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DEFENSE TECHNICAL INFORMATION CENTER  
8725 JOHN J. KINGMAN ROAD  
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IN REPLY  
REFER TO: DTIC-R (FOIA 2020-77)

May 19, 2020

This is in response to your email dated April 12, 2020, received in this office April 13, 2020, requesting information under the Freedom of Information Act (FOIA) (enclosure 1). Under Department of Defense rules implementing the FOIA, published at 32 CFR 286, your request was categorized as "other".

Enclosure 2 is a computer-generated bibliography prepared by matching the subject terms in your request against our Technical Report database. The bibliography may contain some documents that do not apply to the specific subject areas in which you are interested; however, to eliminate any of the key search terms could also eliminate documents that do apply to your subject area(s) of interest.

Enclosure 3 consists of a bibliography that contains unclassified descriptions of classified and/or unclassified/limited distribution documents related to your request. These documents may only be released by the controlling activity. Requests for these documents should be forwarded to the controlling activity, usually identified in the Distribution Statement field of the citation. This office upon request can research documents with no controlling activity identified to determine the appropriate owning agency. NOTE: Although some of the citations listed on the bibliography at attachment 2 may indicate that the document can be viewed and/or downloaded in full text, be advised that these citations/documents are not available to the general public through the DTIC Online Public Technical Reports database.

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correspondence from the DoD about your request will be on official letterhead. Please contact me at (571) 448-9702 if you have any questions. Thank you for your interest in obtaining information from DTIC.

Sincerely,

*Michael Hamilton*

3 Enclosures

Michael Hamilton  
FOIA Program Manager

Highest Classification: Unclassified											
Search: (epidemic OR coronavirus OR pandemic)											
Accession Number"	Title	Corporate Author	Personal Authors	Report Date	Pagination	Report Numbers	Monitor Series	Report Classification	Distribution Codes	Distribution Statement	Descriptive Note
ADC076414"	The Navy CM Mission, Installation CBRNE Preparedness, and Joint Program Guardian IPP. Appendices	CENTER FOR NAVAL ANALYSES ALEXANDRIA VA	Savitz, Scott,Speers, Rosemary,Hughes, Christine,Dickey, Brad,Grund, Matthew R.	5/1/2008	112	CIM-D0015379.A4-REV-1	CNO/AD	S	E - 04	Distribution authorized to DoD only; Specific Authority; MAY 2008. Other requests shall be referred to Office of the Chief of Naval Operations, Assessment Div. (N81B), Washington, DC 20350.	Not available
AD0377138"	LABORATORY EVALUATION OF O'NYONG-NYONG FEVER	FORT DETRICK FREDERICK MD	Beck, Earl S.,Miller, Helen V.,Hearn, Jr, Henry J.	10/1/1966	47	TS-52	ABL/MD	C	C - 02	Distribution authorized to U.S. Gov't. agencies and their contractors; Administrative/Operational Use; OCT 1966. Other requests shall be referred to Army Biological Laboratory, Attn: Technical Releases Branch, Technical Information Div., Fort Detrick, Frederick, MD 21701.	TECHNICAL STUDY
ADC004340"	An Evaluation of the Implicit Risk of Sole-Source Procurement of the DX/DXG in the Event of National or Local Disaster,	NAVAL RADIOLOGICAL DEFENSE LAB SAN FRANCISCO CALIF	Alderson,D. M.,Spotts,R. L.,Freund,D.,Hesser,R. L.,Sullivan,M. A.	4/26/1967	100	USNRDL-TR-67-43	Not available	C	C - 09	Distribution authorized to U.S. Gov't. agencies and their contractors; Administrative/Operational Use; APR 196. Other requests shall be referred to NAVAL RADIOLOGICAL DEFENSE LAB SAN FRANCISCO CALIF	Not available
Highest Classification: Unclassified											

Highest Classification: Unclassified											
Search: (epidemic OR coronavirus OR pandemic)											
Accession Number"	Title	Corporate Author	Personal Authors	Report Date	Pagination	Report Numbers	Monitor Series	Report Classification	Distribution Codes	Distribution Statement	Descriptive Note
AD0852697"	Quarterly Report Number 3-FY 1969	NATIONAL COMMUNICABLE DISEASE CENTER ATLANTA GA	Brachman, Philip S.	4/1/1969	31	Not available	ABL/MD	U	C - 02	Distribution authorized to U.S. Gov't. agencies and their contractors; Administrative/Operational Use; APR 1969. Other requests shall be referred to Commanding Officer, Fort Detrick, Attn: Technical Releases Branch. Frederick, MD 21701., Availability: Document partially illegible.	Rept. for 1 Jan-31 Mar 1969
AD0874390"	Etiology of Acute Respiratory Diseases.	CALIFORNIA STATE DEPT OF PUBLIC HEALTH BERKELEY VIRAL AND RICKETTSIAL DISEASE LAB	Lennette,Edwin H.,Schieble,Jack H.,Magoffin,Robert L.	8/15/1970	19	Not available	Not available	U	E - 04	Distribution: DoD only: others to Commanding General, Army Medical Research and Development Command, Attn: MEDDH-SI. Washington, D. C. 20314.	Annual rept. 1 Oct 69-31 May 70,
ADB340157"	A Point-of-Care Assay for the Detection of Spotted Fever Group and Typhus Group Rickettsia	INBIOS INTERNATIONAL INC SEATTLE WA	Morrow, W. J.	5/17/2008	24	Not available	USAMRMC	U	B - 03	Distribution authorized to U.S. Gov't. agencies only; Proprietary Information; MAY 2008. Other requests shall be referred to US Army Medical and Materiel Command, 504 Scott Street, Ft. Detrick, MD 21702-5012.	Final rept. 18 Oct 2007-17 Apr 2008

ADB356993"	Theory of Epidemic Spreading and Topological Data Analysis of the H1N1 (novel) Pandemic	CERTUS LLC WEST UNIV PLACE TX	Deem, Michael W.	2/22/2010	30	Not available	DARPA/DSO	U	B - 03	Distribution authorized to U.S. Gov't. agencies only; Critical Technology; Premature Dissemination; Proprietary Information; FEB 2010. Other requests shall be referred to Defense Advanced Research Projects Agency, Defense Science Office, 3701 North Fairfax Dr., Arlington, VA 22203-1714. This document contains export-controlled technical data.	Final rept. Jul 2009-Feb 2010
AD0819597"	GENETIC RELATIONSHIPS AMONG HUMAN AND ANIMAL STRAINS OF INFLUENZA VIRUS.	CALIFORNIA UNIV LOS ANGELES	Rasmussen,A. Frederick , Jr	8/1/1967	79	Not available	Not available	U	E - 04	Distribution: DoD only: others to Commanding General, Army Medical Research and Development Command, Attn: MEDDHSI. Washington, D. C. 20315.	Annual progress rept. 1 Nov 66-30 Jun 67 and final rept. 1 Sep 63-30 Jun 67,
ADB330155"	Medical Vanguard Disease Surveillance Phase IV: West Nile Virus Phase 3	GEORGETOWN UNIV WASHINGTON DC	Mun, Seong K.	10/1/2006	99	Not available	USAMRMC	U	B - 03	Distribution authorized to U.S. Gov't. agencies only; Proprietary Information; AUG 2005. Other requests shall be referred to U.S. Army Medical Research and Materiel Command, 504 Scott Street, Fort Detrick, MD 21702-5012.	Final rept.
ADB337499"	Review of Pandemic Influenza Planning and Coordination Requirements for CNE-C6F	CENTER FOR NAVAL ANALYSES ALEXANDRIA VA	Speers, Rosemary,Stewart, Jessica,Grund, Matthew	2/1/2008	75	CRM-D0017584.A2	SF(C6F)	U	E - 04	Distribution authorized to DoD only; Specific Authority; FEB 2008. Other requests shall be referred to Navy Europe Plans and Operations, PSC 817, Box 70, FPO, AE 09622-0002.	Final rept.

ADB137089"	Epidemiological Characteristics of Non-A, Non-B Hepatitis (Epidemioloske Karakteristike Ni-A, Ni-B Hepatitisa),	ARMED FORCES MEDICAL INTELLIGENCE CENTER FORT DETRICK FREDERICK MD	Drndarevic, Dusan,Dordevic, Dusan	10/16/1989	10	AFMIC-HT-087-89	Not available	U	B - 03	Distribution authorized to U.S. Gov't. agencies only; Copyright, Proprietary Info.; 16 Oct 89. Other requests shall be referred to AFMIC-IS, Fort Detrick, Frederick, MD 21701-5004.	Not available
AD0151822"	NEW ANTIGENIC VARIANT IN FAR EAST INFLUENZA EPIDEMIC	WALTER REED ARMY INST OF RESEARCH WASHINGTON D C	MEYER,H.M.,JR.,HILLEM AN,M.R.	7/1/1957	1	105 57	Not available	U	C - 02	Distribution authorized to U.S. Gov't. agencies only; Other requests shall be referred to WALTER REED ARMY INST OF RESEARCH WASHINGTON D C	Not available
AD0840160"	RELATIONSHIP OF BIOLOGICAL AND EPIDEMIOLOGICAL CHARACTERISTICS OF GROUP A STREPTOCOCCI.	MINNESOTA UNIV MINNEAPOLIS COLL OF MEDICAL SCIENCES	Wannamaker,Lewis W.,Ayoub,Elia M.,Chapman,S. Stephen,Anthony,Basco m F.,Kaplan,Edward L.	9/10/1968	29	Not available	Not available	U	E - 04	Distribution: DoD only: others to Commanding General, Army Medical Research and Development Command, Attn: MEDDH-SI. Washington, D. C. 20315.	Annual progress rept. 1 Jul 67-30 Jun 68,
AD0456598"	STUDIES ON THE ETIOLOGY AND PREVENTION OF RUBELLA.	NEW YORK UNIV N Y SCHOOL OF MEDICINE	Green,Robert H.,Cooper,Louis Z.,Krugman,Saul,Mirick, George S.	1/31/1965	10	Not available	Not available	U	F - 05	Notice: All release of this document is con-trolled. All certified requesters shall obtainrelease approval from Commanding General, U. S.Army Medical Research and Development Command,Dept. of the Army, Wash., D. C. 20315	Annual progress rept. 1 Feb 64-31 Jan 65,
AD0076608"	THE EPIDEMIOLOGY OF BETA HEMOLYTIC STREPTOCOCCI AMONG NAVY RECRUITS. I. THE ROLE OF THE NEW RECRUIT IN STREPTOCOCCAL EPIDEMICS,	NAVAL MEDICAL RESEARCH UNIT NO 4 GREAT LAKES ILL	Frank ,Paul F.,Levinson,Marvin L.	6/1/1955	22	Not available	Not available	U	C - 02	Distribution authorized to U.S. Gov't. agencies only; Other requests shall be referred to NAVAL MEDICAL RESEARCH UNIT NO 4 GREAT LAKES ILL	Not available

AD1093612"	Perspectives on Political and Social Regional Stability Impacted by Global Crises- A Social Science Context	Joint Staff Washington DC United States	Cabayan, Hriar, Lockhart, Clare, Martin, Philip, Goldstone, Jack A., Madsen, Elizabeth L., Richards, David L., Gelleny, Ronald, Steen, Peter, Priscoli, Jerome D., Olsen, J. R., White, Kathleen D., Kiang, Julie E., Turnipseed, Phil, Brekke, Levi D., Raff, David A., Pulwarty, Roger S., Webb, Robert, Dehgan, Alex O., Palmer-Moloney, Laura J., Diaz, James, Yalowitz, Kenneth S., Virginia, Ross A., Stoll, Richard J., Arent, Douglas J., Steiner, Jeffrey	1/15/2010	299	Not available	Not available	U	C - 02	U.S. Government agencies and their contractors; Administrative or Operational Use; 15 Jan 2010. Other request shall be referred to Joint Staff , Washington , DC, 20318, Joint Staff .	Technical Report
AD0858993"	Streptococcal and Staphylococcal Infection and Non-Suppurative Sequelae.	ALABAMA UNIV BIRMINGHAM MEDICAL CENTER	Dillon, Hugh C. , Jr., Derrick, C. Warren , Jr	8/15/1969	24	Not available	Not available	U	E - 04	Distribution: DoD only: others to Commanding General, Army Medical Research and Development Command, Attn: MEDDH-SI. Washington, D. C. 20315.	Annual progress rept. 1 Jul 68-30 Jun 69,
AD0922713"	Development and Characterization of Attenuated Live Influenza Virus Vaccines for Use in Man.	MICHIGAN UNIV ANN ARBOR	Maassab, H. F.	9/1/1974	23	Not available	Not available	U	B - 03	Distribution limited to U.S. Gov't. agencies only; Proprietary Info.; Jun 74. Other requests for this document must be referred to Commander, Army Medical Research and Development Command, Attn: SGRD-IDS. Washington, D. C. 20314.	Annual progress rept. 1 Jul 73-30 Jun 74,



ADB403550"	Advanced Development of a Tolerable, Noninvasive Dermal Electroporation Device with Low-cost Disposables for Delivery of DNA Vaccines of Military Interest	INOVIO BIOMEDICAL CORP SAN DIEGO CA	Broderick, Kate E.	11/1/2014	29	Not available	USAMRMC	U	B - 03	Distribution authorized to U.S. Gov't. agencies only; Proprietary Information; NOV 2014. Other requests shall be referred to U.S. Army Medical Research and Materiel Command, 504 Scott St., Ft. Detrick, MD 21702-5012.	Final rept. 24 Jun 2013-24 Nov 2014
ADB370820"	Multi-Agent Distributed, Continuous, and Asynchronous Planning (MADCAP)	CHARLES RIVER ANALYTICS INC CAMBRIDGE MA	Niehaus, James,Call, Catherine,Reilly, Scott N.	6/1/2011	42	AFRL-RI-RS-TR-2011-109	TR-2011-109,AFRL-RI-RS	U	B - 03	Distribution authorized to U.S. Gov't. agencies only; Proprietary Information; JUN 2011. Other requests shall be referred to Air Force Research Lab., Attn: AFRL/RIGG, Rome, NY 13441-4505.	Final rept. Mar-Dec 2010
AD0225515"	EPIDEMIC KERATOCONJUNCTIVITIS(E.K. C.) PART III. ADENOVIRUS ISOLATION FROM E.K.C	NAVAL MEDICAL RESEARCH UNIT NO 3 CAIRO (EGYPT)	YANG,YEN-FEI,JOHNSTON,PAUL B.	6/4/1959	1	Not available	Not available	U	C - 02	Distribution authorized to U.S. Gov't. agencies only; Other requests shall be referred to NAVAL MEDICAL RESEARCH UNIT NO 3 CAIRO (EGYPT)	Not available
ADB048484"	An Algorithm for the Statistical Treatment of Results Obtained from Epidemic Observations (Ob Odnom Algoritme dlya Statisticheskoy Obrabotki Nablyudeny Epidemiicheskogo Protsessa),	ARMY MEDICAL INTELLIGENCE AND INFORMATION AGENCY FORT DETRICK MD	Ikramova,Kh. Z.	8/15/1972	6	USAMIIA-K-2149	Not available	U	B - 03	Distribution limited to U.S. Gov't. agencies only; Copyright, Proprietary Info.; 4 Jun 80. Other requests for this document must be referred to Director, Army Medical Intelligence and Information Agency, Attn: SGMI-IS. Fort Detrick, Frederick, MD 21701. Availability: Document partially illegible.	Not available

ADB256607"	Glanders in Humans and Animals	ARMY MEDICAL RESEARCH INST OF INFECTIOUS DISEASES FORT DETRICK MD	Domma, Karl	1/1/1953	6	MUL-1155	USAMRIID	U	B - 03	Distribution authorized to U.S. Gov't. agencies only; Administrative or Operational Use; 1953. Other requests shall be referred to USAMRIID Library, 1425 Porter St., Fort Detrick, MD 21702-5011.	Not available
AD0872458"	Epidemiology of Stem Rust of Wheat at Hays, Kansas, in 1965	FORT DETRICK FREDERICK MD	Line, Roland F.,Peet, Clyde E.,Kingsolver, Charles H.	6/1/1970	40	SMUFD-TR-110,AMXFD-AE-T-49837	SMUFD	U	C - 02	Distribution authorized to U.S. Gov't. agencies and their contractors; Administrative/Operational Use; JUN 1970. Other requests shall be referred to Dept. of the Army, Fort Detrick, MD 21701.	Technical rept.,
AD0841790"	PREVENTION OF INFLUENZA AND OTHER RESPIRATORY DISEASES.	COLORADO UNIV DENVER MEDICAL CENTER	Meiklejohn,Gordon	9/1/1968	20	Not available	Not available	U	E - 04	Distribution: DoD only: others to Commanding General, Army Medical Research and Development Command, Attn: MEDDH-SI. Washington, D. C. 20315.	Annual progress rept. 1 Jul 67-30 Jun 68,
AD0874463"	Studies on the Prevention, Control and Treatment of Epidemic Influenza.	MICHIGAN UNIV ANN ARBOR SCHOOL OF PUBLIC HEALTH	Davenport,Fred M.	8/1/1970	36	Not available	Not available	U	E - 04	Distribution: DoD only: others to Commanding General, Army Medical Research and Development Command, Attn: MEDDH-SI. Washington, D. C. 20314.	Final rept. and Annual progress rept. no. 1, 1 Jul 69-31 May 70,
ADB170803"	The Effects of the AIDS Epidemic on Traditional Medicaid Populations,	RAND CORP SANTA MONICA CA	Pascal, Anthony H.,Jacobson, Peter D.,Lindsey, Phoebe A.,Duncan, Jennifer J.,DiNardo, John	1/1/1992	82	RAND/R-4148-HCFA	XD	U	C - 12	Distribution: DTIC users only.	Not available

AD0866924"	Rice Culture, Weather, and Rice Blast Epidemiology on Oahu, Hawaii	FORT DETRICK FREDERICK MD	Marchetti, Marco A.,Henriksen, George B.	3/1/1970	48	SMUFD-TM-196,AMXFD-AE-T49587	SMUFD	U	C - 02	Distribution authorized to U.S. Gov't. agencies and their contractors; Administrative/Operational Use; MAR 1970. Other requests shall be referred to Commanding Officer, Fort Detrick, Attn: Technical Releases BranchTID. Frederick, MD 21701. Document partially illegible. This document contains export-controlled technical data.	Technical memo.
ADB131880"	Lessons from the Natural Disasters in Yugoslavia	NATIONAL CENTER FOR MEDICAL INTELLIGENCE FORT DETRICK MD	Birtasevic, Bozidar,Dordevic, Dusan	4/19/1989	10	AFMIC-HT-043-89	AFMIC	U	B - 03	Distribution authorized to U.S. Gov't. agencies only; Proprietary Information; 19 APR 1989. Other requests shall be referred to Armed Forces Medical Intelligence Center, AFMIC-IS, Fort Detrick, Frederick, MD 21701-5004.	Not available
ADB346846"	Situational Awareness (SA) Effects on Decision-Making During Domestic Bio-Incidents	HUMAN EFFECTIVENESS DIRECTORATE WRIGHT-PATTERSON AFB OH 711 HUMAN PERFORMANCE WING	Ferguson, Marcus G.	12/1/2008	54	Not available	AFRL/HPW-711	U	C - 02	Distribution authorized to U.S. Gov't. agencies and their contractors; Critical Technology; DEC 2008. Other requests shall be referred to Air Force Research Laboratory, 711th HPW/RHPC, 2711 K St., Bldg. 434, Wright-Patterson AFB, OH 45433-7662. This document contains export-controlled technical data.	Research rept. Sep-Dec 2008

ADB016609"	Studies on Influenza Subunit Vaccines	MICHIGAN UNIV ANN ARBOR	Eckert, Edward A.	9/1/1976	24	Not available	USAMRDC	U	B - 03	Distribution authorized to U.S. Gov't. agencies only; Proprietary Information; AUG 1976. Other requests shall be referred to Army Medical Research and Development Command, Attn: SGRD-RP. Washington, D. C. 20314.	Annual progress rept. 1 Aug 1975-30 Jul 1976
AD0840950"	DIFFERENTIATION OF CHOLERAGENIC VIBRIOS.	TENNESSEE UNIV MEDICAL UNITS MEMPHIS	Freeman,Bob A.	9/1/1968	29	Not available	Not available	U	E - 04	Distribution: DoD only: others to Commanding General, Army Medical Research and Development Command, Attn: MEDDH-SI. Washington, D. C. 20315.	Annual progress rept. 1 Sep 67-31 Aug 68,
AD0470822"	AN OUTBREAK OF DENGUE FEVER AT UBON, THAILAND	PACAF EPIDEMIOLOGICAL LAB APO SAN FRANCISCO 96274 EPIDEMIOLOGICAL FLIGHT (5TH)	Not available	9/21/1965	16	TR-4-64	USAFEL	U	C - 02	Distribution authorized to U.S. Gov't. agencies and their contractors; Administrative/Operational Use; 21 Sep 1965. Other requests shall be referred to PACAF Epidememiological Lab., Clark AFB, APO-San Francisco, CA., Availability: Document partially illegible.	Technical rept.
AD1058904"	Quantum Dot Integrated Silicon Photonic Devices for Optical Sensor Applications	Vanderbilt University Nashville United States	Gaur,Girija	9/1/2015	220	ARO-54322-CH-PCS.40	ARO-54322-CH-PCS.40	U	B - 03	U.S. Government agencies only;Proprietary Information;;01 Sep 2015.Other request shall be referred to U.S. Army Research Office ,Research Triangle Park,NC,27709-2211, U.S. Army Research Office .	Technical Report

ADB213466"	Evolution of Rabies in Romania. Biological Characteristics of Strains or Rabies Virus Isolated in Our Country,	ARMED FORCES MEDICAL INTELLIGENCE CENTER FORT DETRICK FREDERICK MD	Toacsen, E.,Moraru, Silvia	1/1/1995	14	AFMIC-HT-028-96	AFMIC	U	E - 04	Distribution authorized to DoD only; Proprietary Info.; Copyright; 13 Aug 96. Other requests shall be referred to AFMIC-MI-1A, Fort Detrick, Frederick, MD 21702-5004.	Not available
ADB291181"	MEDREACH: A Web-Enabled Authoring Tool for Communicating Medical Risks	APTIMA INC WOBURN MA	Entin, Eileen B.,Lai, Fuji,Miller, Diane	6/1/2003	35	Not available	ONR	U	B - 03	Distribution authorized to U.S. Gov't. agencies only; Proprietary Info.; Jun 2003. Other requests shall be referred to Office of Naval Research, 800 N. Quincy St., Arlington, VA 22217-5660.	Final rept. Phase I.
AD0470213"	Fourth quarter report, 1965, from Department of Health, Education, and Welfare Public Health Service, Communicable Disease Center, Atlanta, Georgia	COMMUNICABLE DISEASE CENTER ATLANTA GA	Brachman, Philip S.	7/28/1965	41	Not available	CHEMCOR	U	C - 02	Distribution authorized to U.S. Gov't. agencies and their contractors; Administrative/Operational Use; 28 JUL 1965. Other requests shall be referred to Chemical Corps., Fort Detrick, MD 21701. Document partially illegible.	Quarterly rept. no. 4 for FY 1965
ADB337003"	Simulation-Based Planning and Training Tool for Infectious Disease Outbreak (i.e. Pandemic Influenza)	TOTAL IMMERSION SOFTWARE INC ALAMEDA CA	Lunceford, Jr, Wendell H. (Dell)	12/1/2007	18	Not available	USAMRMC	U	B - 03	Distribution authorized to U.S. Gov't. agencies only; Proprietary Information; DEC 2007. Other requests shall be referred to U.S. Army Medical Research and Materiel Command, 504 Scott St., Ft. Detrick, MD 21702-5012.	Final rept. 1 Jun-30 Nov 2007
AD1034748"	Developmental Prototype Report for Software Tests on MIDAS	APTIMA INC WOBURN MA WOBURN United States	Lucia,Lisa	5/31/2017	15	Not available	Not available	U	B - 03	U.S. Government agencies only;Proprietary Information;;31 May 2017.Other request shall be referred to Office of Naval Research , Arlington,VA,22203-1995, Office of Naval Research .	SBIR Report,12 Jan 2017,31 May 2017

AD0874677"	Transmission of the Common Cold to Volunteers Under Controlled Conditions.	ILLINOIS UNIV CHICAGO COLL OF MEDICINE	Jackson,George Gee	8/1/1970	22	MD-2410-6	Not available	U	E - 04	Distribution: DoD only; others to Commanding General, Army Medical Research and Development Command, Attn: MEDDH-SI. Washington, D. C. 20314.	Annual progress rept. 1 Jul 69-30 Jun 70,
ADB221864"	The Pathology of Louse-Borne Typhus Fever from the Epidemic of 1943-1945 in Egypt,	NAVAL MEDICAL RESEARCH INST BETHESDA MD	McAllister, William B., Jr	1/25/1949	15	Not available	NMRI	U	C - 12	Distribution: DTIC users only.	Not available
ADB409412"	UCLA High Speed, High Volume Laboratory Network for Infectious Diseases	CALIFORNIA UNIV LOS ANGELES	Godwin, Hilary	2/1/2015	68	Not available	USAMRMC	U	B - 03	Distribution authorized to U.S. Gov't. agencies only; Proprietary Information; FEB 2015. Other requests shall be referred to U.S. Army Medical Research and Materiel Command, 504 Scott St., Ft. Detrick, MD 21702-5012.	Final rept. 1 Sep 2010-29 Nov 2014
AD0841144"	BIOLOGICAL WARFARE DEFENSE IN SWEDISH SECURITY POLICY,	ARMY BIOLOGICAL LABS FREDERICK MD	Jacksen, S.,Markkula, H.,Tammelin, L-E	8/1/1968	73	Trans-2277	Not available	U	C - 12	Distribution: DTIC Users Only.	Not available
AD0828728"	SECOND QUARTERLY REPORT NUMBER 2, FY 1968	NATIONAL COMMUNICABLE DISEASE CENTER ATLANTA GA	Brachman, Philip S.	2/20/1968	23	Not available	SMUFD	U	C - 02	Distribution authorized to U.S. Gov't. agencies and their contractors; Administrative/Operational Use; FEB 1968. Other requests shall be referred to Commanding Officer, Fort Detrick, Attn: Technical Releases Branch, Frederick, MD 21701. Document partially illegible.	Rept. for 1 Oct-31 Dec 1967
AD0858390"	Investigation of the Physiological Types of Wheat Stem Rust Puccinia Graminis Tritici (Eriksson ET. E. in Northeast China),	ARMY FOREIGN SCIENCE AND TECHNOLOGY CENTER WASHINGTON D C	Tseng,Juang- jan,Chang,Kuo- Chun,Hsueh,Li-Hsin	1/1/1969	19	FSTC-HT-23-267- 68	Not available	U	B - 03	Distribution: USGO: others to Commander, Army Foreign Science and Technology Center, Washington, D. C. 20315.	Not available

AD0913087"	Pathogenesis of Respiratory Infections in Volunteers and Drug Trials.	VIRGINIA UNIV CHARLOTTESVILLE	Gwaltney,Jack M. , Jr.,Hendley,J. Owen,Wenzel,Richard P.	9/1/1973	51	Not available	Not available	U	B - 03	Distribution limited to U.S. Gov't. agencies only; Proprietary Info., Jun 73. Other requests for this document must be referred to Commander, Army Medical Research and Development Command, Attn: SGRD-IDS. Washington, D. C. 20314.	Annual progress rept. 1 Jun 72-31 May 73,
ADB291749"	Psychosoziale Betreuung AIDS-Betroffener in der Bundeswehr (Psycho-Social Care of HIV-Positive and AIDS-Afflicted Soldiers and Their Families in the Federal Armed Forces)	FORSCHUNGSBERICHT AUS DER WEHRMEDIZIN (FBWM) BONN (GERMANY)	Braun, Peter	1/1/1995	413	Not available	X5	U	E - 04	Distribution authorized to DoD only; Foreign Gov't. Info.; Nov 1999. Other requests shall be referred to Embassy of Germany, 4645 Reservoir Rd., NW, Washington, DC 20007-1998.	Final rept.
AD0838486"	VACCINE PROPHYLAXIS IN THE NAVY	ARMY BIOLOGICAL LABS FREDERICK MD	Battista, G.	11/24/1965	24	TRANS-1564	ABL/MD	U	C - 12	Distribution: DTIC Users Only.	Not available
AD0488154"	EPIDEMIOLOGY OF WHEAT STRIPE RUST	OREGON STATE UNIV CORVALLIS	Powelson, R. L.	7/21/1966	2	Not available	ABL/MD	U	C - 02	Distribution authorized to U.S. Gov't. agencies and their contractors; Administrative/Operational Use; Jul 1966. Other requests shall be referred to Army Biological Labs., Frederick, MD 21701.	Semiannual progress rept. 1 Jan-30 Jun 1966
ADB384936"	The Impact of Gestational and Postnatal Exposure on Metabolic Programing and Breast Cancer Risk	M D ANDERSON CANCER CENTER HOUSTON TX	Fuchs-Young, Robin	4/1/2012	15	Not available	USAMRMC	U	B - 03	Distribution authorized to U.S. Gov't. agencies only; Proprietary Information; APR 2012. Other requests shall be referred to U.S. Army Medical Research and Materiel Command, 504 Scott St., Ft. Detrick, MD 21702-5012.	Final rept. 15 Sep 2008-14 Mar 2012

AD0864388"	Annual Progress Report, FY 1968.	MEDICAL LAB (406TH) APO SAN FRANCISCO 96343	McCarty,James E.	6/1/1968	366	Not available	Not available	U	B - 03	Distribution: USGO: others to Commanding Officer, Army Medical Research and Development Command, Attn: MEDDH-SI. Washington, D. C. 20314.	Rept. for 1 Jul 67-30 Jun 68,
ADB015346"	Interaction between Meningococci and Phagocytic Cells	CORNELL UNIV MEDICAL COLL (WEILL) NEW YORK	Roberts, Richard B.	2/1/1976	71	Not available	USAMRDC	U	B - 03	Distribution authorized to U.S. Gov't. agencies only; Proprietary Information; JUN 1972. Other requests shall be referred to Commander, Army Medical Research and Development Command, Attn: SGRD-RP. Washington, DC 20314.	Final progress rept. 1 Aug 1966-31 Jan 1974
AD0887167"	Responses of Humans to Cholera Vaccine Immunization.	TEXAS UNIV GALVESTON MEDICAL BRANCH	Verwey,Willard F.	9/1/1971	18	Not available	Not available	U	B - 03	Distribution limited to U.S. Gov't. agencies only; Proprietary Info.; Jun 71. Other requests for this document must be referred to Commanding General, Army Medical Research and Development Command, Attn: MEDDH-SI. Washington, D. C. 20314.	Annual progress rept. 1 Aug 70-31 Jul 71,
ADB345153"	After Action Report for Neptune Wind: A U.S.-Italy Tabletop Exercise on Pandemic Influenza	CENTER FOR NAVAL ANALYSES ALEXANDRIA VA	Trabert, Eric,Hughes, Christine,Latini, Marco,Whitmore, Christine	11/1/2008	52	CNA-CRM- D0019122.A2	TOBD	U	E - 04	Distribution authorized to DoD only; Specific Authority; NOV 2008. Other requests shall be referred to TRICARE Operations Benefit Division, Skyline 6 Suite 306, 5111 Leesburg Pike, Falls Church, VA 22041-3206.	Final rept.



ADB333254"	Integrated Warfighter Biodefense Program (IWBP)	QUANTUM LEAP INNOVATIONS INC NEWARK DE	Not available	10/10/2007	12	Not available	ONR	U	B - 03	Distribution authorized to U.S. Gov't. agencies only; Premature Dissemination; 10 OCT 2007. Other requests shall be referred to Office of Naval Research, ATTN: Code 34, 875 North Randolph St., Arlington, VA 22203-1995.	Quarterly progress rept. no. 2, 15 Jun-15 Sep 2007
AD1073749"	Disease Dynamics in a Stochastic Network Game: A Little Empathy Goes a Long Way in Averting Outbreaks	Georgia Institute of Technology ATLANTA	Eksin,Ceyhun,Shamma,Jeff S.,Weitz,Joshua S.	3/14/2017	15	ARO-63814-NS.7	ARO-63814-NS.7	U	B - 03	U.S. Government agencies only;Proprietary Information;;14 Mar 2017.Other request shall be referred to U. S. Army Research Office,Research Triangle Park,NC,27709-2211,U. S. Army Research Office.	Journal Article - Open Access
ADB021134"	Development and Characterization of Attenuated Live Influenza Virus Vaccines for Use in Man	MICHIGAN UNIV ANN ARBOR	Maassab, H. F.	9/1/1976	24	Not available	USAMRDC	U	B - 03	Distribution authorized to U.S. Gov't. agencies only; Proprietary Information; JUN 1976. Other requests shall be referred to Army Medical Research and Development Command, ATTN: SGRD-RP, Washington, DC 20314.	Annual rept. 1 Jul 1975-30 Jun 1976
ADB376147"	High Speed, High Volume Laboratory Network for Infectious Diseases	CALIFORNIA UNIV LOS ANGELES	Godwin, Hilary,Miller, Jeffery F.,Detter, Chris	9/1/2011	26	Not available	USAMRMC	U	B - 03	Distribution authorized to U.S. Gov't. agencies only; Proprietary Information; SEP 2011. Other requests shall be referred to U.S. Army Medical Research and Materiel Command, 504 Scott St., Ft. Detrick, MD 21702-5012.	Annual rept. 1 Sep 2010-31 Aug 2011
AD0819604"	ROLE OF CHIROPTERA IN THE EPIDEMIOLOGY OF ENCEPHALITIS.	TEXAS UNIV DALLAS SOUTHWESTERN MEDICAL SCHOOL	Sulkin,S. Edward	7/1/1967	19	Not available	Not available	U	E - 04	Distribution: DoD only: others to Commanding General, Army Medical Research and Development Command, Washington, D. C. 20315.	Annual progress rept. 1 Mar 66-30 Jun 67,

ADB133703"	Sanitary Services during Disasters (Zdravstvena Zastita u Katatrofama),	ARMED FORCES MEDICAL INTELLIGENCE CENTER FORT DETRICK FREDERICK MD	Vracaric, Borivoje,Birtasevic, Bozidar	6/26/1989	14	AFMIC-HT-039-89	Not available	U	B - 03	Distribution authorized to U.S. Gov't. agencies only; Copyright, Proprietary Info.; 26 Jun 89. Other requests shall be referred to AFMIC-IS. Fort Detrick, Frederick, MD 21701-5004.	Not available
ADB370466"	MUC1 Effects on EGFR Ubiquitination in Breast Cancer	ARIZONA UNIV TUCSON	Hart, Matthew	1/1/2011	11	Not available	USAMRMC	U	B - 03	Distribution authorized to U.S. Gov't. agencies only; Proprietary Information; JAN 2011. Other requests shall be referred to U.S. Army Medical Research and Materiel Command, 504 Scott St., Ft. Detrick, MD 21702-5012.	Annual summary rept. 2 Jan=31 Dec 2010
AD0225519"	EPIDEMIC RUBELLA IN TAIWAN 1957-1958. III. GAMMA GLOBULIN IN THE PREVENTION OF RUBELLA	NAVAL MEDICAL RESEARCH UNIT NO 3 CAIRO (EGYPT)	GRAYSTON,J. THOMAS,WATTEN,RAY MOND H.	5/20/1959	1	Not available	Not available	U	C - 02	Distribution authorized to U.S. Gov't. agencies and their contractors; Other requests shall be referred to NAVAL MEDICAL RESEARCH UNIT NO 3 CAIRO (EGYPT)	Not available
AD1050758"	Fast and Accurate Detection of Spread Source in Large Complex Networks	Rensselaer Polytechnic Institute Troy United States	Paluch,Robert,Lu,Xiaoyan,SucHECKI,Krzysztof,Szymanski,Boleslaw K,Holyst,Janusz A	2/6/2018	12	67398-LS.3	67398-LS.3	U	B - 03	U.S. Government agencies only;Proprietary Information;;06 Feb 2018.Other request shall be referred to U.S. Army Research Office ,Research Triangle Park,NC,27709, U.S. Army Research Office .	Journal Article - Open Access
ADB166519"	Study on the Surveillance of House-Rat Type Epidemic Hemorrhagic Fever,	ARMY MEDICAL RESEARCH INST OF INFECTIOUS DISEASES FORT DETRICK MD	Tao, Su	1/1/1992	16	USAMRIID-MUL-905	USAMRIID	U	B - 03	Distribution authorized to U.S. Gov't. agencies only; Proprietary Info.; 17 Aug 92. Other requests shall be referred to USAMRIID, Bldg. 1425, Ft. Detrick, Frederick, MD 21702-5011.	Not available

AD0827182"	PRIMATE CONDITIONING AND BREEDING COLONY.	HAZLETON LABS INC FALLS CHURCH VA	Sharp,James B. , Jr	1/1/1968	22	Not available	Not available	U	E - 04	Distribution: DoD only: others to Commanding General, Army Medical Research and Development Command, Attn: MEDDH-SI. Washington, D. C. 20315.	Annual progress rept. no. 7, 1 Aug 66-30 Nov 67,
AD1031698"	A Novel Antifibrotic for Chronic Kidney Disease	Angion Biomedica Corp. Uniondale United States	Narayan,Prakash	10/1/2016	21	Not available	Not available	U	B - 03	U.S. Government agencies only;Proprietary Information;;01 Oct 2016.Other request shall be referred to U.S. Army Medical Research and Materiel Command , Fort Detrick,MD,21702, U.S. Army Medical Research and Materiel Command .	Technical Report,05 Sep 2015,04 Sep 2016
ADB337044"	Selective Biological Countermeasures	CALDERA PHARMACEUTICALS INC LOS ALAMOS NM	Harris, Michael N.	1/1/2008	16	Not available	USAMRMC	U	B - 03	Distribution authorized to U.S. Gov't. agencies only; Proprietary Information; JAN 2008. Other requests shall be referred to U.S. Army Medical Research and Materiel Command, 504 Scott St., Ft. Detrick, MD 21702-5012.	Final rept. 29 Dec 2006-28 Dec 2007
ADB309642"	U.S. Military Human Immunodeficiency Virus (HIV) Research Program	HENRY M JACKSON FOUNDATION FOR THE ADVANCEMENT OF MILITARY MEDICINE ROCKVILLEMD	Robb, Merlin L.,Lowe, John W.	5/1/2005	189	Not available	USAMRMC	U	B - 03	Distribution authorized to U.S. Gov't. agencies only; Proprietary Information; MAY 2005. Other requests shall be referred to US Army Medical Research and Materiel Comd., 504 Scott St., Fort Detrick, MD 21702- 5012.	Annual rept. 1 Apr 2004-31 Mar 2005

ADB376365"	Development of Strategies to Treat and Prevent Norovirus Infections	CHILDREN'S HOSPITAL MEDICAL CENTER CINCINNATI OH DIV OF INFECTIOUS DISEASES	Jiang, Xi	8/1/2011	30	Not available	USAMRMC	U	B - 03	Distribution authorized to U.S. Gov't. agencies only; Proprietary Information; AUG 2011. Other requests shall be referred to U.S. Army Medical Research and Materiel Command, 504 Scott St., Ft. Detrick, MD 21702-5012.	Final rept. 1 Feb 2004-31 Jul 2011
AD0903732"	Rickettsial Diseases: A. Trench Fever. B. Epidemic Typhus.	HARVARD SCHOOL OF PUBLIC HEALTH BOSTON MASS	Murray,Edward S.,Vinson,J. William	9/1/1972	32	Not available	Not available	U	B - 03	Distribution limited to U.S. Gov't. agencies only; Proprietary Info.; Jun 72. Other requests for this document must be referred to Commanding General, Army Medical Research and Development Command, Attn: SGRD-IDS. Washington, D. C. 20314.	Annual Progress rept. 1 Jun 71-31 May 72,
ADB811880"	Prevention of Epidemics in Prisoner of War Camps Occuring Shortly After Capture (Richtlinien zur Seuchenverhuetung bei Kriegsgefangenen in der ersten Zeit nach der Gefangennahme)	ATI COLLECTION FORT BELVOIR VA	Not available	6/1/1942	5	Not available	XD	U	E - 04	DISTRIBUTION AUTHORIZED TO DOD ONLY; ADMINISTRATIVE/OPERATIONAL USE; 03 MAR 1999. OTHER REQUESTS SHALL BE REFERRED THROUGH DEFENSE TECHNICAL INFORMATION CENTER, DTIC BCS, 8725 JOHN J KINGMAN RD., FT. BELVOIR, VA 22060-6218	Not available
ADB146122"	Anthrax in Tchad: A Present Day Zoonosis,	ARMY MEDICAL RESEARCH INST OF INFECTIOUS DISEASES FORT DETRICK MD	Lamarque, D.,Haessler, C.,Champion, R.,Granga, D.,Steinmetz, P.	7/30/1990	19	USAMRIID-MUL-816	Not available	U	B - 03	Distribution authorized to U.S. Gov't. agencies only; Proprietary Info.; 30 Jul 90. Other requests shall be referred to USAMRIID, Bldg. 1425, Ft. Detrick, Frederick, MD 21702-5011.	Not available

ADB138476"	On the Behavior and Spread of the Encephalitic Virus in the Central Nervous System of Nasally-Infected Animals (Studies of the Virus Causing Encephalitis Epidemica).	ARMY MEDICAL RESEARCH INST OF INFECTIOUS DISEASES FORT DETRICK MD	Kawamura, T.,Kodama, M.,Ito, T.,Yazaki, T.,Kobayakawa, Y.	1/1/1989	5	USAMRIID-MUL-769	Not available	U	B - 03	Distribution authorized to U.S. Gov't. agencies only; Proprietary Info.; 21 Nov 89. Other requests shall be referred to USAMRIID Library, Bldg. 1425, Ft. Detrick, Frederick, MD 21701-5011.	Rept. no. 4,
ADB006473"	The Etiology of Acute Infectious Nonbacterial Enteritis	UNIVERSITY HOSPITAL BOSTON MA	Blacklow, Neil R.	7/1/1975	25	Not available	OSG	U	B - 03	Distribution authorized to U.S. Gov't. agencies only; Proprietary Information; JUL 1975. Other requests shall be referred to Commander, Army Medical Research and Development Command, Attn: SGRD-RP. Washington, DC 20314.	Annual progress rept. 1974-1975
ADB085632"	Self-Regulation of Epidemic Process of Respiratory Tract Streptococcal Infection (Samoregulyatsiya Epidemicheskogo Protsessa Streptokokkovoy Infektsii Dykhatel'nukh Putey),	ARMED FORCES MEDICAL INTELLIGENCE CENTER FORT DETRICK FREDERICK MD	Khodyrev,A. P.	8/29/1984	15	AFMIC-HT-032-84	Not available	U	B - 03	Distribution limited to U.S. Gov't. agencies only; Copyright, Proprietary Info.; 29 Aug 84. Other requests must be referred to AFMIC-IS, Fort Detrick, Frederick, MD 21701.	Not available
ADB349802"	Posturing the Marines to Win throughout the Long War	ARMY WAR COLL CARLISLE BARRACKS PA	Merna, John	3/18/2009	34	Not available	USAWC	U	B - 03	Distribution authorized to U.S. Gov't. agencies only; Administrative/Operational Use; MAY 2006. Other requests shall be referred to US Army War College, 122 Forbes Avenue, Carlisle, PA 17013.	Research paper
AD0859270"	Quarterly Report Number 4-Fy 1969	NATIONAL COMMUNICABLE DISEASE CENTER ATLANTA GA	Brachman, Philip S.	7/1/1969	11	Not available	SMUFD	U	C - 02	Distribution authorized to U.S. Gov't. agencies and their contractors; Administrative/Operational Use; JUL 1969. Other requests shall be referred to Commanding Officer, Fort Detrick, Attn: Technical Releases Branch, Frederick, MD 21701.	Quarterly rept. no. 4, 1 Apr-30 Jun 1969

ADB201679"	Maintenance Mechanisms for Leptospirosis Epidemic FOCI,	ARMED FORCES MEDICAL INTELLIGENCE CENTER FORT DETRICK FREDERICK MD	Agaev, I. A.	8/3/1995	8	AFMIC-HT-014-94	AFMIC	U	E - 04	Distribution authorized to DoD only; Proprietary Info.; Copyright; 3 Aug 95. Other requests shall be referred to AFMIC-IS, Fort Detrick, Frederick, MD 21702-5004.	Not available
AD1072490"	Advancing a Promising Tuberculosis Vaccine Candidate: MTBVAC	International Aids Vaccine Initiative Inc. Rockville United States	Ginsberg,Ann,Cadieux,Nathalie	10/1/2018	24	Not available	Not available	U	B - 03	U.S. Government agencies only;Proprietary Information;;01 Oct 2018.Other request shall be referred to U.S. Army Medical Research and Materiel Command,Fort Detrick,MD,21702-5012,U.S. Army Medical Research and Materiel Command.	Technical Report,30 Sep 2017,29 Sep 2018
AD0076694"	THE THERAPY OF EPIDEMIC TYPHUS WITH THE NEWER ANTIBIOTICS	NAVAL MEDICAL RESEARCH UNIT NO 3 CAIRO (EGYPT)	FARID,Z.,ARKAN,M.G.	9/30/1955	1	Not available	Not available	U	C - 02	Distribution authorized to U.S. Gov't. agencies and their contractors; Other requests shall be referred to NAVAL MEDICAL RESEARCH UNIT NO 3 CAIRO (EGYPT)	Not available
AD0221018"	SUMMARY AND INTERPRETATION OF THREE YEARS' COOPERATIVE STEM RUST EPIDEMIOLOGY STUDIES	AGRICULTURAL RESEARCH SERVICE WASHINGTON DC CEREAL CROPS RESEARCH BRANCH	LAMBERT, E. B.	12/31/1957	36	Not available	CHEMCOR	U	C - 02	Distribution authorized to U.S. Gov't. agencies and their contractors; Administrative/Operational Use; 31 Dec 1957. Other requests shall be referred to Commander, Chemical Corps Biological Labs, Fort Detrick, MD., Availability: Document partially illegible.	Not available
ADB106713"	An Epidemic of Anthrax in a Textile Factory in Northeastern Switzerland.	ARMY MEDICAL RESEARCH INST OF INFECTIOUS DISEASES FORT DETRICK MD	Willimann,Urs	1/1/1986	58	USAMRIID-MUL-0703	Not available	U	B - 03	Distribution limited to U.S. Gov't. agencies only; Proprietary Info.; 5 Nov 86. Other requests must be referred to USAMRIID Library, Bldg. 1425, Fort Detrick, MD 21701.	Doctoral thesis,

AD0853656"	Epidemiology of Stem Rust of Wheat at Crookston, Minnesota, in 1964	FORT DETRICK FREDERICK MD	Line, Roland F.,Peet, Clyde E.	5/1/1969	25	SMUFD-TR-107	SMUFD	U	C - 02	Distribution authorized to U.S. Gov't. agencies and their contractors; Administrative/Operational Use; MAY 1969. Other requests shall be referred to Commanding Officer, Fort Detrick, Attn: Technical Releases Branch. Frederick, MD 21701. This document contains export-controlled technical data.	Technical rept.
ADB207005"	Collected Reprints of the Armed Forces Epidemiological Board. Volume 24. Numbers 2079-2227.	ARMED FORCES EPIDEMIOLOGICAL BOARD WASHINGTON DC	Not available	1/1/1966	1280	Not available	DA	U	C - 12	Distribution: DTIC users only., Availability: Document partially illegible.	Not available
ADB006870"	Development and Characterization of Attenuated Live Influenza Virus Vaccines for Use in Man	MICHIGAN UNIV ANN ARBOR	Maassab, H. F.	9/1/1975	22	Not available	USAMRDC	U	B - 03	Distribution authorized to U.S. Gov't. agencies only; Proprietary Information; JUN 1975. Other requests shall be referred to Army Medical Research and Development Command, Attn: SGRD-RP, Washington, DC 20314.	Annual progress rept. 1 Jul 1974-30 Jun 1975
ADB204491"	Cholera 0:139 Bengal Vibration, A New Serum Group with Epidemic Potential,	ARMED FORCES MEDICAL INTELLIGENCE CENTER FORT DETRICK FREDERICK MD	Ciufecu, C.,Nacescu, Nadia	10/11/1995	9	AFMIC-HT-031-95	AFMIC	U	E - 04	Distribution authorized to DoD only; Copyright; Proprietary Info.; 11 Oct 95. Other requests shall be referred to AFMIC-MI-1A, Fort Detrick, Frederick, MD 21702-5004.	Not available
ADB373742"	Triosyn T-5000 Respirator Quick-Look Report	AIR FORCE MEDICAL SUPPORT AGENCY FORT DETRICK MD AIR FORCE MEDICAL EVALUATION SUPPORT ACTIVITY	Henry, Michael W.	3/1/2007	39	Not available	AFMESA	U	F - 05	Distribution: Further dissemination only as directed by Air Force Medical Evaluation Support Activity, Fort Detrick, MD 21702, MAR 2007, or higher DoD authority.	Not available

ADB182283"	Specific Immunity in Preschool Children at High Risk of Infection with Hepatitis A	ARMED FORCES MEDICAL INTELLIGENCE CENTER FORT DETRICK FREDERICK MD	Doroshenko, N. V.,Schastnyj, Eh I.,Ygodovski, V. V.,Abdullaeva, F. A.,Straxonova, V. M.	3/18/1994	10	AFMIC-HT-011-94	AFMIC	U	B - 03	Distribution authorized to U.S. Gov't. agencies only; Proprietary Information; 18 MAR 1994. Other requests shall be referred to the AFMIC-PAG-3, Fort Detrick, Frederick, MD 21702-5004. Document partially illegible.	Not available
ADB219552"	Field Trial of Shigella Flexneri III Vaccine. I. Background, Scope, and Organization of the Program.	NAVAL MEDICAL RESEARCH INST BETHESDA MD	Barnes, L. A.,Bennett, Ivan L.,Gordon, Robert S.	3/16/1949	29	Not available	NMRI	U	C - 12	Distribution: DTIC users only., Availability: Document partially illegible.	Rept. no. 5,
ADB206742"	Typology of Natural Foci of Tick-Borne Rickettsiosis,	ARMED FORCES MEDICAL INTELLIGENCE CENTER FORT DETRICK FREDERICK MD	Rudakov, N. V.,Bogdanov, I. I.	1/31/1996	8	AFMIC-HT-007-96	AFMIC	U	E - 04	Distribution authorized to DoD only; Copyright; Proprietary Info.; 31 Jan 96. Other requests shall be referred to AFMIC-MI-1A, Ft. Detrick, Frederick, MD 21702-5004.	Not available
AD0839763"	ETIOLOGY AND EPIDEMIOLOGY OF ACUTE RESPIRATORY DISEASES.	VIRGINIA UNIV CHARLOTTESVILLE	Gwaltney,Jack M. , Jr.,Edmondson,William P. , Jr	9/1/1968	38	Not available	Not available	U	E - 04	Distribution: DoD only: others to Commanding General, Army Medical Research and Development Command, Attn: MEDDH-SI. Washington, D. C. 20315.	Annual progress rept. 1 Jul 67-30 Jun 68,
ADB954622"	Determination of the Pathogen of Epidemic Hemorrhagic Fevers.	ARMY MEDICAL RESEARCH INST OF INFECTIOUS DISEASES FORT DETRICK MD	Not available	1/1/1944	9	USAMRIID-MUL-0633	Not available	U	B - 03	Distribution limited to U.S. Gov't. agencies only; Proprietary Info.; 31 Jan 83. Other requests for this document must be referred to USAMRIID Library, Fort Detrick, Frederick, MD 21701.	Not available



ADB048099"	Some Principles of Anti-Epidemic Prophylaxis of Cattle Farming Facilities According to the Black and White System (Zu Einigen Grundsätzen der Seuchenprophylaktischen Absicherung von Produktionsanlagen der Rinderwirtschaft nach dem Schwartz-Weiss-System),	ARMY MEDICAL INTELLIGENCE AND INFORMATION AGENCY FORT DETRICK MD	Mehlhorn,G.	7/7/1972	19	USAMIIA-K-2251	Not available	U	B - 03	Distribution limited to U.S. Gov't. agencies only; Copyright, Proprietary Info.; 3 Jun 80. Other requests for this document must be referred to Director, Army Medical Intelligence and Information Agency, Attn: SGMI-IS. Fort Detrick, Frederick, MD 21701.	Not available
AD0427366"	INTESTINAL MORPHOLOGY IN HUMAN AND EXPERIMENTAL CHOLERA,	NAVAL MEDICAL RESEARCH UNIT NO 2 TAIPEI (TAIWAN)	Fresh,James W.,Versage,P. M.,Reyes,Vincente	7/19/1963	10	NAMRU2	Not available	U	C - 02	Distribution authorized to U.S. Gov't. agencies and their contractors; Other requests shall be referred to NAVAL MEDICAL RESEARCH UNIT NO 2 TAIPEI (TAIWAN) This document contains export-controlled technical data.	Not available
ADB201609"	Annual US Air Force Sexually Transmitted Disease (STD) Report, 1994.	ARMSTRONG LAB BROOKS AFB TX AEROSPACE MEDICINE DIRECTORATE	Hackl, Yona	5/23/1995	40	AL/AO-TR-1995-0101	AL/AO	U	F - 05	Distribution: Further dissemination only as directed by AL/AOES, 2801 West Rd, Suite 2, Brooks AFB, TX 78235-5241, 13 Jun 95 or higher DoD authority., This document contains export-controlled technical data.	Final rept. 1992-1994,
ADB186857"	Evaluating the Epidemic and Epizootic Activity of Natural Foci of Hemorrhagic Fever with Renal Syndrome	ARMED FORCES MEDICAL INTELLIGENCE CENTER FORT DETRICK FEDERICK MD	Nevskiy, I. M.,Karmanova, R. I.,Magaznov, A. M.,Apekina, N. S.,Gavrilovskaya, I. N.	5/20/1994	12	AFMIC-HT-005-94	AFMIC	U	B - 03	Distribution authorized to U.S. Gov't. agencies only; Proprietary Information; 20 MAY 1994. Other requests shall be referred to AFMIC-PAG-3, Fort Detrick, Frederick, MD 21702-5004.	Not available
AD0858428"	Studies on the Role of Mycoplasma Organisms in Human Respiratory Disease.	WASHINGTON UNIV SEATTLE DEPT OF PREVENTIVE MEDICINE	Grayston,J. Thomas,Kenny,George E.,Foy,Hjordis M.	9/15/1969	58	Not available	Not available	U	E - 04	Distribution: DoD only: others to Commanding General, Army Medical Research and Development Command, Attn: MEDDH-SI. Washington, D. C. 20315.	Annual progress rept. 1 Jul 68-31 May 69,

AD1073761"	A Practical Generation-Interval-Based Approach to Inferring the Strength of epidemics from their Speed	GEORGIA TECH RESEARCH CORP ATLANTA ATLANTA United States	Park,Sang W.,Champredon,David, Weitz,Joshua S.,Dushoff,Jonathan	1/10/2019	9	63814-NS.15	63814-NS.15	U	B - 03	U.S. Government agencies only;Proprietary Information;;10 Jan 2019.Other request shall be referred to U.S. Army Research Office,Research Triangle Park,NC,27709-2211,U.S. Army Research Office.	Journal Article - Open Access
ADB141926"	Quantitative Studies of Cyclic Fluctuation of the Epidemic Process in Bulgaria,	ARMED FORCES MEDICAL INTELLIGENCE CENTER FORT DETRICK FREDERICK MD	Ranchov, G. K.	3/19/1990	8	AFMIC-HT-145-89	Not available	U	B - 03	Distribution authorized to U.S. Gov't. agencies only; Copyright; Proprietary Info.; 19 Mar 90. Other requests shall be referred to AFMIC-IS, Fort Detrick, Frederick, MD 21701-5004.	Not available
ADB006263"	Studies on the Prevention, Control and Treatment of Epidemic Influenza	MICHIGAN UNIV ANN ARBOR	Davenport, Fred M.	8/1/1975	23	Not available	USAMRDC	U	B - 03	Distribution authorized to U.S. Gov't. agencies only; Proprietary Information; JUN 1975. Other requests shall be referred to Commander, Army Medical Research and Development Command, Attn: SGRD-IDS. Washington, DC 20314.	Annual rept. 1 Jul 1974-30 Jun 1975
ADB118331"	Q Fever - A Current Problem in Military Health Services	ARMED FORCES MEDICAL INTELLIGENCE CENTER FORT DETRICK FREDERICK MD	Knapp, Joseph,Ziemka, Janusz	2/16/1988	8	AFMIC-HT-204-87	AFMIC	U	B - 03	Distribution authorized to U.S. Gov't. agencies only; Proprietary Information; 16 FEB 1988. Other requests shall be referred to US Armed Forces Medical Intelligence Center, Attn: IS, Fort Detrick, MD 21701-5004.	Journal article
AD0815753"	QUARTERLY REPORT NUMBER 3 - FY 1967,	COMMUNICABLE DISEASE CENTER ATLANTA GA	Eickhoff,Theodore C.	4/28/1967	7	Not available	Not available	U	C - 02	Distribution: No Foreign without approval of Commanding Officer, Fort Detrick, Attn: Technical Releases Branch. Frederick, Md. 21701.	Not available

ADB291871"	Development of a Broadly Protective Vaccine for Alphaviruses through DNA Shuffling	MAXYGEN INC REDWOOD CITY CA	Whalen, Robert G.,Schmaljohn, Connie S.,Paidhungat, Maden,Dupuy, Lesley,Fong, Steven	7/1/2003	10	Not available	USAMRMC	U	B - 03	Distribution authorized to U.S. Gov't. agencies only; Proprietary Information; Jul 2003. Other requests shall be referred to US Army Medical Research and Materiel Command, 504 Scott Street, Ft. Detrick, MD 21702-5012	Annual rept. 1 Jul 2002-30 Jun 2003
ADB239525"	Intervention to Decrease Risk for Sexually Transmitted Diseases (STDs) and the Associated Negative Reproductive Health Outcomes in Women Aboard Ships: A Biopsychosocial Approach.	CALIFORNIA UNIV SAN FRANCISCO	Shafer, Mary-Ann	9/1/1997	69	Not available	USAMRMC	U	B - 03	Distribution authorized to U.S. Gov't. agencies only; Proprietary Info.; Sep 97. Other requests shall be referred to U.S. Army Medical Research and Materiel Comd., Fort Detrick, MD 21702-5012.	Annual rept. 7 Aug 96-6 Aug 97
AD0819755"	MENINGOCOCCUS: BACTERIOLOGICAL, SEROLOGICAL AND EPIDEMIOLOGICAL STUDIES.	STATE UNIV OF NEW YORK SYRACUSE UPSTATE MEDICAL CENTER	Feldman,Harry A.	9/1/1967	20	Not available	Not available	U	E - 04	Distribution: DoD only: others to Commanding General, Army Medical Research and Development Command, Washington, D. C. 20315.	Annual progress rept. 16 Feb 66-15 Sep 67,
AD0888049"	Rickettsial Diseases: A. Trench Fever. B. Epidemic Typhus.	HARVARD SCHOOL OF PUBLIC HEALTH BOSTON MASS DEPT OF MICROBIOLOGY	Murray,Edward S.,Vinson,J. William	9/1/1971	25	Not available	Not available	U	B - 03	Distribution limited to U.S. Gov't. agencies only; Proprietary Info.; Jun 71. Other requests for this document must be referred to Commanding General, Army Medical Research and Development Command, Attn: MEDDH-SI. Washington, D. C. 20314.	Annual progress rept. 1 Jun 70-31 May 71,
AD0472689"	STUDY OF INFLUENZA VIRUS VACCINES IN INFANTS AND YOUNG CHILDREN. CLINICAL AND LABORATORY STUDIES OF THE EFFECTIVENESS OF VACCINES.	LOMA LINDA UNIV CALIF	Quilligan,J. J. ,Jr.	10/31/1965	28	Not available	Not available	U	F - 05	Notice: All release of this document is controlled. All certified requesters shall obtain release approval from Commanding General, Army Medical Research and Development Command, Dept. of the Army, Washington, D. C.	Annual rept. 1 Nov 64-31 Oct 65,

AD0887894"	Studies on the Prevention, Control and Treatment of Epidemic Influenza.	MICHIGAN UNIV ANN ARBOR	Davenport,Fred M.	8/1/1971	44	Not available	Not available	U	B - 03	Distribution limited to U.S. Gov't agencies only; Proprietary Info.; Jun 71. Other requests for this document must be referred to Commanding General, Army Medical Research and Development Command, Attn: MEDDH-SI. Washington, D. C. 20314.	Annual progress rept. 1 Jun 70-31 May 71,
ADB033756"	Studies of the Prevention, Control and Treatment of Epidemic Influenza.	MICHIGAN UNIV ANN ARBOR	Hennessy,Albert V.	9/1/1978	11	Not available	Not available	U	B - 03	Distribution limited to U.S. Gov't. agencies only; Proprietary Info.; Jun 77. Other requests for this document must be referred to Commander, Army Medical Research and Development Command, Attn: SGRD-AJ. Fort Detrick, Frederick, MD 21701.	Final scientific rept. 1 Jul 69-31 Dec 77,
AD0905558"	Studies on Rickettsial Diseases	MARYLAND UNIV BALTIMORE DEPT OF MICROBIOLOGY	Wisseman Jr, Charles L.	8/1/1972	85	Not available	USAMRDC	U	B - 03	Distribution limited to U.S. Gov't. agencies only; Proprietary Info.; Jun 1971. Other requests for this document must be referred to Commanding General, U.S. Army Medical Research and Development Command, Attn: SGRD-IDS, Washington, DC 20314.	Annual progress rept. 1 Jun 1971-31 May 1972
ADB126621"	Dengue Hemorrhagic Fever in the Developing Countries of Southeast Asia	ARMED FORCES MEDICAL INTELLIGENCE CENTER FORT DETRICK FEDERICK MD	Pokrovskiy, V. I.,Am, Nguen T.,Godovanny, B. A.	9/20/1988	11	AFMIC-HT-131-88	AFMIC	U	B - 03	Distribution authorized to U.S. Gov't. agencies only; Proprietary Information; 28 SEP 1988. Other requests shall be referred to AFMIC-IS, Fort Detrick, Frederick, MD 21701-5004.	Not available

ADB411418"	Medical Informatics Decision and Support (MIDAS)	MILCORD LLC WALTHAM MA	Clark, Timothy,Diedrich, Frederick	1/6/2015	33	Not available	ONR	U	B - 03	Distribution authorized to U.S. Gov't. agencies only; Proprietary Information; 06 JAN 2016. Other requests shall be referred to Office of Naval Research, Attn: ONR Code 30, 875 N. Randolph St., Arlington, VA 22203-1995.	Final rept. 6 Jul 2015-6 Jan 2016
AD0438213"	EPIDEMIC KERATOCONJUNCTIVITIS ON TAIWAN: ETIOLOGICAL AND CLINICAL STUDIES,	NAVAL MEDICAL RESEARCH UNIT NO 2 TAIPEI (TAIWAN)	Grayston ,Thomas,Yang ,Yen-Fei,Johnston ,Paul B.,Ko,Liang-She	9/17/1963	7	NAMRU-2-MR005 09 1201 10 6	MR005 09 1201 10 6	U	C - 02	Distribution authorized to U.S. Gov't. agencies and their contractors; Other requests shall be referred to NAVAL MEDICAL RESEARCH UNIT NO 2 TAIPEI (TAIWAN) This document contains export-controlled technical data.	Not available
ADB216709"	Who's Coughing in Formation? A Common Disease is Again Creating Problems in the Army and in Our Country,	ARMED FORCES MEDICAL INTELLIGENCE CENTER FORT DETRICK FREDERICK MD	Zhirnova, Irina	11/7/1996	6	AFMIC-HT-040-96	AFMIC	U	E - 04	Distribution authorized to DoD only; Proprietary Info.; Copyright; 7 Nov 96. Other requests shall be referred to AFMIC-MI-1A, Fort Detrick, Frederick, MD 21702-5004.	Not available
ADB310839"	Prognostic Epidemiology: Mathematical Approaches to the Monitoring and Control of Epidemics	DYNAMICS TECHNOLOGY INC TORRANCE CA	Not available	7/8/2005	37	DTE-0372-05001	ARO	U	B - 03	Distribution authorized to U.S. Gov't. agencies only; Proprietary Information; 08 JUL 2005. Other requests shall be referred to U.S. Army Research Office, P. O. Box 12211, Research Triangle Park, NC 27709-2211. This document is not available from DTIC in microfiche.	Final technical rept.

ADB343767"	Development of Bacterial Ghost Vaccine for Avian Influenza	VITAL PROBES MAYFIELD PA	DelVecchio, Vito G.	5/21/2008	24	AFRL-RH-WP-TR-2008-0092	TR-2008-0092,AFRL-RH-WP	U	B - 03	Distribution authorized to U.S. Gov't. agencies only; Proprietary Information; MAY 2008. Other requests shall be referred to Air Force Research Laboratory, ATTN: RHPB, 2729 R St., Bldg. 837, Wright-Patterson AFB, OH 45433-5707.	Final rept. 21 Aug 2006-21 May 2008
ADB046816"	The Ebola Virus Epidemic in Zaire, 1976,	ARMY FOREIGN SCIENCE AND TECHNOLOGY CENTER CHARLOTTESVILLE VA	Raffier,G.	3/1/1980	21	FSTC-HT-1024-79	Not available	U	B - 03	Distribution limited to U.S. Gov't. agencies only; Copyright, Proprietary Info.; 14 May 80. Other requests for this document must be referred to Commander, Army Foreign Science and Technology Center, Charlottesville, VA 22901.	Not available
AD0861736"	Viral and Rickettsial Diseases	MARYLAND UNIV BALTIMORE DEPT OF MICROBIOLOGY	Wisseman, Jr, Charles L.	6/1/1969	75	Not available	USAMRDC	U	E - 04	Distribution authorized to DoD only; Administrative/Operational Use; JUN 1969. Other requests shall be referred to General, Army Medical Research and Development Command, Attn: MEDDH-SI. Washington, DC 20315.	Annual progress rept. Nov 1968-30 Jun 1969
AD1073763"	Coevolutionary Complex Networks: Dynamical Foundations, Influence, and Control	GEORGIA TECH RESEARCH CORP ATLANTA ATLANTA United States	Weitz,Joshua S.	2/25/2019	3	63814-NS.17	63814-NS.17	U	B - 03	U.S. Government agencies only;Proprietary Information,;25 Feb 2019.Other request shall be referred to U.S. Army Research Office,Research Triangle Park,NC,27709-2211,U.S. Army Research Office.	Technical Report,15 Jul 2014,14 Mar 2019

ADB969828"	Isolation and Identification of c. burnetti from the Urine of Infected Sheep ,	ARMY MEDICAL RESEARCH INST OF INFECTIOUS DISEASES FORT DETRICK MD	Morozzi, A.	1/1/1951	5	USAMRIID-MUL-802	USAMRIID	U	B - 03	Distribution authorized to U.S. Gov't. agencies only; Critical Technology; 10 Jun 92. Other requests shall be referred to USAMRIID/Lib., Ft. Detrick, MD 21702-5011.	Not available
AD1078246"	Data-Assisted Reduced-Order Modeling of Extreme Events in Complex Dynamical Systems	University of California - Santa Barbara Santa Barbara United States	Wang,Zhong Y,Vlachas,Pantelis,Koumoutsakos,Petros,Sapsis,Themistoklis,Durstewitz,Daniel	5/24/2018	24	70881-EG-MUR.11	70881-EG-MUR.11	U	B - 03	U.S. Government agencies only;Proprietary Information;;24 May 2018.Other request shall be referred to U.S. Army Research Office ,Research Triangle Park,NC,27709, U.S. Army Research Office .	Journal Article - Open Access
AD0839907"	ETIOLOGY AND EPIDEMIOLOGY OF RESPIRATORY DISEASE AT KEESLER AIR FORCE BASE AND CHARACTERISTICS OF THE CAUSATIVE AGENTS.	TULANE UNIV NEW ORLEANS LA SCHOOL OF MEDICINE	Mogabgab,William J.	9/15/1968	48	Not available	Not available	U	E - 04	Distribution: DoD only: others to Commanding General, Army Medical Research and Development Command, Attn: MEDDH-SI. Washington, D. C. 20315.	Annual progress rept. 1 Jul 67-30 Jun 68,
ADB250905"	Aerosol Vaccination Against Dangerous Infectious Diseases	ARMY MEDICAL RESEARCH INST OF INFECTIOUS DISEASES FORT DETRICK MD	Slepanov, A. V.,Marinin, L. I.,Vorobiev, A. A.	1/1/1999	12	MUL-1142	USAMRIID	U	B - 03	Distribution authorized to U.S. Gov't. agencies only; Proprietary Info.; 1999. Other requests shall be referred to USAMRIID, 1425 Port St., Fort Detrick, MD 21701.	Not available
ADB339947"	Development of a Broadly Protective Vaccine for Alphaviruses Through DNA Shuffling	MAXYGEN INC REDWOOD CITY CA	Whalen, Robert	1/1/2006	12	Not available	USAMRMC	U	B - 03	Distribution authorized to U.S. Gov't. agencies only; Proprietary Information; JAN 2006. Other requests shall be referred to U.S. Army Medical Research and Materiel Command, 504 Scott St., Ft. Detrick, MD 21702-5012.	Final rept. 1 Jul 2002-31 Dec 2005

ADB275506"	Hypothesis on the Achean Disease	OFFICINE ORTOPEDICHE RIZZOLI BOLOGNA (ITALY)	Urso, C.	6/1/1993	4	MUL-1186	USAMRIID	U	B - 03	Distribution authorized to U.S. Gov't. agencies only; Administrative/Operational Use; Jun 93. Other requests shall be referred to USAMRIID Lib., 1425 Porter St., Fort Detrick, MD 21702-5011.	Not available
AD0867026"	Annual Progress Report, FY 1969.	MEDICAL LAB (406TH) APO SAN FRANCISCO 96343	McCarty,James E.	7/1/1969	482	Not available	Not available	U	B - 03	Distribution: USGO: others to Commanding General, Army Medical Research and Development Command, Attn: MEDDH-SI. Washington, D. C. 20314.	Rept. for 1 Jul 68-30 Jun 69,
ADB364942"	Selection for Resistance to Oseltamivir in Seasonal and Pandemic H1N1 Influenza and Widespread Co-Circulation of the Lineages	AMERICAN MUSEUM OF NATURAL HISTORY NEW YORK	Janies, Daniel A.,Voronkin, Igor O.,Studer, Jonathon,Hardman, Jori,Alexandrov, Boyan B.,Treseder, Travis W.,Valson, Chandni	1/1/2010	10	ARO-48811-LS-DRP.33	48811-LS-DRP.33,ARO	U	B - 03	Distribution authorized to U.S. Gov't. agencies only; Proprietary Information; 2010. Other requests shall be referred to U.S. Army Research Office, PO Box 12211, Research Triangle Park, NC 27709-2211.	Journal article
ADB050033"	Occupational Diseases and Problems in Animal Husbandry (Berufskrankheiten und Berufsbedingte Erschwernisse in der Tierhaltung),	ARMY MEDICAL INTELLIGENCE AND INFORMATION AGENCY FORT DETRICK MD	Wolff,F.	12/10/1971	16	USAMIIA-K-0938	Not available	U	B - 03	Distribution limited to U.S. Gov't. agencies only; Copyright, Proprietary Info.; 15 Aug 80. Other requests for this document must be referred to Director, Army Medical Intelligence and Information Agency, Attn: SGMI-IS. Fort Detrick, Frederick, MD 21701.	Not available
ADB352255"	U.S. Military Human Immunodeficiency Virus (HIV) Research Program	HENRY M JACKSON FOUNDATION FOR THE ADVANCEMENT OF MILITARY MEDICINE ROCKVILLE MD	Robb, Merlin L.	9/1/2008	135	Not available	USAMRMC	U	B - 03	Distribution authorized to U.S. Gov't. agencies only; Proprietary Information; SEP 2008. Other requests shall be referred to U.S. Army Medical Research and Materiel Command, 504 Scott St., Ft. Detrick, MD 21702-5012.	Annual rept. 15 Sep 2007-14 Aug 2008



ADB006161"	Revolution in Epidemiology	ARMY FOREIGN SCIENCE AND TECHNOLOGY CENTER CHARLOTTESVILLE VA	Belyakov, V. D.	4/25/1975	14	FSTC-HT-23-732-75	FSTC	U	B - 03	Distribution authorized to U.S. Gov't. agencies only; Proprietary Information; 01 OCT 1972. Other requests shall be referred to Army Foreign Science and Technology Center, Charlottesville, VA 22901.	Not available
ADB237064"	Youth violence: A Public-Health Problem with Disturbing Correlates	RAND CORP SANTA MONICA CA	Ellickson, Phyllis, Saner, Hilary, McGuigan, Kimberly	1/1/1998	4	Not available	XD	U	C - 12	Distribution: DTIC users only.	Not available
AD0860756"	Rickettsial Diseases: A. Trench Fever. B. Epidemic Typhus.	HARVARD SCHOOL OF PUBLIC HEALTH BOSTON MASS	Murray, Edward S., Vinson, J. William	9/1/1969	26	Not available	Not available	U	E - 04	Distribution: DoD only: others to Commanding General, Army Medical Research and Development Command, Attn: MEDDH-SI. Washington, D. C. 20314.	Annual progress rept. 1 Jul 68-31 May 69,
AD1049717"	Bioactive Sphingolipids and Wound Healing	University of Kentucky College of Medicine Lexington United States	Nikolova-Karakashian, Mariana	8/1/2017	21	Not available	Not available	U	B - 03	U.S. Government agencies only; Proprietary Information; 01 Aug 2017. Other request shall be referred to U.S. Army Medical Research and Materiel Command, Fort Detrick, MD, 21702-5012, U.S. Army Medical Research and Materiel Command.	Technical Report, 01 Aug 2016, 31 Jul 2017
ADB037509"	Genesis of Arthropod-Borne Viral Epidemics.	CORNELL UNIV MEDICAL COLL NEW YORK DEPT OF MICROBIOLOGY	Wiebe, Michael E.	2/1/1979	28	Not available	Not available	U	B - 03	Distribution limited to U.S. Gov't. agencies only; Proprietary Info; Feb 79. Other requests for this document must be referred to Commander, Army Medical Research and Development Command, Attn: SGRD-SI. Fort Detrick, Frederick, MD 21701.	Rept. no. 2,

ADB199711"	Cargo Lands on the X: Russians Develop a Homing System for Air Drops.	NATIONAL GROUND INTELLIGENCE CENTER CHARLOTTESVILLE VA	Medvedev, Yuriy	4/10/1995	4	NGIC-HT-0082-95	NGIC	U	C - 02	Distribution authorized to U.S. Govt. agencies and their contractors; Specific Authority; 1 Jan 88. Other requests shall be referred to U.S. Army National Ground Intelligence Center, 220 7th Street, NE, Charlottesville, VA 22902-5396.	Not available
AD0473681"	PREVENTION OF INFLUENZA AND OTHER RESPIRATORY DISEASES.	COLORADO UNIV DENVER MEDICAL CENTER	Meiklejohn,Gordon	10/31/1965	15	Not available	Not available	U	C - 02	Notice: All release of this document is controlled. All certified requesters shall obtain release approval from Commanding General, Army Medical Research and Development Command, Dept. of the Army, Washington, D. C. 20301.	Final progress rept. 1 Nov 64-31 Oct 65,
AD0824239"	EPIDEMIOLOGY OF STEM RUST OF WHEAT AT STILLWATER, OKLAHOMA; HAYS, KANSAS; AND LINCOLN, NEBRASKA, IN 1964.	FORT DETRICK FREDERICK MD	Line,Roland F.,Peet,Clyde E.	11/1/1967	57	SMUFD-TR-95	Not available	U	C - 02	Distribution: No Foreign without approval of Commanding Officer, Fort Detrick, Attn: Technical Release Branch. Frederick, Md. 21701.	Technical rept.,
AD0287493"	A STUDY OF THE SEASONAL SUCCESSION OF SOME MEDICALLY IMPORTANT INSECTS IN THE TAIPEI AREA	NAVAL MEDICAL RESEARCH UNIT NO 2 TAIPEI (TAIWAN)	SUN,WESLEY K.C.	6/19/1962	1	Not available	Not available	U	C - 02	Distribution to US Gov't agencies and their contractors only: No Foreign without approval of NAVAL MEDICAL RESEARCH UNIT NO 2 TAIPEI (TAIWAN)	Not available
AD0025663"	AN ATTEMPT TO RECOVER PANDEMIC-TYPE INFLUENZA VIRUS	SCHOOL OF AVIATION MEDICINE RANDOLPH AFB TEX	ELLINGSON,HAROLD V.	12/1/1953	1	Not available	Not available	U	C - 02	Distribution authorized to U.S. Gov't. agencies and their contractors; Other requests shall be referred to SCHOOL OF AVIATION MEDICINE RANDOLPH AFB TEX	Not available

ADB207266"	Lyme Borreliosis,	ARMED FORCES MEDICAL INTELLIGENCE CENTER FORT DETRICK FREDERICK MD	Dziubek, Zdzislaw	2/20/1996	11	AFMIC-HT-040-95	AFMIC	U	E - 04	Distribution authorized to DoD only; Copyright; Specific Authority; 20 Feb 96. Other requests shall be referred to AFMIC-MI-1A, Ft. Detrick, Frederick, MD 21702-5004.	Not available
AD0903956"	Etiology of Acute Respiratory Diseases.	CALIFORNIA STATE DEPT OF PUBLIC HEALTH BERKELEY VIRAL AND RICKETTSIAL DISEASE LAB	Lenette ,Edwin H.,Schieble,Jack H.,Magoffin,Robert L.	8/15/1972	19	Not available	Not available	U	B - 03	Distribution limited to U.S. Gov't. agencies only; Proprietary Info.; Jun 71. Other requests for this document must be referred to Commanding General, Army Medical Research and Development Command, Attn: SGRD-IDS. Washington, D. C. 20314.	Annual rept. 1 Jun 71-31 May 72,
ADB373430"	Distributed Bioinformatics Analysis of Avian (Bird) Flu Using Global Computational Data Grid	CALIFORNIA UNIV SAN DIEGO LA JOLLA	Arzberger, Peter W.,Li, Wilfred W.,Alam, Maqsudul,Jeong, Karpjoo,Lin, Jung- Hsin,Nan, Kai,Tatebe, Osamu,Wahab, Habibah,Wei, Xiaohui	2/1/2009	160	Not available	USAMRMC	U	B - 03	Distribution authorized to U.S. Gov't. agencies only; Proprietary Information; FEB 2009. Other requests shall be referred to U.S. Army Medical Research and Materiel Command, 504 Scott Street, Fort Detrick, MD 221702-5012.	Final rept. 19 Jan 2007-18 Jan 2009
ADB969834"	Isolation and Identification of C. burnetti from an Epidemic Episode of 'Q Fever in Chiaravalle,	ARMY MEDICAL RESEARCH INST OF INFECTIOUS DISEASES FORT DETRICK MD	Mueller, G.,Baldelli, B.	1/1/1950	8	USAMRIID-MUL-804	USAMRIID	U	B - 03	Distribution authorized to U.S. Gov't. agencies only; Critical Technology; 10 Jun 92. Other requests shall be referred to USAMRIID, Library, Fort Detrick, Frederick, MD 21702-5011.	Not available
AD0903530"	Studies on the Prevention, Control and Treatment of Epidemic Influenza.	MICHIGAN UNIV ANN ARBOR	Davenport,Fred M.	8/1/1972	41	Not available	Not available	U	B - 03	Distribution limited to U.S. Gov't. agencies only; Proprietary Info.; Jun 72. Other requests for this document must be referred to Commanding General, Army Research and Development Command, Attn: SGRD-IDS. Washington, D. C. 20314.	Annual progress rept. 1 Jun 71-31 May 72,

ADB334861"	BioSurveillance Indicators of Notable Events (BioSINE)	APTIMA INC WOBURN MA	Picciano, Paul	8/1/2007	24	AP-R-1402,AFRL-RH-WP-TR-2007-0120	TR-2007-0120,AFRL-RH-WP	U	B - 03	Distribution authorized to U.S. Gov't. agencies only; Proprietary Information; AUG 2007. Other requests shall be referred to Air Force Research Laboratory, ATTN: RHPC, 2729 R St., Wright-Patterson AFB, OH 45433-5707.	Final rept. 23 Jan-29 Aug 2007
AD0865099"	Quarterly Report Number 2-FY 1970.	NATIONAL COMMUNICABLE DISEASE CENTER ATLANTA GA	Brachman,Philip S.	1/1/1970	9	Not available	Not available	U	C - 02	Distribution: No Foreign without approval of Commanding Officer, Fort Detrick, Attn: Technical Releases Branch. Frederick, Md. 21701.	Rept. for 1 Oct-31 Dec 69,
AD0848609"	Quarterly Report Number 2-FY 1969	NATIONAL COMMUNICABLE DISEASE CENTER ATLANTA GA	Brachman, Philip S.	1/1/1969	53	Not available	SMUFD	U	C - 02	Distribution authorized to U.S. Gov't. agencies and their contractors; Critical Technology; JAN 1969. Other requests shall be referred to Commanding Officer, Department of the Army, Fort Detrick, Attn: Technical Releases Branch/TID, Frederick, MD 21707. Document partially illegible. This document contains export-controlled technical data.	Rept. for 1 Oct-31 Dec 1968
AD0255121"	INFECTIONS IN SURGERY AND TRAUMA WITH SPECIAL EMPHASIS ON THE STAPHYLOCOCCI	MISSISSIPPI UNIV JACKSON SCHOOL OF MEDICINE	ARTZ,CURTIS P.	4/20/1961	1	Not available	Not available	U	C - 02	Distribution authorized to US Gov't and their contractors only; Other requests shall be referred to MISSISSIPPI UNIV JACKSON SCHOOL OF MEDICINE.	Not available

AD1028623"	Nanoparticle Delivery of mRNA Transcripts for the Production of Oligoclonal Anti Burkholderia Antibodies in Vivo	Pfizer Inc. Cambridge United States	Holsti,Matthew	2/16/2017	750	Not available	Not available	U	B - 03	U.S. Government agencies only;Proprietary Information;;16 Feb 2017.Other request shall be referred to Defense Advanced Research Projects Agency , Arlington,VA,22203, Defense Advanced Research Projects Agency .	Technical Report,01 Dec 2013,31 Jan 2017
ADB308600"	Impact of HIV/AIDS in Sub-Sahara Africa on US National Security	ARMY WAR COLL CARLISLE BARRACKS PA	Coles, Theresa D.	3/3/2005	27	Not available	USAWC	U	B - 03	Distribution authorized to U.S. Gov't. agencies only; Administrative/Operational Use; MAR 2005. Other requests shall be referred to U.S. Army War College, Carlisle Barracks, Carlisle, PA 17013-5050.	Research paper
ADB334574"	Biosurveillance-based Integrated Outbreak Warning and Recognition System (BIOWARS (Trademark))	KNOWLEDGE BASED SYSTEMS INC COLLEGE STATION TX	Ramachandran, Satheesh,Painter, Michael K.,Corlette, Dan,Patki, Mukul,Mayer, Richard J.	9/1/2007	51	AFRL-RH-WP-TR-2007-0116	TR-2007-0116,AFRL-RH-WP	U	B - 03	Distribution authorized to U.S. Gov't. agencies only; Proprietary Information; SEP 2007. Other requests shall be referred to Air Force Research Lab., Attn: AFRL/RHPC-CBD, 2729 R St., Bldg. 837, Wright-Patterson AFB, OH 45433-5707.	Final rept. 7 Feb-5 Sep 2007
AD0856223"	Epidemiology of Stripe Rust (Puccinia striiformis West.) of Wheat	OREGON STATE UNIV CORVALLIS	Powelson, Robert L.	6/1/1969	188	Not available	ABL/MD	U	C - 02	Distribution authorized to U.S. Gov't. agencies and their contractors; Administrative/Operational Use; DEC 1968. Other requests shall be referred to Commanding Officer, Fort Detrick, Attn: Technical Releases Branch/TID. Frederick, MD 21701., Availability: Document partially illegible.	Final technical rept. 1 Feb 1964-31 Dec 1968

ADB001998"	Protective Measures during Nuclear Attacks, Bacteriological Attacks and Epidemics	ARMY FOREIGN SCIENCE AND TECHNOLOGY CENTER CHARLOTTESVILLE VA	Not available	6/8/1974	57	FSTC-HT-23-368-74	FSTC	U	C - 02	Distribution authorized to U.S. Gov't. agencies and their contractors; Specific Authority; 01 OCT 1972. Other requests shall be referred to Army Foreign Science and Technology Center, Attn: IANG-IM-LS, M/S 801, 2055 Boulder Road, Charlottesville, VA 22911-8318.	Not available
AD0440433"	Quarterly Report Number 3 for Period Ending FY 1964.	COMMUNICABLE DISEASE CENTER ATLANTA GA	Not available	4/10/1964	23	Not available	Not available	U	C - 02	Release or announcement to Foreign Governments or their nationals is not authorized.	Quarterly rept. no. 3.
AD0436041"	THE ECOLOGY OF JAPANESE ENCEPHALITIS VIRUS	NAVAL MEDICAL RESEARCH UNIT NO 2 MANILA (PHILIPPINES)	Hurlbut, Herbert S.	12/19/1963	8	NAMRU-LRS-R-63-2	NAMRU-2	U	C - 02	Distribution authorized to U.S. Gov't. agencies and their contractors; Administrative/Operational Use; 19 DEC 1963. Other requests shall be referred to US Naval Medical Research Unit No. 3, Box 14, APO 63, San Francisco, CA.	Not available
ADB150351"	Anthrax in the Digestive Tract of Humans	ARMY MEDICAL RESEARCH INST OF INFECTIOUS DISEASES FORT DETRICK MD	Solowieff, N.	1/1/1989	14	USAMRIID-MUL-846	USAMRIID	U	B - 03	Distribution authorized to U.S. Gov't. agencies only; Proprietary Information; 06 DEC 1990. Other requests shall be referred to Army Medical Research Institute for Infectious Disease, USAMRIID, Ft Detrick, Frederick, MD 21702-5011.	Not available
AD1053474"	A Single Shot Flu Vaccine	Infectious Disease Research Institute Seattle United States	Carter,Darrick,Reed,Steve	12/11/2014	68	ARO-ARO-58329-LS-DRP.1	ARO-58329-LS-DRP.1	U	B - 03	U.S. Government agencies only;Proprietary Information;;11 Dec 2014.Other request shall be referred to U.S. Army Research Office ,Research Triangle Park,NC,27709-2211,U.S. Army Research Office .	Technical Report,13 Sep 2010,12 Sep 2014

AD0287495"	THE EPIDEMIOLOGY OF JAPANESE ENCEPHALITIS VIRUS ON TAIWAN IN 1961	NAVAL MEDICAL RESEARCH UNIT NO 2 TAIPEI (TAIWAN)	GREEN,IRVING J.,WANG,SAN-PIN	6/25/1962	1	Not available	Not available	U	C - 02	Distribution authorized to U.S. Gov't. agencies and their contractors; Other requests shall be referred to NAVAL MEDICAL RESEARCH UNIT NO 2 TAIPEI (TAIWAN)	Not available
ADA211870"	Epidemiology of Hantavirus Infections in Baltimore	JOHNS HOPKINS UNIV BALTIMORE MD	Childs, James E.,Gurri-Glass, Gregory E.	6/12/1989	47	Not available	USAMRDC	U	C - 12	Distribution: DTIC Users Only.	Final rept.
ADB205589"	The Interrelationship of the Infectious Risk Areas for the Human Population in the Regions Boarding Nosologic Areas for Tick Rickettsiosis and Tick Encephalitis,	ARMED FORCES MEDICAL INTELLIGENCE CENTER FORT DETRICK FREDERICK MD	Yastrebov, V. K.	11/30/1995	4	AFMIC-HT-051-95	AFMIC	U	E - 04	Distribution authorized to DoD only; Copyright; Proprietary Info.; 30 Nov 95. Other requests shall be referred to AFMIC-MI-1A, Ft. Detrick, Frederick, MD 21702-5004.	Not available
ADB361103"	The Impact of Gestational and Postnatal Exposures on Metabolic Programming and Breast Cancer Risk	M D ANDERSON CANCER CENTER HOUSTON TX	Fuchs-Young, Robin	10/1/2009	10	Not available	USAMRMC	U	B - 03	Distribution authorized to U.S. Gov't. agencies only; Proprietary Information; OCT 2009. Other requests shall be referred to US Army Medical Research and Materiel Command, 504 Scott Street, Ft. Detrick, MD 21702-5012.	Annual rept. 15 Sep 2008-14 Sep 2009
ADB366092"	Primary Pneumonic Plague Transmission and BW Casualty Assessments	INSTITUTE FOR DEFENSE ANALYSES ALEXANDRIA VA	Bombardt, Jr, John N.	12/1/2001	190	IDA-P-3657,IDA/HQ-01-002596	01-002596,JS	U	C - 02	Distribution authorized to U.S. Gov't. agencies and their contractors; Administrative/Operational Use; DEC 2001. Other requests shall be referred to Joint Staff (Director for Logistics, J-4), The Pentagon, Washington, DC 20301.	Final rept.
ADB225098"	Meningococcal Meningitis, Bangkok.	ARMED FORCES MEDICAL INTELLIGENCE CENTER FORT DETRICK FREDERICK MD	Not available	6/5/1997	6	AFMIC-HT-013-97	AFMIC	U	E - 04	Distribution authorized to DoD only; Proprietary Info., Copyright; 5 Jun 97. Other requests shall be referred to AFMIC-MI-1A, Ft. Detrick, MD 21702-5004.	Not available

ADB322355"	Development of Novel Methods and Reagents for Surveillance of Prion Infection	ADLYFE INC ROCKVILLE MD	Orser, Cindy S.	8/1/2006	18	Not available	USAMRMC	U	B - 03	Distribution authorized to U.S. Gov't. agencies only; Proprietary Information; AUG 2006. Other requests shall be referred to US Army Medical Research and Materiel Command, 504 Scott Street, Ft. Detrick, MD 21702-5012.	Final rept.
AD1009852"	Design Automation Software for DNA-Based Nano-Sensor Architectures	Firebird Biomolecular Sciences, LLC Gainesville United States	Benner,Steven A.	10/23/2014	147	ARO-62013-EL-ST2.7	ARO-62013-EL-ST2.7	U	B - 03	U.S. Government agencies only;Proprietary Information;;23 Oct 2014.Other request shall be referred to U.S. Army Research Office , Research Triangle Park,NC,27709-2211, U.S. Army Research Office .	STTR Report,24 Sep 2012,23 Sep 2014
AD0903424"	The Etiology of Acute Infectious Non-Bacterial Gastroenteritis.	UNIVERSITY HOSPITAL BOSTON MASS	Blacklow,Neil R.	7/1/1972	15	809	Not available	U	B - 03	Distribution limited to U.S. Gov't. agencies only; Proprietary Info.; Jun 72. Other requests for this document must be referred to Commanding General, Army Medical Research and Development Command, Attn: SGRD-IDS. Washington, D. C. 20314.	Annual progress rept. 1 Jan-31 May 72,
ADB021903"	Studies on the Prevention, Control and Treatment of Epidemic Influenza	MICHIGAN UNIV ANN ARBOR	Hennessy, Albert V.	7/1/1977	18	Not available	USAMRDC	U	B - 03	Distribution authorized to U.S. Gov't. agencies only; Proprietary Information; JUN 1977. Other requests shall be referred to Army Medical Research and Development Command, Attn: SGRD-RP, Washington, DC 20314.	Annual rept. 1 Jul 1976-30 Jun 1977
ADA199062"	Genetic and Molecular Studies of the Phlebotomus Fever Group of Viruses	INSTITUTE OF VIROLOGY OXFORD (UNITED KINGDOM)	Bishop, David H.	2/10/1988	14	Not available	USAMRDC	U	C - 12	Distribution: DTIC users only.	Final rept. 1 Sep 1984-31 Aug 1986



ADB303223"	Classification Guide for Chemical/Biological Defense Information	DEPARTMENT OF ENERGY WASHINGTON DC	Not available	7/1/2002	58	CG-CB-2	DOE	U	E - 04	Distribution authorized to DoD only; Administrative/Operational Use; Jul 2002. Other requests shall be referred to US Department of Energy, Ofc. of Classification & Information Control, Washington, DC 20585.	Not available
AD0827303"	EPIDEMIOLOGY OF STEM RUST OF WHEAT AT LANGDON, NORTH DAKOTA, IN 1964.	FORT DETRICK FREDERICK MD	Line,Roland F.,Peet,Clyde E.	12/1/1967	28	SMUFD-TR-96	Not available	U	C - 02	Distribution: No Foreign without approval of Commanding Officer, Fort Detrick, Attn: Technical Releases Branch. Frederick, Md. 21701.	Technical rept.,
ADB112910"	A-V Conduction Disorders in Patients with Hemorrhagic Dengue Fever ( Disturbi della Conduzione Atrioventricolare in Pazienti Colpiti da Dengue Emorragica)	ARMY MEDICAL RESEARCH INST OF INFECTIOUS DISEASES FORT DETRICK MD	Donegani, E.,Briceno, J.	1/1/1986	9	USAMRIID-MUL-0720	USAMRIID	U	B - 03	Distribution authorized to U.S. Gov't. agencies only; Proprietary Information; 01 JUL 1987. Other requests shall be referred to U.S. Army Medical Research Inst. of Infectious Diseases (USAMRIID) Library, Bldg 1425, Ft. Detrick, Frederick, MD 21701.	Journal article
AD0819048"	TRAVELLERS' DIARRHOEA. AN EPIDEMIOLOGICAL STUDY	ARMY PERSONNEL RESEARCH COMMITTEE LONDON (UNITED KINGDOM)	Barnes, J.,Moylan-Jones, R. J.	6/1/1966	91	APRC-66/TD3(R)	APRC	U	C - 02	Distribution authorized to U.S. Gov't. agencies and their contractors; Foreign Government Information; 30 JUN 1966. Other requests shall be referred to British Embassy, 3100 Massachusetts Avenue, NW, Washington, DC 20008. Document partially illegible.	Not available

ADB215275"	Some Epidemiological Characteristics of Hemorrhagic Fever with Renal Syndrome in Serbia in the Period 1979-1992,	ARMED FORCES MEDICAL INTELLIGENCE CENTER FORT DETRICK FREDERICK MD	Zivaljevic, Vladan,Adanja, Binko,Obradovic, M.,Lukac, V.	1/1/1995	8	AFMIC-HT-039-96	AFMIC	U	E - 04	Distribution authorized to DoD only; Proprietary Info.; 18 Oct 96. Other requests shall be referred to AFMIC-MI-1A, Fort Detrick, Frederick, MD 21702-5004.	Not available
AD0810809"	VIRAL AND RICKETTSIAL DISEASES.	MARYLAND UNIV BALTIMORE DEPT OF MICROBIOLOGY	Wisseman,Charles L. , Jr	3/1/1967	124	Not available	Not available	U	E - 04	Distribution: DoD only: others to Commanding General, Army Medical Research and Development Command, Washington, D. C. 20315.	Annual progress rept. 1 Mar 66-28 Feb 67,
ADB052722"	The 50 Case Studies of Epidemic Hemorrhagic Fever Complicated with Disseminated Intravascular Coagulation (Liu-Hsin-Hsin Chu-Shwei Zoer Bin Far Mi Man Shin Shwei Gwen Nai Shei Wo-si Li Lin Chun Fen Shi),	ARMY MEDICAL INTELLIGENCE AND INFORMATION AGENCY FORT DETRICK MD	Low,Bin-Chuan,Guo,Gwo-Shung,Zun,Zwei-Sen,Cho,I.	11/20/1980	7	USAMIIA-L-0256	Not available	U	B - 03	Distribution limited to U.S. Gov't. agencies only; Copyright, Proprietary Info.; 20 Nov 80. Other requests for this document must be referred to Director, Army Medical Intelligence and Information Agency, Attn: SGMI-IS. Fort Detrick, Frederick, MD 21701.	Not available
ADB046898"	Lipid Composition of Cellular Systems After Infection with Respiratory Viruses. Report 3. Gas Chromatographic Determination of the Fatty Acid Composition	ARMY MEDICAL RESEARCH INST OF INFECTIOUS DISEASES FORT DETRICK MD	Moeller, D.,Mentel, R.,Saidel, W.	1/1/1975	8	USAMRIID-MUL-0600	USAMRIID	U	B - 03	Distribution authorized to U.S. Gov't. agencies only; Proprietary Information; 20 MAY 1980. Other requests shall be referred to Commander, Army Medical Research and Development Command, Attn: USAMRIID. Fort Detrick, Frederick, MD 21701. Document partially illegible.	Not available
ADB196950"	Description of Epidemic Manifestations of Plague in the USSR from 1920 Through 1989,	ARMY MEDICAL RESEARCH INST OF INFECTIOUS DISEASES FORT DETRICK MD	Narkevich, M. I.,Onishchenko, G. G.,Naumov, A. V.,Fedorov, Yu. M.,Kokushkin, A. M.	1/1/1989	10	USAMRIID-MUL-900	USAMRIID	U	B - 03	Distribution authorized to U.S. Govt agencies only; Proprietary Info.; 7 Mar 95. Other requests shall be referred to USAMRIID, Bldg. 1425, Ft. Detrick, Frederick, MD 21702-5011.	Not available

AD0839237"	Role of Chroptera in the Epidemiology of Encephalitis	TEXAS UNIV SOUTHWESTERN MEDICAL SCHOOL AT DALLAS	Sulkin, S. E.	7/1/1968	35	Not available	USAMRDC	U	C - 02	Distribution authorized to U.S. Gov't. agencies and their contractors; Specific Authority; JUN 1968. Other requests shall be referred to Army Research Development and Engineering Command, Edgewood Chemical Biological Center, 5183 Blackhawck Road, Aberdeen Proving Ground, MD 21010-5424.	Final rept. 1 Jul 1967-30 Jun 1968
AD0913428"	Studies on the Prevention, Control and Treatment of Epidemic Influenza.	MICHIGAN UNIV ANN ARBOR	Davenport,Fred M.	8/1/1973	29	Not available	Not available	U	B - 03	Distribution limited to U.S. Gov't. agencies only; Proprietary Info.; Jun 73. Other requests for this document must be referred to Commander, Army Medical Research and Development Command, Attn: SGRD-IDS. Washington, D. C. 20314.	Annual progress rept. 1 Jun 72-30 Jun 73,
AD0827409"	TRANSMISSION, CONTROL AND TREATMENT OF INFECTIOUS DISEASES OF MILITARY IMPORTANCE IN EQUATORIAL ASIA.	INSTITUTE FOR MEDICAL RESEARCH KUALA LUMPUR (MALAYSIA)	Omar-Ahmad,Ungku Dato Kerabat	10/1/1967	82	Not available	Not available	U	E - 04	Distribution: DoD only: others to Commanding General, Army Medical Research and Development Command, Attn: MEDDH-SI. Washington, D. C. 20315.	Annual progress rept. 1 Oct 66-30 Sep 67,
AD0109692"	EPIDEMIC HERMORRHAGIC FEVER IN A KOREAN FARM POPULATION	WALTER REED ARMY INST OF RESEARCH WASHINGTON D C	DODGE,H.J.,GRIFFIN,H.E.	12/1/1955	1	99 55	Not available	U	C - 02	Distribution authorized to U.S. Gov't. agencies and their contractors; Other requests must be referred to WALTER REED ARMY INST OF RESEARCH WASHINGTON D C	Not available

ADB075540"	Microbes for War	ARMY FOREIGN SCIENCE AND TECHNOLOGY CENTER CHARLOTTESVILLE VA	Not available	5/4/1983	5	FSTC-HT-740-82	FSTC	U	C - 02	Distribution authorized to U.S. Gov't. agencies and their contractors; Specific authority; 8 Aug 1983. Other requests must be referred to U.S. Army Foreign Science and Technology Center, 220 Seventh Street NE. Charlottesville, VA 22901.	Not available
AD0489553"	THE PLAGUE IN WESTERN EUROPE AND THE MEDITERRANEAN BASIN: GREAT EPIDEMICS, MEDICAL CONCEPTS AND MEANS OF COMBAT (LA PESTE DANS L'EUROPE OCCIDENTALE ET LA BASSIN MEDITERRANEAN: PRINCIPALES EPIDEMIES, CONCEPTIONS MEDICALES, MOYENS DE LUTTE),	NAVAL MEDICAL SCHOOL BETHESDA MD TRANSLATION SERVICE	Biraben,Jean-Noel	8/10/1966	24	NMS-Trans-1133	Not available	U	C - 02	Distribution: No Foreign without approval of Naval Medical School, Bethesda, Md. Availability: Microfiche only after original copies exhausted.	Not available
AD1058034"	Designing a Joint Task Force Headquarters for Non-Combat Operations	Center for Naval Analyses Arlington United States	De Allende,Veronica,Vernon ,Alison R	7/31/2018	82	DRM-2018-U-017741-Final	Not available	U	D - 16	Department of Defense and U.S. DoD contractors only;Administrative or Operational Use;;31 Jul 2018.Other request shall be referred to Commander, U.S. Naval Forces, U.S. Southern Command ,Jacksonville,FL,32228, Commander, U.S. Naval Forces, U.S. Southern Command .	Technical Report
AD1064606"	Identifying Conditions for Elimination and Epidemic Potential of Methicillin-resistant Staphylococcus aureus in Nursing Homes	University of Wisconsin - Madison Madison United States	Batina,Nataliya G.,Crnich,Christopher J.,Anderson,David F.,Doepfer,Doerte	8/31/2016	20	ARO-64890-MA.14	ARO-64890-MA.14	U	B - 03	U.S. Government agencies only;Proprietary Information;;31 Aug 2016.Other request shall be referred to U.S. Army Research Office ,Research Triangle Park,NC,27709-2211,U.S. Army Research Office .	Journal Article - Open Access

ADB226301"	Ecology Studies in the Bonneville Basin of West Central Utah.	ARMY DUGWAY PROVING GROUND UT	Smart, K. L.	11/1/1976	119	DPG-FR-X100P	TECOM	U	C - 12	Distribution: DTIC users only.	Final rept. 1 Jan-31 Dec 73,
AD1018908"	TexSHIELD: Texas Science, Humanitarian Intervention, Education, and Leadership for Disasters	The University of Texas Health Science Center at Houston Houston United States	Conyers,Jodie L.	10/1/2012	41	Not available	Not available	U	B - 03	U.S. Government agencies only;Proprietary Information;;01 Oct 2012.Other request shall be referred to U.S. Army Medical Research and Materiel Command , Fort Detrick,MD,21702, U.S. Army Medical Research and Materiel Command .	Technical Report,28 Sep 2009,27 Sep 2012
ADB381370"	Homeland Security - A Strategic Overview	DEFENSE MEDICAL READINESS TRAINING INST FORT SAM HOUSTON TX	Hill, Linda	4/30/2012	29	Not available	DMRTI	U	E - 04	Distribution authorized to DoD only; Administrative/Operational Use; 30 APR 2012. Other requests shall be referred to Defense Medical Readiness Training Institute, 1706 Stanley Rd., Fort Sam Houston, TX 78234.	Briefing charts
ADB222259"	Early Laboratory Diagnosis of the Pulmonary Form of Glanders and Melioidosis with the Use of Rapid Methods of Immunochemical Analysis,	ARMY MEDICAL RESEARCH INST OF INFECTIOUS DISEASES FORT DETRICK MD	Alekseev, V. V.,Savchenko, S. T.,Yakovlev, A. T.,Rybkin, V. S.,Kovalenko, A. A.	1/1/1995	6	Not available	USAMRIID	U	B - 03	Distribution authorized to U.S. Gov't. agencies only; Critical Technology; 9 Apr 97. Other requests shall be referred to USAMRIID/Library, Ft. Detrick, MD 21702-5011.	Not available
ADB043666"	Achievements of the Bielorussian Anti-Epidemic Service (On the Sixtieth Anniversary of Soviet Bielorussia),	ARMY MEDICAL INTELLIGENCE AND INFORMATION AGENCY FORT DETRICK MD	Belyatskiy ,D. B.	1/1/1979	12	USAMIIA-K-9749	Not available	U	B - 03	Distribution limited to U.S. Gov't. agencies only; Copyright, Proprietary Info.; 26 Dec 79. Other requests for this document must be referred to Director, Army Medical Intelligence and Information Agency, Attn: SGMI-IS. Fort Detrick, Frederick, MD 21701.	Not available

AD1007391"	Development of Diazaquinomycin Class Antibiotics for the Treatment of Drug-Resistant TB Infections	University of Illinois Chicago United States	Murphy,Brian	8/1/2015	27	Not available	Not available	U	B - 03	U.S. Government agencies only;Proprietary Information;;01 Aug 2015.Other request shall be referred to U.S. Army Medical Research and Materiel Command , Fort Detrick,MD,21702-5012, U.S. Army Medical Research and Materiel Command .	Technical Report,15 Jul 2014,14 Jul 2015
ADB352014"	Host Gene Modulators for Treatment of Ebola Virus Infections	AVI BIOPHARAMA INC CORVALLIS OR	Iversen, Patrick L.	5/1/2009	114	Not available	USAMRMC	U	B - 03	Distribution authorized to U.S. Gov't. agencies only; Proprietary Information; MAY 2009. Other requests shall be referred to U.S. Army Medical Research and Materiel Command, 504 Scott St., Fort Detrick, MD 21702-5012.	Final rept. 1 May 2007-30 Apr 2009
AD0023203"	DEVELOPMENT OF A FIELD CULTURE FOR PRIMARY VIRUS ISOLATION	MIAMI UNIV CORAL GABLES FLA	SANDERS,MURRAY	12/31/1953	1	Not available	Not available	U	C - 02	Distribution to US Gov't agencies and their contractors only: No Foreign without approval of MIAMI UNIV CORAL GABLES FLA	Not available
AD0917039"	Rickettsial Diseases: A. Trench Fever. B. Epidemic Typhus.	HARVARD SCHOOL OF PUBLIC HEALTH BOSTON MASS DEPT OF MICROBIOLOGY	Murray,Edward S.,Vinson,J. William	9/1/1973	33	Not available	Not available	U	B - 03	Distribution limited to U.S. Gov't. agencies only; Proprietary Info.; Jun 72. Other requests for this document must be referred to Commander, Army Medical Research and Development Command, Attn: SGRD-IDS. Washington, D. C. 20314.	Annual progress rept. 1 Jun 72-31 May 73,
ADB219637"	Field Trial of Shigella Flexneri III Vaccine. II. Serum Agglutination Studies,	NAVAL MEDICAL RESEARCH INST BETHESDA MD	Bennett, Ivan L.,Gordon, Robert S.,Barnes, Laverne A.	3/1/1949	32	Not available	NMRI	U	C - 12	Distribution: DTIC users only., Availability: Document partially illegible.	Rept. no. 6,

AD0874236"	Etiology and Epidemiology of Acute Respiratory Diseases.	VIRGINIA UNIV CHARLOTTESVILLE	Gwaltney,Jack M. , Jr.,Edmondson,William P. , Jr.,Hendley,J. Owen	9/1/1970	57	Not available	Not available	U	E - 04	Distribution: DoD only: others to Commanding General, Army Medical Research and Development Command, Attn: MEDDH-SI. Washington, D. C. 20314.	Annual progress rept. 1 Jun 69-31 May 70,
AD0876492"	Variability of Wheat Stripe Rust.	OREGON STATE UNIV CORVALLIS	Powelson,Robert L.	9/1/1970	11	Not available	Not available	U	C - 02	Distribution: No Foreign without approval of Commanding Officer, Fort Detrick, Attn: Technical Releases Branch. Frederick, Md. 21701.	Final technical rept. 1 Jan 69-30 Jun 70,
ADB184731"	Communities Challenging Aids. International Conference on AIDS (7th) Held in Florence, Italy on 16-21 June 1991	ISTITUTO SUPERIORE DI SANITA ROME (ITALY)	Carballo, Manuel,Rezza, Giovanni,Thomas, Laura	6/21/1991	17	Not available	X5	U	C - 02	Distribution authorized to U.S. Gov't. agencies and their contractors; Foreign Government Information; 21 JUN 1991. Other requests shall be referred to the Italian Embassy, 3000 Whitehaven Street, NW, Washington, DC 20008.	Not available
ADB114698"	Civil Defense- a Collection of 16 Posters	ARMY FOREIGN SCIENCE AND TECHNOLOGY CENTER CHARLOTTESVILLE VA	Rasputin, Igor	10/16/1986	21	FSTC-HT-1265-86	FSTC	U	C - 02	Distribution limited to U.S. Gov't. agencies and their contractors; Copyright, Specific Authority; 1 Jun 1984. Other requests must be referred to U.S. Army Foreign Science and Technology Center, 220 7th St., N.E., Charlottesville, VA 22901-5396.	Not available
ADB162397"	Sanitation of Drinking Water (Trinkwasserhygiene),	ARMED FORCES MEDICAL INTELLIGENCE CENTER FORT DETRICK FREDERICK MD	Bergmann, H.	3/4/1992	7	AFMIC-HT-014-92	Not available	U	B - 03	Distribution authorized to U.S. Gov't. agencies only; Copyright, Proprietary Info.; 4 Mar 92. Other requests shall be referred to AFMIC-ISD, Fort Derick, Frederick, MD 21702-5004.	Not available

ADB092526"	Biological War.	ARMY MEDICAL RESEARCH INST OF INFECTIOUS DISEASES FORT DETRICK MD	Not available	1/1/1983	22	USAMRIID-MUL-673	Not available	U	B - 03	Distribution limited to U.S. Gov't. agencies only; Proprietary Info.; 21 Jun 85. Other requests must be referred to Library, U.S. Army Medical Res. Inst. of Infectious Diseases, Fort Detrick, MD 21701.	Not available
AD0864163"	Variability of Wheat Stripe Rust	OREGON STATE UNIV CORVALLIS	Powelson, Robert L.	12/1/1969	26	Not available	ABL/MD	U	C - 02	Distribution authorized to U.S. Gov't. agencies and their contractors; Administrative/Operational Use; DEC 1969. Other requests shall be referred to Commanding Officer, Fort Detrick, Attn: Technical Releases Branch. Frederick, MD 21701., Availability: Document partially illegible., This document contains export-controlled technical data.	Annual progress rept., 1 Jan-Dec 1969
ADA129643"	Biological Disaster Emergency Mobilization Preparedness.	SCIENCE APPLICATIONS INC MCLEAN VA	Antsen,Patricia Benner,Chamberlin,John L.	12/23/1982	140	Not available	Not available	U	C - 12	Distribution: DTIC Users Only.	Final rept.,
ADB149197"	The IWG Model for the Heterosexual Spread of HIV and the Demographic Impact on the AIDS Epidemic	AIR FORCE ACADEMY COLORADO SPRINGS CO	Stanley, Elizabeth A.,Seitz, Steven T.,Way, Peter O.,Johnson, Peter D.,Curry, Thomas F.	9/1/1990	38	USAFA-TR-90-8	USAFA	U	F - 05	Distribution: Further dissemination only as directed by United States Air Force Academy, Attn: Dept. of Mathematical Sciences, Colorado Springs, CO 80840, 02 NOV 1990, or higher DoD authority.	Final rept.
AD0283855"	THERAPEUTIC ASPECTS OF THE 1961-1962 CHOLERA EPIDEMIC IN THE PHILIPPINE ISLANDS	NAVAL MEDICAL RESEARCH UNIT NO 2 TAIPEI (TAIWAN)	WALLACE,CRAIG K.	5/17/1962	1	LARS62 3	Not available	U	C - 02	Distribution to US Gov't agencies and their contractors only: No Foreign without approval of NAVAL MEDICAL RESEARCH UNIT NO 2 TAIPEI (TAIWAN)	Not available



AD0840902"	TRANSMISSION OF THE COMMON COLD UNDER CONTROLLED CONDITIONS.	ILLINOIS UNIV CHICAGO COLL OF MEDICINE	Jackson,George Gee	9/1/1968	24	MD-2410-4	Not available	U	E - 04	Distribution: DoD only; others to Commanding General, Army Medical Research and Development Command, Attn: MEDDH-SI. Washington, D. C. 20315.	Annual progress rept. 1 Jul 67-30 Jun 68,
ADB381154"	Emergency Management Policy and Regulations	ARMY MEDICAL COMMAND FORT SAM HOUSTON TX	Topinka, Joseph B.	4/30/2012	62	Not available	MEDCOM	U	E - 04	Distribution authorized to DoD only; Administrative/Operational Use; 30 APR 2012. Other requests shall be referred to U.S. Army Medical Command, 2050 Worth Rd., San Antonio, TX 78234-7533.	Briefing charts
ADB155164"	Mapping, Charting, and Geodesy Requirements.	ARMY WAR COLL CARLISLE BARRACKS PA	Mich, Paul F.	4/1/1991	68	Not available	AWC	U	F - 05	Distribution: Further dissemination only as directed by U.S. Army War College, Carlisle Barracks, PA 17013-5050, 1 Apr 91 or higher DoD authority.	Study project,
ADB211417"	Modern Epidemiological Dangers of Contagious Diseases,	ARMED FORCES MEDICAL INTELLIGENCE CENTER FORT DETRICK FREDERICK MD	Magdzik, Wieslaw	2/1/1996	8	AFMIC-HT-039-95	AFMIC	U	E - 04	Distribution authorized to DoD only; Copyright, Proprietary Info.; Feb 96. Other requests shall be referred to AFMIC-MI-1A, Ft. Detrick, MD 21702-5004.	Not available
ADB279628"	Estimation of Antibacterials Efficacy in the Treatment of Monkey with Experimental Glandular Plague	ARMY MEDICAL RESEARCH INST OF INFECTIOUS DISEASES FORT DETRICK MD	Romanov, V. E.,Evstigneev, V. I.,Vasilyev, N. T.,Shabalin, B. A.,Paramonov, V. E.	7/10/2000	5	Not available	USAMRIID	U	B - 03	Distribution authorized to U.S. Gov't. agencies only; Administrative/Operational Use; Jul 2000. Other requests shall be referred to USAMRIID Lib., 1425 Porter St., Fort Detrick, MD 21702-5011.	Not available

ADB180513"	Joint Service Operational Requirement (JSOR) for a Family of Hepatitis Vaccines	ARMY TRAINING AND DOCTRINE COMMAND FORT MONROE VA	Not available	12/18/1989	41	CARDS-JSOR-1486	TRADOC	U	C - 02	Distribution authorized to U.S. Gov't. agencies and their contractors; Critical Technology; 29 JAN 1990. Other requests shall be referred to Army Training and Doctrine Command, Attn: ATCD-SE, Fort Monroe, VA 23651- 5000. This document contains export-controlled technical data.	Rept. for period ending 29 Jan 1990
ADB954603"	Studies on Inflammation (Especially Epidemic Hemorrhagic Fever),	ARMY MEDICAL RESEARCH INST OF INFECTIOUS DISEASES FORT DETRICK MD	Honzin,R.,Kurata,Y.,Ikeda,K.	1/1/1944	12	USAMRIID-MUL-0634	Not available	U	B - 03	Distribution limited to U.S. Gov't. agencies only; Proprietary Info.; 31 Jan 83. Other requests for this document must be referred to USAMRIID Library, Fort Detrick, Frederick, MD 21701.	Not available
AD1047160"	Public Health Epidemiology Training Guide: A U.S. Air Force Public Health Guidebook	USAFSAM/PHR Wright-Patterson AFB United States	Ruiz, Stefani,Holbrook,Victoria,Wolff,Gregory,Toure,Elizabeth,Zorich,Shauna,Webber,Bryant,Leon,Juan C.,Burrress,Landrus,Escobar,James,Lucas,Pauline	6/11/2018	163	AFRL-SA-WP-SR-2018-0003	AFRL-SA-WP-SR-2018-0003	U	D - 16	Department of Defense and U.S. DoD contractors only;Administrative or Operational Use;;08 Feb 2018.Other request shall be referred to USAF School of Aerospace Medicine Public Health and Preventive Medicine Department,Wright-Patterson AFB,OH,45433-7913,USAF School of Aerospace Medicine Public Health and Preventive Medicine Department.	Technical Report,01 Mar 2017,01 Jun 2018
AD0123729"	DIPHENHYDRAMINE THERAPY IN THE EARLY FEBRILE PHASE OF EPIDEMIC HEMORRHAGIC FEVER	WALTER REED ARMY INST OF RESEARCH WASHINGTON D C	STOCKARD,JOE L.,HALE,EDWARD H.,BULLARD,HOKE V.	7/1/1956	1	124 56	Not available	U	C - 02	Distribution authorized to U.S. Gov't. agencies and their contractors; Other requests shall be referred to WALTER REED ARMY INST OF RESEARCH WASHINGTON D C.	Not available

AD0880059"	Rabies from a Military Point of View (Die Tollwut in Wehrmedizinischer Sicht),	ARMY FOREIGN SCIENCE AND TECHNOLOGY CENTER WASHINGTON D C	Huerter,K. P.,Holpert,D.	9/17/1970	20	FSTC-HT-23-1165-70	Not available	U	B - 03	Distribution: USGO: others to Commander, Army Foreign Science and Technology Center, Washington, D. C. 20315.	Not available
ADB289239"	MEDREACH: A Web-Enabled Authoring Tool for Communicating Medical Risks	APTIMA INC WOBURN MA	Entin, Eileen B.,Lai, Fuji,Miller, Diane	6/1/2003	34	Not available	ONR	U	B - 03	Distribution authorized to U.S. Gov't. agencies only; Proprietary Info.; Jun 2003. Other requests shall be referred to Office of Naval Research, Cognitive & Neural Science & Technology Div., 800 N. Quincy St., Arlington, VA 22217-5660.	Phase 1 of Final rept. (Draft)
AD0820465"	STUDIES ON THE ETIOLOGY AND EPIDEMIOLOGY OF ACUTE RESPIRATORY INFECTIONS.	NORTH CAROLINA UNIV CHAPEL HILL	Denny,Floyd W.,Clyde,Wallace A. , Jr.,Glezen,William P.	9/15/1967	33	Not available	Not available	U	E - 04	Distribution: DoD only: others to Commanding General, Army Medical Research and Development Command, Washington, D. C. 20315.	Annual progress rept. 1 Mar 66-30 Jun 67,
AD0456627"	RICKETTSIAL DISEASES: SECTION A: TRENCH FEVER; SECTION B: EPIDEMIC TYPHUS.	HARVARD SCHOOL OF PUBLIC HEALTH BOSTON MASS	Murray,Edward S.,Vinson,J. William	2/1/1965	16	Not available	Not available	U	F - 05	Notice: All release of this document is con-trolled. All certified requesters shall obtainrelease approval from Army Medical Research andDevelopment Command, Washington, D. C. 20315.	Annual rept., 15 Feb 64-1 Feb 65,
AD0722834"	Postattack Communicable Respiratory Diseases.	RESEARCH TRIANGLE INST DURHAM N C OPERATIONS RESEARCH AND ECONOMICS DIV	Voors,Antonie W.,Harris,Benjamin S. H. , III	11/1/1970	153	RTI-R-OU-493-F	Not available	U	C - 12	Distribution: DTIC Users Only.	Final rept. Oct 69-Nov 70,
AD0432224"	VIRAL AND RICKETTSIAL DISEASES.	MARYLAND UNIV BALTIMORE SCHOOL OF MEDICINE	Wisseman,Charles L. ,Jr.	2/29/1964	1	Not available	Not available	U	F - 05	Notice: All requests require approval of ArmyMedical Research and Development Command, Dept.of the Army, Wash. 25, D. C.	Annual progress rept., 1 Mar 63-29 Feb 64,

AD0466417"	Third Quarter Report - FY 1965	COMMUNICABLE DISEASE CENTER ATLANTA GA	Brachman, Philip S.	5/8/1965	10	Not available	ABL/MD	U	C - 02	Distribution authorized to U.S. Gov't. agencies and their contractors; Administrative/Operational Use; May 1965. Other requests shall be referred to Army Biological Labs, Fort Detrick, Frederick, MD., Availability: Document partially illegible.	Quarterly rept. no. 3 for FY 1965
AD0227442"	FOLLOW-UP STUDY OF EPIDEMIC HEMORRHAGIC FEVER. CHARACTERISTICS OF THE ACUTE ILLNESS, AND SUBSEQUENT MORTALITY, MORBIDITY, AND DISABILITY AS DETERMINED FROM RECORDS	NATIONAL ACADEMY OF SCIENCES - NATIONAL RESEARCH COUNCIL WASHINGTON D C	JABLON,SEYMOUR	10/1/1959	1	Not available	Not available	U	C - 02	Distribution authorized to U.S. Gov't. agencies and their contractors; Other requests shall be referred to NATIONAL ACADEMY OF SCIENCES - NATIONAL RESEARCH COUNCIL WASHINGTON D C	Not available
ADB003762"	Meningococcus: Bacteriological, Serological and Epidemiological Studies	STATE UNIV OF NEW YORK UPSTATE MEDICAL CENTER SYRACUSE	Feldman, Harry A.	1/1/1975	14	Not available	USAMRDC	U	B - 03	Distribution authorized to U.S. Gov't. agencies only; Proprietary Information; JAN 1975. Other requests shall be referred to Commander, Army Medical Research and Development Command, Attn: SGRD-IDS. Washington, DC 20314.	Annual Progress rept. 1 Jun 1973-31 Dec 1974
ADB353858"	Immune Modulators for Treatment of Marburgvirus Infections	AVI BIOPHARAMA INC CORVALLIS OR	Iversen, Patrick L.	5/1/2009	141	Not available	USAMRMC	U	B - 03	Distribution authorized to U.S. Gov't. agencies only; Proprietary Information; MAY 2009. Other requests shall be referred to U.S. Army Medical Research and Materiel Command, 504 Scott St., Fort Detrick, MD 21702-5012.	Final rept. 1 May 2007-31 May 2009

ADB204828"	The Cholera Epidemic in Various Mountain Regions of Dagestan in Relation to the True Nature of the Water Factors in its Spread,	ARMED FORCES MEDICAL INTELLIGENCE CENTER FORT DETRICK FREDERICK MD	Onishchenko, G. G.,Toporkov, V. P.,Prometnoi, V. I.,Naumov, A. V.	1/1/1995	10	AFMIC-HT-047-95	AFMIC	U	E - 04	Distribution authorized to DoD only; Copyright, Proprietary Info.; Oct 95. Other requests shall be referred to AFMIC-MI-IA, Ft. Detrick, MD 21702-5004.	Not available
AD1081710"	Detection of Spread Source in Complex Networks	Rensselaer Polytechnic Institute Troy United States	Paluch,Robert,Gajewski, Lukasz,Lu,Xiaoyan,Suchacki,Krzysztof,Szymanski, Boleslaw K.,Holyst,Janusz A.	10/4/2019	4	ARO-67398-LS.19	ARO-67398-LS.19	U	B - 03	U.S. Government agencies only;Proprietary Information;;04 Oct 2019.Other request shall be referred to U.S. Army Research Office ,Research Triangle Park,NC,27709-2211,U.S. Army Research Office .	Conference Paper
ADB241973"	Oral Vaccination Against Anthrax Using a Transgenic Plant Expressing Protective Antigen	CROPTECH DEVELOPMENT CORP BLACKSBURG VA	Oishi, Karen K.	10/1/1998	35	Not available	USAMRMC	U	B - 03	Distribution authorized to U.S. Gov't. agencies only; specific Authority; Oct 98. Other requests shall be referred to US Army Medical Research and Materiel Comd., Fort Detrick, MD 21702-5012.	Annual rept. Phase 2
ADB321240"	Statistical Modeling of Dependent Network Data	WASHINGTON UNIV SEATTLE DEPT OF STATISTICS	Hoff, Peter D.	12/1/2005	18	Not available	ONR	U	F - 05	Distribution: Further dissemination only as directed by Office of Naval Research Ballston Tower One, 800 N. Quincy St., Arlington, VA 22217, DEC 2005, or higher DoD authority.	Final technical rept., Sep 2002-Dec 2005
ADB156113"	Molecular Genetical Studies on Capsule Plasmid of Bacillus Anthracis,	ARMY MEDICAL RESEARCH INST OF INFECTIOUS DISEASES FORT DETRICK MD	Uchida, Ikuo,Makiho, Suichi	8/1/1990	20	USAMRIID-MUL-864	USAMRIID	U	B - 03	Distribution authorized to U.S. Gov't. agencies only; Proprietary Info.; 3 Jul 91. Other requests shall be referred to USAMRIID, Attn: Library, Fort Detrick, Frederick, MD 21701-5011.	Not available

AD0430007"	RICKETTSIAL DISEASES.	HARVARD SCHOOL OF PUBLIC HEALTH BOSTON MASS	Murray,Edward S.,Vinson,J. William	2/14/1964	18	Not available	Not available	U	F - 05	Notice: All requests require approval of Army Medical Research and Dev. Command, Dept.of the Army, Wash. 25, D. C.	Annual rept., 1 Mar 63-14 Feb 64,
AD0859108"	Studies on the Etiology and Epidemiology of Acute Respiratory Infections.	NORTH CAROLINA UNIV CHAPEL HILL	Denny,Floyd W.,Clyde,Wallace A. , Jr.,Fernald,Gerald W.,Glezen,W. Paul	9/1/1969	41	Not available	Not available	U	E - 04	Distribution: DoD only: others to Commanding General, Army Medical Research and Development Command, Attn: MEDDH-SI. Washington, D. C. 20315.	Annual progress rept. 1 Jul 68-30 Jun 69,
AD0476250"	EPIDEMIOLOGY OF STEM RUST OF WHEAT IN CENTRAL UNITED STATES, 1963	ARMY BIOLOGICAL LABS FREDERICK MD	Johnson, William B.,Line, Roland F.	12/1/1965	32	ABL-TR-73	ABL/MD	U	C - 02	Distribution authorized to U.S. Gov't. agencies and their contractors; Administrative/Operational Use; Dec 1965. Other requests shall be referred to Commander, Army Biological Labs., Fort Detrick, Frederick, MD 21701.	Technical rept.
ADB371584"	A Nonlethal Young Domesticated Ferret (Mustela putorius furo) Model for Studying Pandemic Influenza Virus A/California/04/2009 (H1N1)	MIDWEST RESEARCH INST KANSAS CITY MO	Lednický, John A.,Croutch, Claire R.,Lawrence, Sandra J.,Hamilton, Sara B.,Daniels, Deirdre E.,Astroff, Barry	10/1/2010	9	ARO-57247-LS-DRP.4	57247-LS-DRP.4,ARO	U	B - 03	Distribution authorized to U.S. Gov't. agencies only; Proprietary Information; OCT 2010. Other requests shall be referred to U.S. Army Research Office, P.O. Box 12211, Research Triangle Park, NC 27709-2211.	Not available
AD0471834"	SEPARATION AND CHARACTERIZATION OF ANTIGENS OF RICKETTSIA TSUTSUGAMUSHI.	HARVARD SCHOOL OF PUBLIC HEALTH BOSTON MASS DEPT OF MICROBIOLOGY	Ley,Herbert L.,Jr.,Zipilivan,E. Mario,Passaretti,Paula G.	9/1/1965	27	2597-1	Not available	U	E - 04	Notice: Release only to Department of Defense Agencies is authorized. Other certified requesters shall obtain release approval from Army Medical Research and Development Command, Washington, D. C. 20315.	Progress rept. no. 1, 1 Aug 64-31 Aug 65,

ADB192127"	Plague and Anti-Plague Vaccination. Widespread Tropical Endemic Diseases	ARMY MEDICAL RESEARCH INST OF INFECTIOUS DISEASES FORT DETRICK MD	Girard, G.	1/1/1992	27	USAMRIID-MUL-1010	USAMRIID	U	B - 03	Distribution authorized to U.S. Gov't. agencies only; Proprietary Information; DEC 1992. Other requests shall be referred to Army Medical Research Institute of Infectious Diseases, USAMRIID/Library, Fort Detrick, Frederick, MD 21702-5011.	Not available
ADB100771"	Current Serological Data on Viral Hemorrhagic Fevers in the Central African Republic	ARMY MEDICAL RESEARCH INST OF INFECTIOUS DISEASES FORT DETRICK MD	Meunier, D. M. Y.,Johnson, E.,Gonzalez, J. P.,Georges-Courbot, M. C.,Georges, A. J.	1/1/1984	14	MUL-690	USAMRIID	U	B - 03	Distribution authorized to U.S. Gov't. agencies only; Test and Evaluation; 14 APR 1986. Other requests shall be referred to U.S. Army Medical Research Inst. of Infectious Diseases, Fort Detrick, MD 21701.	Not available
AD0461327"	STUDIES ON THE PREVENTION, CONTROL AND TREATMENT OF EPIDEMIC INFLUENZA	MICHIGAN UNIV ANN ARBOR SCHOOL OF PUBLIC HEALTH	Francis, Jr, Thomas	10/31/1964	34	Not available	USAMRDC	U	F - 05	Distribution: Further dissemination only as directed by Army Medical Research and Development Command, Washington, DC 20315, 31 OCT 1964, or higher DoD authority.	Annual rept. 1 Mar-31 Oct 1964
AD0844336"	Quarterly Report Number 1 - FY 1969	NATIONAL COMMUNICABLE DISEASE CENTER ATLANTA GA	Brachman, Philip S.	10/1/1968	58	Not available	SMUFD	U	C - 02	Distribution authorized to U.S. Gov't. agencies and their contractors; Critical Technology; OCT 1968. Other requests shall be referred to Commanding Officer, Fort Detrick, Attn: Technical Releases Branch/TID, Frederick, MD 21701. Document partially illegible. This document contains export-controlled technical data.	Rept. for 1 Jul-30 Sep 1968

ADB192019"	Plague: Disease and Vaccine	ARMY MEDICAL RESEARCH INST OF INFECTIOUS DISEASES FORT DETRICK MD	Michel, P.,Rasoamanana, B.,Rasolofonorina, N.,Roux, J.	12/1/1992	19	USAMRIID-MUL-1015	USAMRIID	U	B - 03	Distribution authorized to U.S. Gov't. agencies only; Proprietary Information; DEC 1992. Other requests shall be referred to U.S. Army Medical Research Institute of Infectious Diseases, Attn: USAMRIID Library, Fort Detrick, Frederick, MD 21702-5011.	Not available
ADB302895"	Intervention to Decrease Risk for Sexually Transmitted Diseases (STDs) and the Associated Negative Reproductive Health Outcomes in Women Aboard Ships: A Biopsychosocial Approach	CALIFORNIA UNIV SAN FRANCISCO	Boyer, Cherrie B.,Shafer, Mary-Ann	7/1/2004	80	Not available	USAMRMC	U	B - 03	Distribution authorized to U.S. Gov't. agencies only; Proprietary Info.; Jul 2004. Other requests shall be referred to US Army Medical Research and Materiel Comd., 504 Scott St., Fort Detrick, MD 21702-5012.	Final rept. 7 Sep 2003-30 Jun 2004
AD0153786"	An Introduction to the Stochastic Theory of Epidemics and Some Related Statistical Problems,	SCHOOL OF AVIATION MEDICINE RANDOLPH AFB TEX	Not available	12/1/1957	1	Not available	Not available	U	C - 02	Distribution authorized to U.S. Gov't. agencies and their contractors; Other requests shall be referred to Commanding SCHOOL OF AVIATION MEDICINE RANDOLPH AFB TEX.	Not available
ADB165174"	Drug Use in the Detroit Metropolitan Area: Problems, Programs, and Policy Options,	RAND CORP SANTA MONICA CA	Haaga, John G.,Scott, Richard,Hawes-Dawson, Jennifer,McGlynn, Elizabeth A.,Russell, Katheryn	1/1/1992	136	RAND/R-4085-SKF/DPRC	Not available	U	C - 12	Distribution: DTIC users only.	Not available
ADB167712"	Modeling Heterogeneity in Susceptibility and Infectivity for HIV Infection,	RAND CORP SANTA MONICA CA	Cardell, N. S.,Kanouse, David E.	1/1/1991	22	RAND/N-3134-RC	RAND	U	C - 12	Distribution: DTIC users only.	Not available



ADB042834"	Studies on the Role of Mycoplasma and Other Microorganisms in Human Respiratory Disease.	WASHINGTON UNIV SEATTLE	Kenny ,George E.,Foy ,Hjordis M.,Cooney,Marion K.	1/1/1979	17	Not available	Not available	U	B - 03	Distribution limited to U.S. Gov't. agencies only; Proprietary Info.; Jun 71. Other requests for this document must be referred to Commander, Army Medical Research and Development Command, Attn: SGRD-SI. Fort Detrick, Frederick, MD 21701.	Final rept. 1 Nov 73-31 Jan 75,
ADB341790"	Metrics for Influence Operation Measurement (MIME)	TWENTY FIRST CENTURY TECHNOLOGIES INC AUSTIN TX	Marcus, Sherry,Hilderbrand, Stephen	7/1/2007	56	AFRL-HE-BR-TR-2007-0051	TR-2007-0051,AFRL-HE-BR	U	B - 03	Distribution authorized to U.S. Gov't. agencies only; Proprietary Information; 01 FEB 2007. Other requests shall be referred to Air Force Research Lab., Attn: AFRL/HEX, 2486 Gillingham Dr., Brooks City-Base TX 78235-5107.	Final technical rept. 28 Apr 2006-8 Feb 2007
ADB372028"	High Speed, High Volume Laboratory Network For Infectious Diseases	CALIFORNIA UNIV LOS ANGELES	Godwin, Hilary,Miller, Jeffery F.,Detter, Chris	6/1/2011	33	Not available	USAMRMC	U	B - 03	Distribution authorized to U.S. Gov't. agencies only; Proprietary Information; JUN 2011. Other requests shall be referred to U.S. Army Medical Research and Materiel Command, 504 Scott Street, Fort Detrick, MD 21702-5012.	Addendum to final rept. 16 Jun 2010-20 May 2011
AD0887909"	Interaction between Meningococci and Phagocytic Cells.	CORNELL UNIV NEW YORK MEDICAL COLL	Roberts,Richard B.	9/1/1971	14	Not available	Not available	U	B - 03	Distribution limited to U.S. Gov't. agencies only; Proprietary Info.; Jun 71. Other requests for this document must be referred to Commanding General, Army Medical Research and Development Command, Attn: MEDDH-SI. Washington, D. C. 20314.	Annual progress rept. 1 Jun 70-31 May 71,

ADB027024"	Isolation or Characterization of Human Hepatitis Virus(es)	UNIVERSITY OF SOUTHERN CALIFORNIA LOS ANGELES SCHOOL OF MEDICINE	Gordon, Irving	8/1/1977	27	Not available	USAMRDC	U	B - 03	Distribution authorized to U.S. Gov't. agencies only; Proprietary Information; JUN 1971. Other requests shall be referred to Commander, Army Medical Research and Development Command, Attn: SGRD-AJ. Fort Detrick, Fredrick, MD 21701.	Final rept. 1 Sep 1969-31 Dec 1974
ADB328514"	Integrated Warfighter Biodefense Program (IWBP)	QUANTUM LEAP INNOVATIONS INC NEWARK DE	Not available	6/25/2007	13	Not available	ONR	U	B - 03	Distribution authorized to U.S. Gov't. agencies only; Premature Dissemination; 25 JUN 2007. Other requests shall be referred to Office of Naval Research, ATTN: Code 34, 875 North Randolph St., Arlington, VA 22203-1995.	Quarterly progress rept. no. 1, Mar-May 2007
AD0477450"	ROLE OF CHIROPTERA IN THE EPIDEMIOLOGY OF ENCEPHALITIS.	TEXAS UNIV DALLAS SOUTHWESTERN MEDICAL SCHOOL	Sulkin,S. Edward	2/5/1966	22	Not available	Not available	U	E - 04	Distribution: DoD only: others to Commanding General, Army Medical Research and Development Command, Washington, D. C.	Annual progress rept. 1 Mar 65-28 Feb 66,
ADB327388"	US Military Human Immunodeficiency Virus (HIV) Research Program	HENRY M JACKSON FOUNDATION FOR THE ADVANCEMENT OF MILITARY MEDICINE ROCKVILLE MD	Lowe, John,Robb, Merlin	8/1/2006	1103	Not available	USAMRMC	U	B - 03	Distribution authorized to U.S. Gov't. agencies only; Proprietary Information; AUG 2006. Other requests shall be referred to US Army Medical Research and Materiel Command, 504 Scott Street, Ft. Detrick, MD 21702-5012. Document partially illegible.	Final rept. 1 Jun 1998-31 Aug 2006
AD0838658"	STUDIES ON THE PREVENTION, CONTROL, AND TREATMENT OF EPIDEMIC INFLUENZA.	MICHIGAN UNIV ANN ARBOR SCHOOL OF PUBLIC HEALTH	Francis,Thomas , Jr	6/30/1968	38	Not available	Not available	U	E - 04	Distribution: DoD only: others to Commanding General, Army Medical Research and Development Command, Attn: MEDDH-SI. Washington, D. C. 20315.	Annual progress rept. 1 Jul 67-30 Jun 68,

ADB063504"	Epidemic Nephritis--Contact with Rodents (Swedish),	ARMY MEDICAL RESEARCH INST OF INFECTIOUS DISEASES FREDERICK MD	Ellstrom,Jan,Lindberger, Kerstin	1/1/1974	15	Not available	Not available	U	B - 03	Distribution limited to U.S. Gov't. agencies only; Proprietary Info.; 29 Mar 82. Other requests for this document must be referred to Commander, Army Medical Research and Development Command, Attn: USAMRIID. Fort Detrick, Frederick, MD 21701.	Not available
AD0808646"	STUDY OF THE ETIOLOY AND EPIDEMIOLOGY OF RESPIRATORY ILLNESS IN MILITARY POPULATIONS.	NIJMEGEN UNIV (NETHERLANDS) DEPT OF HYGIENE	VAN DER Veen,J.	11/1/1966	40	Not available	Not available	U	B - 03	Distribution: USGO: others to Army Research and Development Group (Europe), APO New York 09757.	Final technical rept. 1 Nov 65 31 Oct 66,
AD0826154"	EPIDEMOLOGY OF WHEAT STRIPE RUST	OREGON STATE UNIV CORVALLIS	Powelson, Robert L.	12/1/1967	27	Not available	SMUFD	U	C - 02	Distribution authorized to U.S. Gov't. agencies and their contractors; Administrative/Operational Use; DEC 1967. Other requests shall be referred to Commanding Officer, Army Biological Center, Attn: Technical Releases Branch, Fort Detrick, Frederick, MD 21701. Document partially illegible.	Annual progress rept. 1 Jan-31 Dec 1967
ADB322116"	Asymmetrical Warfare Threat: Foot and Mouth Disease	CENTER FOR ARMY ANALYSIS FORT BELVOIR VA	Scheber, Belinda H.	3/1/2006	62	CAA-R-05-34	DAMO-AC	U	F - 05	Distribution: Further dissemination only as directed by Director of Analysis & CIO, G3, ATTN: DAMO-ZD, 400 Army Pentagon, Washington, DC 20310-0400, MAR 2006, or higher DoD authority. This document is not available from DTIC in microfiche.	Final rept. 3 Sep 2001-06 Jun 2002

AD0870782"	Quarterly Report Number 3-FY 1970	NATIONAL COMMUNICABLE DISEASE CENTER ATLANTA GA	Brachman, Philip S.	4/1/1970	45	Not available	SMUFD	U	C - 02	Distribution authorized to U.S. Gov't. agencies and their contractors; Administrative/Operational Use; APR 1970. Other requests shall be referred to Commanding Officer, Fort Detrick, Attn: Technical Releases Branch. Frederick, MD 21701. Document partially illegible. This document contains export-controlled technical data.	Rept. for 1 Jan-31 Mar 1970
AD0661994"	The Status of Chemistry and Chemical Technology in Communist China	MCGRAW-HILL INC WRIGHT-PATTERSON AFB United States	Not available	6/15/1967	57	MHR-67-28	Not available	U	C - 02	U.S. Government agencies and their contractors;Administrative or Operational Use,,15 Jun 1967.Other request shall be referred to Foreign Technology Division,Wright-Patterson AFB,OH,45433,Foreign Technology Division.	Technical Report
ADB026510"	Everything About Antibiological Protection (Sve o protivbioloskoj zastiti)	ARMY MEDICAL INTELLIGENCE AND INFORMATION AGENCY FORT DETRICK MD	Stavjel, Boris	3/24/1978	8	USAMIIA-K-8818	USAMIIA	U	C - 02	Distribution authorized to U.S. Gov't. agencies and their contractors; Specific Authority; 24 MAR 1978. Other requests shall be referred to Director, Army Medical Intelligence and Information Agency, Attn: SGMI-IS, Washington, DC 20314.	Not available
AD0412365"	AN ANALYSIS OF VIRUSES AND VIRAL DISEASES IN SOUTH CENTRAL PHILIPPINES.	SILLIMAN UNIV MEDICAL CENTER DUMAGUETE CITY (PHILIPPINES)	Beran,George W.	7/31/1963	8	Not available	Not available	U	C - 02	For reference only at each of the DDC Offices. This report cannot be satisfactorily reproduced; DDC does not furnish copies.	Annual progress rept. 1 Aug 62-31 July 63,

ADB081155"	Department of the Air Force FY 1985 RDT&E Descriptive Summary, (DoD Software Engineering Institute), DoD Mission Area 551 (Electronic & Physical Sciences (ATD)), Budget Activity 2 (Advanced Technology Development)	DEPARTMENT OF THE AIR FORCE WASHINGTON DC	Not available	2/1/1984	4	Not available	USAF	U	C - 02	Distribution limited to U.S. Gov't. agencies and their contractors; Administrative/Operational Use; 14 Mar 1984. Other requests must be referred to Headquarters, United States Air Force, Office of the Deputy Chief of Staff for Research, Development and Acquisition, Attn: AF/RDXR, Washington, DC 20330., Availability: Document partially illegible.	Not available
AD0477234"	RICKETTSIAL DISEASES	HARVARD SCHOOL OF PUBLIC HEALTH BOSTON MA	Murray, Edward S.,Vinson, J. W.	2/1/1966	22	Not available	USAMRDC	U	E - 04	Distribution authorized to DoD only; Administrative/Operational Use; Feb 1966. Other requests shall be referred to Commanding General, Army Medical Research and Development Command, Washington, DC.	Annual rept. 1 Feb 1965-1 Feb 1966
ADB348420"	Development of a Vaccine Manufacturing Platform Technology: Vaccine Manufacturing Technology and Thermo-stable Formulation Development	HAWAII BIOTECHNOLOGY GROUP INC AIEA	Weeks-Levy, Carolyn,Collier, Beth-Ann	3/1/2009	61	Not available	USAMRMC	U	B - 03	Distribution authorized to U.S. Gov't. agencies only; Proprietary Information; MAR 2009. Other requests shall be referred to US Army Medical Research and Materiel Command, 504 Scott Street, Ft. Detrick, MD 21702-5012.	Final rept. 8 Feb 2007-7 Feb 2009
AD1089647"	Detection of Infections Using Graph Signal Processing in Heterogeneous Networks	North Carolina State University Raleigh United States	Hosseinalipour,Seyyedali ,Wang,Jie,Dai,Huaiyu,Wa ng,Wenye	12/4/2017	8	Not available	Not available	U	B - 03	U.S. Government agencies only;Proprietary Information;;04 Dec 2017.Other request shall be referred to U.S. Army Research Office ,Research Triangle Park,NC,27709, U.S. Army Research Office .	Conference Paper

AD0847612"	Annual Progress Report FY 1967.	MEDICAL LAB (406TH) SAN FRANCISCO CALIF 96343	Metzger,Joseph F.	7/1/1967	379	Not available	Not available	U	B - 03	Distribution: USGO: others to Commanding General, Army Medical Research and Development Command, Attn: MEDDHSI. Washington, D. C. 20315.	Rept. for 1 Jul 66-30 Jun 67,
AD0886754"	Etiology of Acute Respiratory Diseases.	CALIFORNIA STATE DEPT OF PUBLIC HEALTH BERKELEY VIRAL AND RICKETTSIAL DISEASE LAB	Lennette,Edwin H.,Schieble,Jack H.,Magoffin,Robert L.	8/15/1971	19	Not available	Not available	U	B - 03	Distribution limited to U.S. Gov't. agencies only; Proprietary Info.; Jun 71. Other requests for this document must be referred to Commanding General, Army Medical Research and Development Command, Attn: MEDDH-SI. Washington, D. C. 20314.	Annual rept. 1 Oct 70-31 May 71,
AD0461834"	THE EPIDEMIOLOGY OF MENINGOCOCCAL INFECTIONS IN NAVAL RECRUITS. II. DESCRIPTION OF AN OUTBREAK,	NAVY PREVENTIVE MEDICINE UNIT NO 5 SAN DIEGO CALIF	Bristow,W. M.	9/15/1964	20	NAVMED-MR- 005.09-1215-2	MR-005.09-1215- 2	U	C - 02	Distribution authorized to U.S. Gov't. agencies and their contractors; Other requests shall be referred to the NAVY PREVENTIVE MEDICINE UNIT NO 5 SAN DIEGO CALIF	Not available
ADA339030"	Naval Health Research Center Update, Issue No. 6.	NAVAL HEALTH RESEARCH CENTER SAN DIEGO CA	Not available	7/1/1997	4	Not available	NHRC	U	C - 12	Distribution: DTIC Users Only.	Not available
AD0841139"	BOTULIN - 'THE WEAPON OF SILENT WARFARE'	ARMY BIOLOGICAL LABS FREDERICK MD	Dolder, R.	2/1/1966	11	SMUFD-TRANS- 2289	ABL/MD	U	C - 02	Distribution authorized to U.S. Gov't. agencies and their contractors; Administrative/Operational Use; FEB 1966. Other requests shall be referred to the Army Biological Laboratory, Attn: SMUFD-AE-T, Fort Detrick, MD 21701., This document contains export-controlled technical data.	Journal article

ADB383882"	Pandemic Influenza Response Exercise NOVEL STRAIN 2010 (NS 10)	NORTHERN COMMAND PETERSON AFB CO	Pino, Gene	4/1/2010	12	Not available	NORTHCOM	U	E - 04	Distribution authorized to DoD only; Administrative/Operational Use; 01 APR 2010. Other requests shall be referred to U.S. Northern Command, ATTN: N-NC/J7, 250 Vandenberg St., Unit B016, Peterson AFB, CO 80914-3805.	Briefing charts
AD0808434"	GENETIC RELATIONSHIPS AMONG HUMAN AND ANIMAL STRAINS OF INFLUENZA VIRUS.	CALIFORNIA UNIV LOS ANGELES DEPT OF MEDICAL MICROBIOLOGY AND IMMUNOLOGY	Rasmussen,A. F. , Jr	11/1/1966	33	Not available	Not available	U	F - 05	Distribution: Controlled: all requests to Commanding General, Army Medical Research and Development Command, Washington, D. C. 20315.	Annual rept. 30 Oct 65-1 Nov 66,
AD0894901"	Recommendations for a Standard Louse Control Powder in the Department of Defense.	NAVAL MEDICAL FIELD RESEARCH LAB CAMP LEJEUNE N C	Grothaus,Roger H.	5/1/1972	10	NMFRL-Vol-XXII-No-13	Not available	U	B - 03	Distribution limited to U.S. Gov't. agencies only; Test and Evaluation; May 72. Other requests for this document must be referred to Commander, Naval Medical Field Research Lab., Camp Lejeune, N. C. 28542.	Interim rept.,
AD0225520"	EPIDEMIOLOGIC STUDIES OF THE 1958 CHOLERA EPIDEMIC IN BANGKOK, THAILAND	NAVAL MEDICAL RESEARCH UNIT NO 2 TAIPEI (TAIWAN)	SIDDHICHA,PRADITH,GRAYSTON,J. THOMAS	4/21/1959	1	Not available	Not available	U	C - 02	Distribution authorized to U.S. Gov't. agencies and their contractors; Other requests shall be referred to the NAVAL MEDICAL RESEARCH UNIT NO 2 TAIPEI (TAIWAN)	Not available
AD0083280"	SEROLOGICAL REACTIONS OF TWO VIRUSES ISOLATED DURING THE 1953 MENINGOENCEPHALITIS EPIDEMICS IN YUGOSLAVIA AND AUSTRIA	WALTER REED ARMY INST OF RESEARCH WASHINGTON D C	POND,WILLIAM L.,RUSS,SUDIE B.	9/1/1954	1	Not available	Not available	U	C - 02	Distribution authorized to U.S. Gov't. agencies and their contractors; Other requests shall be referred to the WALTER REED ARMY INST OF RESEARCH WASHINGTON D C	Not available

ADB095519"	On How the 'Three-Day Fever' Appeared and Spread in Eastern Sicily and Southern Calabria (Sul Modo Come Avvenne la Comparsa e la Diffusione della 'Febbre di tre Giorni' nella Sicilia Orientale e nella Calabria Inferiore),	ARMY MEDICAL RESEARCH INST OF INFECTIOUS DISEASES FORT DETRICK MD	Gabbi,U.	1/1/1985	10	USAMRIID-MUL-0675	Not available	U	B - 03	Distribution limited to U.S. Gov't. agencies only; Proprietary Info.; 27 Sep 85. Other requests must be referred to Army Medical Research Inst. of Infectious Diseases, Attn: Library. Fort Detrick, MD 21701.	Not available
AD0921233"	Etiology of Acute Respiratory Diseases.	CALIFORNIA STATE DEPT OF HEALTH BERKELEY VIRAL AND RICKETTSIAL DISEASE LAB	Schieble,Jack H.,Lennette,Edwin H.,Magoffin,Robert L.	8/1/1974	17	Not available	Not available	U	B - 03	Distribution limited to U.S. Gov't. agencies only; Proprietary Info.; Jun 74. Other requests for this document must be referred to Commander, Army Medical Research and Development Command, Attn: SGRD-IDS. Washington, D. C. 20314.	Annual rept. 1 Jun 73-31 May 74,
ADB188599"	The Disease is Eliminated but Should we Eradicate the Smallpox Virus Species	ARMY MEDICAL RESEARCH INST OF INFECTIOUS DISEASES FORT DETRICK MD	Not available	1/1/1994	7	USAMRIID-MUL-995	USAMRIID	U	B - 03	Distribution authorized to U.S. Gov't. agencies only; Specific Authority; 14 SEP 1994. Other requests shall be referred to USAMRIID, Bldg. 1425, Fort Detrick, Frederick, MD 21702-5011.	Not available
ADB353833"	Novel Methods for Rapid Detection of Infection Agents and the Severity of Cellular Damage	DIACARTA LLC FOSTER CITY CA	Okunieff, Paul,Zhang, Lurong	10/31/2009	16	Not available	DARPA/AMCOM	U	B - 03	Distribution authorized to U.S. Gov't. agencies only; Test and Evaluation; 31 OCT 2009. Other requests shall be referred to Director, Defense Advanced Research Projects Agency, Attn: Tech. Information, 3701 N. Fairfax Dr., Arlington, VA 22203-1714.	Final rept. 19 Aug 2008-31 Oct 2009



ADB251412"	Oral Vaccination Against Y.pestis and Anthrax Using Transgenic Plant Expressing Protective Antigens	CROPTech DEVELOPMENT CORP BLACKSBURG VA	Oishi, Karen	8/1/1999	74	Not available	USAMRMC	U	B - 03	Distribution authorized to U.S. Gov't. agencies only; Specific Authority; Feb 2000 Other requests shall be referred to USAMRMC, Fort Detrick, MD 21702-5012	Final rept. phase II, 23 Sep 1996-22 Jul 1999
AD1071425"	Evolution of Threats in the Global Risk Network	Rensselaer Polytechnic Institute Troy United States	Niu,Xiang,Moussawi,Ala a,Korniss,Gyorgy,Szyman ski,Boleslaw K.	8/10/2018	26	ARO-67398-LS.9	ARO-67398-LS.9	U	B - 03	U.S. Government agencies only;Proprietary Information;;10 Aug 2018.Other request shall be referred to Army Research Office ,Research Triangle Park,NC,27709,Army Research Office .	Journal Article - Open Access
AD0820829"	TRANSMISSION OF THE COMMON COLD UNDER CONTROLLED CONDITIONS.	ILLINOIS UNIV CHICAGO COLL OF MEDICINE	Jackson,George Gee	9/1/1967	31	MD-2410-3	Not available	U	E - 04	Distribution: DoD only: others to Commanding General, Army Medical Research and Development Command, Washington, D. C. 20315.	Annual progress rept. 1 Mar 66-30 Jun 67,
AD0800106"	A STUDY ON THE EPIDEMIOLOGY OF STRIPE RUST, PUCCINIA STRIIFORMIS WEST. IN CALIFORNIA	CALIFORNIA UNIV DAVIS DEPT OF PLANT PATHOLOGY	Tollenaar, H.,Houston, Byron R.	1/1/1966	19	Not available	ABL/MD	U	C - 02	Distribution authorized to U.S. Gov't. agencies and their contractors; Administrative/Operational Use; AUG 1966. Other requests shall be referred to US Army Biological Laboratories, Fort Detrick, MD 20701.	Final rept.
AD0858419"	Studies on the Prevention, Control and Treatment of Epidemic Influenza.	MICHIGAN UNIV ANN ARBOR SCHOOL OF PUBLIC HEALTH	Francis,Thomas , Jr	8/1/1969	44	Not available	Not available	U	E - 04	Distribution: DoD only: others to Commanding General, Army Medical Research and Development Command, Attn: MEDDH-SI. Washington, D. C. 20315.	Annual progress rept. 1 Jul 68-31 May 69,

ADB287395"	Advanced Biological Sensors Based on Fluorescent Conjugated Polymers	QTL BIOSYSTEMS LLC SANTA FE NM	Whitten, David,McBranch, Duncan	2/28/2003	31	0004AB	DARPA	U	B - 03	Distribution authorized to U.S. Gov't. agencies only; Proprietary Info.; Feb 2003. Other requests shall be referred to Defense Advanced Research Projects Agcy., Contracts Management Directorate (CMD), 3701 N. Fairfax Dr., Arlington, VA 22203-1714.	Final technical rept. 18 Jan 2000-17 Jan 2003
ADB401405"	Broad Spectrum Antiviral Host Oriented Therapeutics	FUNCTIONAL GENETICS INC GAITHERSBURG MD	Duan, Ruxanne	9/1/2008	8	Not available	USAMRMC	U	B - 03	Distribution authorized to U.S. Gov't. agencies only; Proprietary Information; SEP 2008. Other requests shall be referred to U.S. Army Medical Research and Materiel Command, 504 Scott St., Fort Detrick, MD 21702-5012.	Annual rept. 1 Sep 2007-31 Aug 2008
ADA306176"	Counterproliferation of Biological Weapons.	NAVAL POSTGRADUATE SCHOOL MONTEREY CA	Collins, Raymond P., Jr	9/1/1995	69	Not available	NPS	U	C - 12	Distribution: DTIC Users Only.	Master's thesis,
ADB110744"	Textbook on Civil Defense Medical Service (Uchebnoye Posobiye po Meditsinskoy Oborony),	ARMED FORCES MEDICAL INTELLIGENCE CENTER FORT DETRICK FREDERICK MD	Safronov,P. N.	4/13/1987	159	AFMIC-HT-054-87	Not available	U	B - 03	Distribution limited to U.S. Gov't. agencies only; Copyright; Proprietary Info., 13 Apr 87. Other requests must be referred to AFMIC-IS, Ft. Detrick, Frederick MD 21701-5004.	Not available
ADB311890"	U. S. Military Human Immunodeficiency Virus (HIV) Research Program	JACKSON (HENRY M) FOUNDATION ROCKVILLE MD	Lowe, John W.,Robb, Merlin	5/1/2005	194	Not available	USAMRMC	U	B - 03	Distribution authorized to U.S. Gov't. agencies only; Proprietary Information; MAY 2005. Other requests shall be referred to U.S. Army Medical Research and Materiel Command, 504 Scott St., Ft. Detrick, MD 21702-5012.	Annual rept. 1 Jun 2004-31 May 2005

ADB370322"	HIV/AIDS Care and Prevention Program	STICHTING PHARMACCESS INTERNATIONAL INTERNATIONAL AMSTERDAM (NETHERLANDS)	Kersemaekers, Saskia	9/1/2010	44	Not available	USAMRMC	U	B - 03	Distribution authorized to U.S. Gov't. agencies only; Proprietary Information; SEP 2010. Other requests shall be referred to U.S. Army Medical Research and Materiel Command, 504 Scott St., Ft. Detrick, MD 21702-5012.	Final rept. 1 Feb 2009-31 Aug 2010
ADB329788"	Quantitative Assessment of Influence Operations	TEMPEST TECHNOLOGIES LOS ANGELES CA	Wang, Yun	7/1/2007	46	AFRL-HE-BR-TR-2007-0054	TR-2007-0054,AFRL-HE-BR	U	B - 03	Distribution authorized to U.S. Gov't. agencies only; Proprietary Information; FEB 2007. Other requests shall be referred to Air Force Research Laboratory/HEX, Brooks City-Base, TX 78235-5107.	Final rept. 1 Apr 2006-31 Jan 2007
AD0807776"	STUDIES ON THE ETIOLOGY AND PREVENTION OF RUBELLA.	NEW YORK UNIV N Y MEDICAL CENTER	Green,Robert H.,Cooper,Louis Z.,Giles,Joan P.,Krugman,Saul,Balsamo,Michael R.	11/1/1966	14	Not available	Not available	U	E - 04	Distribution: DoD only: others to Commanding General, Army Medical Research and Development Command, Washington, D. C. 20315.	Final rept. 1 Jul 63-30 Jun 66,
ADB014151"	Studies on the Prevention, Control and Treatment of Epidemic Influenza	MICHIGAN UNIV ANN ARBOR	Hennessy, Albert V.	8/1/1976	19	Not available	USAMRDC	U	B - 03	Distribution authorized to U.S. Gov't. agencies only; Proprietary Information; JUN 1976. Other requests shall be referred to Commander, Army Medical Research and Development Command, Attn: SGRD. Washington, DC 20314.	Annual rept., 1 Jul 1975-30 Jun 1976
ADB233155"	Development of a Biological and Clinical Prognostic Model of Rift Valley Fever.	ARMY MEDICAL RESEARCH INST OF INFECTIOUS DISEASES FORT DETRICK MD	Adam, F.,Jouan, A.,Riou, O.,Phillipe, B.,Coulibaly, I.	1/1/1989	12	MUL-1123	USAMRIID	U	B - 03	Distribution authorized to U.S. Gov't. agencies only; Critical Technology; Feb 98. Other requests shall be referred to USAMEIID - Library. Fort Detrick, MD 21702-5011.	Not available

ADP206105"	An Empirical Study of Epidemic Algorithms in Large Scale Multihop Wireless Networks	CALIFORNIA UNIV BERKELEY DEPT OF COMPUTER SCIENCES	Ganesan, Deepak, Krishnamachari, Bhaskar, Woo, Alec, Culler, David, Estrin, Deborah, Wicker, Stephen	3/1/2002	16	IRB-TR-02-003	AFRL-IF-WP	U	C - 02	Distribution authorized to U.S. Gov't. agencies and their contractors; Administrative/Operational Use; MAY 2006. Other requests shall be referred to Air Force Research Lab., Attn: AFRL/IFSC, Wright-Patterson AFB, OH 45433-7334.	Technical rept.
AD1060046"	Defense against Viral Illness Phase I (DAVI)	CUBRC, Inc. Buffalo United States	Lingappa, Vishwanath R.	10/14/2010	74	Not available	Not available	U	B - 03	U.S. Government agencies only; Proprietary Information; 01 Oct 2010. Other request shall be referred to U.S. Army Medical Research and Materiel Command, Ft. Detrick, MD, 21702-5012, U.S. Army Medical Research and Materiel Command.	Technical Report, 15 Mar 2009, 14 Sep 2010
AD0254014"	OBSERVATIONS ON THE PRESENT STATE OF PLAGUE AND PLAGUE CONTROL IN THE SOVIET UNION (ACCORDING TO DATA AVAILABLE TO 31 OCTOBER 1960)	FORDHAM UNIV BRONX NY	Pollitzer, Robert	12/1/1960	18	1	CWL	U	C - 02	Distribution authorized to U.S. Gov't. agencies and their contractors; Administrative/Operational Use; DEC 1960. Other requests shall be referred to Chemical Warfare Labs., Army Chemical Center, MD.	Not available
AD0820442"	DIFFERENTIATION OF CHOLERAGENIC VIBRIOS.	TENNESSEE UNIV MEMPHIS MEDICAL UNITS	Freeman, Bob A.	9/1/1967	11	Not available	Not available	U	E - 04	Distribution: DoD only: others to Commanding General, Army Medical Research and Development Command, Washington, D. C. 20315.	Annual progress rept. 1 Feb-31 Aug 67,
AD0839609"	RICKETTSIAL DISEASES: A. TRENCH FEVER. B. EPIDEMIC TYPHUS.	HARVARD SCHOOL OF PUBLIC HEALTH BOSTON MASS	Murray, Edward S., Vinson, J. William	9/1/1968	29	Not available	Not available	U	E - 04	Distribution: DoD only: others to Commanding General, Army Medical Research and Development Command, Attn: MEDDH-SI. Washington, D. C. 20315.	Annual progress rept. 1 Feb 67-30 Jun 68,

AD0844562"	On the Population Genetics of the ABO-Blood Groups. Second Report. Gene Frequency and Epidemic Diseases (Ueber die Population Genetik der ABO-Blutgruppen. 2. Mitteilung. Genhaeufigkeit und Epidemische Erkrankungen),	ARMY BIOLOGICAL LABS FREDERICK MD	Vogel, F.,Pettenkofer, H. J.,Helmbold, W.	1/25/1962	30	TRANS-1129	SMUFD	U	C - 02	Distribution authorized to U.S. Gov't. agencies and their contractors; Critical Technology; JAN 1962. Other requests shall be referred to Commanding Officer, Army Biological Laboratories, Attn: Technical Releases Branch, Frederick, MD 21701. Document partially illegible. This document contains export-controlled technical data.	Not available
ADB337294"	Consequences and Challenges of Bioterrorist Attacks	ROBERT KOCH-INSTITUT BERLIN (GERMANY F R)	Kurth, Reinhard	1/1/2002	4	USAMRIID-MUL-1275	MUL-1275,USAMRIID	U	B - 03	Distribution authorized to U.S. Gov't. agencies only; Administrative/Operational Use; 2002. Other requests shall be referred to U.S. Army Medical Research Inst. of Infectious Diseases, Attn: Library, 1425 Porter St., Ft. Detrick, MD 21702-5011.	Journal article
AD0720774"	Insecticide Dispersal Equipment for Navy and Marine Corps Aircraft	NAVAL MEDICAL FIELD RESEARCH LAB CAMP LEJEUNE NC	Grothaus, Roger H.	2/1/1971	20	NMFRL-VOL-XXI/NO-4,NAVMED-M4305.12BXG6-1	M4305.12BXG6-1,NAVMED	U	C - 12	Distribution: DTIC users only.	Interim rept.
AD0832229"	STRIPE RUST. PART I. WINTER BEHAVIOR AND INFLUENCE ON YIELD. PART II. RACE IDENTIFICATION IN THE PACIFIC NORTHWEST	WASHINGTON STATE UNIV PULLMAN	Hendrix, J. W.	12/15/1967	85	Not available	SMUFD	U	C - 02	Distribution authorized to U.S. Gov't. agencies and their contractors; Administrative/Operational Use; DEC 1967. Other requests shall be referred to Commanding Officer, Army Biological Center, Attn: Technical Information Department, Frederick, MD 21701.	Annual rept. 1 Dec 1966-30 Nov 1967

AD0841789"	ECOLOGY OF DENGUE AND OTHER ARBOVIRUSES OF MALAYSIA.	CALIFORNIA UNIV SAN FRANCISCO GEORGE WILLIAMS HOOPER FOUNDATION	Audy,J. Ralph,Rudnick,Albert	9/1/1968	119	Not available	Not available	U	E - 04	Distribution: DoD only: others to Commanding General, Army Medical Research and Development Command, Attn: MEDDH-SI. Washington, D. C. 20315.	Annual progress rept. 1 Jul 67-30 Jun 68,
AD0461091"	(NO TITLE).	WASHINGTON STATE UNIV PULLMAN	Not available	3/1/1965	50	Not available	Not available	U	C - 02	Release or announcement to foreign governments or their nationals is not authorized.	Final rept.
ADB144872"	Mathematical Models for Infectious Diseases.	MATHEMATISCHES FORSCHUNGSINSTITUT OBERWOLFACH (GERMANY F R)	Not available	6/1/1989	21	Jun-89	Not available	U	C - 12	Distribution: DTIC users only.	Not available
ADB337078"	Anthrax as a Biological Weapon	OBIHIRO UNIV OF AGRICULTURE AND VETERINARY MEDICINE HOKKAIDO (JAPAN)	Makino, Souichi	6/1/2002	13	USAMRIID-MUL-1266	MUL-1266,USAMRIID	U	B - 03	Distribution authorized to U.S. Gov't. agencies only; Administrative/Operational Use; JUN 2002. Other requests shall be referred to U.S. Army Medical Research Inst. of Infectious Diseases, Attn: Library, 1425 Porter St., Ft. Detrick, MD 21702-5011.	Journal article
AD0028994"	A NOTE ON THE SPREAD OF RUMOR OR EPIDEMIC	ILLINOIS UNIV AT URBANA COORDINATED SCIENCE LAB	SHMOYS, JEROME	2/1/1954	13	R-48	SCel	U	C - 02	Distribution authorized to U.S. Gov't. agencies and their contractors; Administrative/Operational Use; FEB 1954. Other requests shall be referred to Army Signal Research and Development Laboratory, Fort Monmouth, NJ. Document partially illegible.	Not available

ADB299045"	Bioterrorism Preparedness for Infectious Disease (BTPID) Proposal	HAWAII UNIV HONOLULU	Burgess, Lawrence P.	1/1/2004	24	Not available	USAMRMC	U	B - 03	Distribution authorized to U.S. Gov't. agencies only; Proprietary Info.; Jan 2004. Other requests shall be referred to the U.S. Army Medical Research and Materiel Command, 504 Scott Street, Fort Detrick, MD 21702-5012.	Annual rept. 1 Jan 2003-31 Dec 2003
AD0853655"	Epidemiology of Stem Rust of Wheat at Casselton, North Dakota, in 1964.	FORT DETRICK FREDERICK MD	Line, Roland F.,Peet, Clyde E.	5/1/1969	25	SMUFD-TR-106	USAMRIID	U	C - 02	Distribution authorized to U.S. Gov't. agencies and their contractors; Administrative/Operational Use; MAY 1969. Other requests shall be referred to Army Medical Research Institute of Infectious Diseases, Dept of Entomology, Attn: Technical Releases Branch. Fort Detrick, MD 21701. Document partially illegible. This document contains export-controlled technical data.	Technical rept.,
ADB092222"	Principles for the Maintenance of Hygiene and Prevention of Epidemic Disease Utilizing Military Medical Science and Civil Defense (Grundsätze der Hygienischantiepidemischen Sicherstellung im Rahmen der Militärmedizin und Zivilverteidigung,	ARMED FORCES MEDICAL INTELLIGENCE CENTER FORT DETRICK FREDERICK MD	Furter,H. J.	5/6/1985	17	AFMIC-HT-035-85	Not available	U	B - 03	Distribution limited to U.S. Gov't. agencies only; Copyright, Proprietary Info.; 6 May 85. Other requests must be referred to AFMIC-IS, Fort Detrick, Frederick, MD 21701-5004.	Not available
AD0871951"	Intoxications of Man and Animal by Phyto-Plankton Toxins from Surface Water (Intoxikationen von Mensch und Tier Durch Phytoplanktontoxine aus Oberflaechengewaessern),	ARMY FOREIGN SCIENCE AND TECHNOLOGY CENTER WASHINGTON D C	Volger,G.	4/20/1970	36	FSTC-HT-23-352-70	Not available	U	B - 03	Distribution: USGO: others to Commander, Army Foreign Science and Technology Center, Washington, D. C. 20315.	Not available

ADA402062"	Locking Pandora's Box and Preventing Deliberate Disease	ARMY WAR COLL CARLISLE BARRACKS PA	Walker, Cliff L.	3/21/2002	44	Not available	USAWC	U	B - 03	Distribution authorized to U.S. Gov't. agencies only; Specific authority; 23 Aug 2002. Other requests shall be referred to U.S. Army War College, Carlisle Barracks, Carlisle, PA 17013-5220.	Not available
ADB387637"	The Outbreak of Ebola Virus Haemorrhagic Fever in the Republic of Congo, 2003: A New Strategy?	ARMY MEDICAL RESEARCH INST OF INFECTIOUS DISEASES FORT DETRICK MD	Formenty, P.,Libama, F.,Epelboin, A.,Allaranger, Y.,Leroy, E.,Moudzeo, H.,Tarangonia, P.,Molamou, A.,Lenzi, M.,Ait-Ikhlef, K.	1/1/2003	9	MUL1329,RIID-03-2012	USAMRIID	U	B - 03	Distribution authorized to U.S. Gov't. agencies only; Administrative/Operational Use; JAN 2011. Other requests shall be referred to U.S. Army Medical Research Institute of Infectious Diseases, 1425 Porter St., Ft. Detrick, MD 21702-5011.	Journal article
ADB208237"	Present Status of HIV Epidemic in Kingdom of Cambodia and Policies of its Government to Cope with the Epidemic Disease,	ARMED FORCES MEDICAL INTELLIGENCE CENTER FORT DETRICK FREDERICK MD	Kihara, Masahiko,Tajima, Zazuo,Tomizawa, Ichiro,Ozaki, Shinpei	3/25/1996	18	AFMIC-HT-001-96	AFMIC	U	E - 04	Distribution authorized to DoD only; Copyright; Proprietary Info.; Mar 96. Other requests shall be referred to AFMIC-MI-1A, Fort Detrick, Frederick, MD 21702--5004.	Not available
AD0037944"	PROPHYLAXIS OF EPIDEMIC PAROTITIS THE ANTIBODY RESPONSE FOLLOWING INJECTION OF MUMPS ANTIGEN IN VARYING DOSAGE	NAVAL MEDICAL RESEARCH UNIT NO 4 GREAT LAKES ILL	KEMPF,J. EMERSON,SPAETH,RALP H	6/10/1953	1	Not available	Not available	U	C - 02	U.S. Government agencies and their contractors; Other request shall be referred to NAVAL MEDICAL RESEARCH UNIT NO 4 GREAT LAKES ILL	Not available
AD0255862"	Final Report.	COMMUNICABLE DISEASE CENTER ATLANTA GA	Not available	4/21/1961	1	Not available	Not available	U	C - 02	U.S. Government agencies and their contractors; Other request shall be referred to COMMUNICABLE DISEASE CENTER ATLANTA GA	Not available



ADB392052"	Autonomic Software Protection System (ASPS)	AVIRTEK INC TUCSON AZ	Hariri, Salim	9/1/2013	73	AFRL-RY-WP-TR-2013-0122	TR-2013-0122,AFRL-RY-WP	U	B - 03	Distribution authorized to U.S. Gov't. agencies only; Proprietary Information; SEP 2013. Other requests shall be referred to Air Force Research Lab., Attn: AFRL/Rywa, Wright-Patterson AFB, OH 45433-7320.	Final rept. 4 Jan 2011-8 Apr 2013
AD0858177"	Epidemiology of Stem Rust of Wheat at Rosemount, Minnesota, in 1964.	FORT DETRICK FREDERICK MD	Line,Roland F.,Peet,Clyde E.	8/1/1969	25	SMUFD-TR-109	Not available	U	C - 02	Distribution: No Foreign without approval of Commanding Officer, Fort Detrick, Attn: Technical Releases Branch. Frederick, Md. 21701.	Technical rept.,
AD0913774"	Attenuation and Antigenic Modification of Influenza Virus.	MICHIGAN UNIV ANN ARBOR	Maassab,H. F.	9/1/1973	27	Not available	Not available	U	B - 03	Distribution limited to U.S. Gov't. agencies only; Proprietary Info.; Jun 73. Other requests for this document must be referred to Commander, Army Medical Research and Development Center, Attn: SGRD-IDS. Washington, D. C. 20314.	Annual progress rept.,
AD0852496"	Physiologic Specialization Plant Pathogenic Fungi and Bacteria,	ARMY FOREIGN SCIENCE AND TECHNOLOGY CENTER WASHINGTON D C	Kazuo,Goto,Yoshito,Iwata	4/10/1969	24	FSTC-HT-23-268-68G	Not available	U	B - 03	Distribution: USGO: others to Commander, Army Foreign Science and Technology Center, Washington, D. C. 20315.	Not available
AD0904966"	Epidemiology and Prevention of Acute Respiratory Disease in Navy Recruits.	NAVAL MEDICAL RESEARCH UNIT NO 4 GREAT LAKES ILL	Peckinpugh,Robert O.,Miller,C. H.	11/1/1972	74	NAMRU-4-72.15	Not available	U	B - 03	Distribution limited to U.S. Gov't. agencies only; Proprietary Info.; 20 Nov 72. Other requests for this document must be referred to Commanding Officer, Naval Medical Research Unit No. 4, Great Lakes, Ill. 60088.	Annual progress rept.,

AD1068310"	Humanitarian Crises and Natural Disasters in USSOUTHCOM Since 1990	Center for Naval Analyses Arlington United States	Walsh,Brian	1/1/2019	14	DIM-2019-U-019155-Final	Not available	U	C - 02	U.S. Government agencies and their contractors;Specific Authority;;01 Jan 2019.Other request shall be referred to Office of the Chief of Naval Operations ,Washington,DC,20350, Office of the Chief of Naval Operations .	Technical Report
ADB403490"	Weekly Journal for Veterinary Medicine and Cattle Breeding. Volume 23, Number 25, June 1879	ARMY MEDICAL RESEARCH INST OF INFECTIOUS DISEASES FORT DETRICK MD	Not available	1879-06-01	12	USAMRIID-MUL-1339,RIID-07-13	USAMRIID	U	B - 03	Distribution authorized to U.S. Gov't. agencies only; Administrative/Operational Use; AUG 2013. Other requests shall be referred to U.S. Army Medical Research Institute of Infectious Diseases, 1425 Porter Street, Fort Detrick, MD, 21702-5011.	Translation
AD0289839"	THE STUDY OF STRESS, METABOLISM, IMMUNE MECHANISMS AND SUSCEPTIBILITY TO ILLNESS	CORNELL UNIV NEW YORK MEDICAL COLL	HINKLE,LAWRENCE E. JR.,WOLFF,HAROLD G.	9/30/1962	1	Not available	Not available	U	C - 02	U.S. Government agencies and their contractors; Other request shall be referred to CORNELL UNIV NEW YORK MEDICAL COLL	Not available
AD0834275"	QUARTERLY REPORT NUMBER THREE - FY 1968.	NATIONAL COMMUNICABLE DISEASE CENTER ATLANTA GA	Brachman,Philip S.	5/22/1968	29	Not available	Not available	U	C - 02	Distribution: No Foreign without approval of Commanding Officer, Fort Detrick, Attn: Technical Releases Branch. Frederick, Md. 21701.	Rept. for 1 Jan-31 Mar 68,
ADB016765"	History of War Diseases in Japan Synoptic Description (II)	ARMY MEDICAL INTELLIGENCE AND INFORMATION AGENCY FORT DETRICK MD	Nakanomiya, Yasuo	1/1/1977	18	USAMIIA-K-6701	USAMIIA	U	B - 03	Distribution authorized to U.S. Gov't. agencies only; Proprietary Information; 27 JAN 1977. Other requests shall be referred to Army Medical Intelligence and Information Agency, Attn: SGMI-IS, Washington, D. C. 20314.	Not available

ADP206109"	Trickle: A Self-Regulating Algorithm for Code Propagation and Maintenance in Wireless Sensor Networks	CALIFORNIA UNIV BERKELEY DEPT OF ELECTRICAL ENGINEERING AND COMPUTER SCIENCE	Levis, Philip,Patel, Neil,Culler, David,Shenker, Scott	3/1/2004	14	Not available	AFRL-IF-WP	U	C - 02	Distribution authorized to U.S. Gov't. agencies and their contractors; Administrative/Operational Use; MAY 2006. Other requests shall be referred to Air Force Research Lab., Attn: AFRL/IFSC, Wright-Patterson AFB, OH 45433-7334.	Conference paper
ADB054140"	Using Balanced Salt Solutions as the Treatment of Shock Caused by Epidemic Hemorrhagic Fever--The Clinical Study of 40 Cases,	ARMY MEDICAL INTELLIGENCE AND INFORMATION AGENCY FORT DETRICK MD	Chuan,Dai Ker	1/15/1981	5	USAMIIA-L-0255	Not available	U	B - 03	Distribution limited to U.S. Gov't. agencies only; Copyright, Proprietary Info.; 21 Jan 81. Other requests for this document must be referred to Director, Army Medical Intelligence and Information Agency, Attn: SGMI-IS. Fort Detrick, Frederick, MD 21701.	Not available
ADB350860"	Automatic Identification and Mitigation of Unauthorized Information Leaking from Enterprise Networks	SECURE COMMAND LLC CENTREVILLE VA	Not available	4/10/2009	15	Not available	ARO	U	B - 03	Distribution authorized to U.S. Gov't. agencies only; Proprietary Information; APR 2009. Other requests shall be referred to U.S. Army Research Office, PO Box 12211, Research Triangle Park, NC 27709-2211.	Final technical rept. 19 Sep 2008-18 Mar 2009
ADB216207"	The Transmission of Japanese Encephalitis by Mosquitoes after Experimental Hibernation,	NAVAL MEDICAL RESEARCH INST BETHESDA MD	Hurlbut, Herbert S.	8/22/1949	7	NMRI-9	NMRI	U	C - 12	Distribution: DTIC users only.	Not available
ADB253495"	PACAF Epidemiological Laboratory	EPIDEMIOLOGICAL FLIGHT (5TH) APO SAN FRANCISCO 96528	Not available	4/1/1964	15	TR-4-64	USAF	U	F - 05	Distribution: Further dissemination only as directed by Dept. of the Air Force, Washington, DC 20330 (Apr 64) or higher DoD authority.	Technical rept.,

ADB401487"	UCLA High Speed, High Volume Laboratory Network for Infectious Diseases	CALIFORNIA UNIV LOS ANGELES	Clemens, John,Godwin, Hilary	9/1/2013	242	Not available	USAMRMC	U	B - 03	Distribution authorized to U.S. Gov't. agencies only; Proprietary Information; SEP 2013. Other requests shall be referred to U.S. Army Medical Research and Materiel Command, 504 Scott St., Ft. Detrick, MD 21702-5012.	Annual rept. 1 Sep 2012-30 Aug 2013
ADB214603"	An Epidemic of Eosinophilic Meningitis, A Previously Undescribed Disease, Occuring on Ponape, Eastern Carolines,	NAVAL MEDICAL RESEARCH INST BETHESDA MD	Bailey, Charles A.	10/14/1948	35	NMRI-7	NMRI	U	C - 12	Distribution: DTIC users only., Availability: Document partially illegible.	Not available
ADB103446"	Assigning DoD a Narcotics Interdiction Mission.	NATIONAL WAR COLL WASHINGTON DC	Mudd,Joseph F.	2/1/1986	30	NDU/NWC-86-2-A-7S	Not available	U	C - 02	Distribution limited to U.S. Gov't. agencies and their contractors; Specific Authority; Jun 86. Other requests must be referred to National War College, Washington, DC 20319-6000.	Final rept. Sep 85-Feb 86,
ADB410796"	Molecular and Structural Basis for Fine Specificity of Antiviral Antibodies	VANDERBILT UNIV MEDICAL CENTER NASHVILLE TN	Crowe, Jr, James E.	1/1/2015	9	Not available	DTRA	U	B - 03	Distribution authorized to U.S. Gov't. agencies only; Administrative/Operational Use; Premature Dissemination; Proprietary Information; 12 NOV 2015. Other requests shall be referred to Defense Threat Reduction Agency, 8725 John J. Kingman Rd., Fort Belvoir, VA 22060.	Not available
ADB953389"	An Epidemic of Field Fever (?) in Finnish Lapland,	ARMY MEDICAL RESEARCH INST OF INFECTIOUS DISEASES FREDERICK MD	Hortling,H.	1/1/1946	14	USAMRIID-MUL-0622	Not available	U	B - 03	Distribution limited to U.S. Gov't. agencies only; Proprietary Info.; 29 Mar 82. Other requests for this document must be referred to Cmdr., Army Med. Res. and Dev. Cmd., Attn: USAMRIID. Fort Detrick, Frederick, MD 21701.	Not available

ADB133963"	AIDS-Its Impact on the Armed Forces.	INDUSTRIAL COLL OF THE ARMED FORCES WASHINGTON DC	Newman, George E.	4/1/1989	31	NDU-ICAF-88-A67	Not available	U	E - 04	Distribution authorized to DoD only; Critical Technology; 13 Jul 89. Other requests shall be referred to National Defense Univ., Attn: NDU-LD-SCH. Washington, DC 20319-6000.	Research rept. Aug 87-Apr 88,
AD0252019"	RICKETTSIAL DISEASES	HARVARD SCHOOL OF PUBLIC HEALTH BOSTON MASS	MURRAY,EDWARD S.,VINSON,J. WILLIAM	2/24/1961	1	Not available	Not available	U	C - 02	Not available	Not available
AD0881745"	Epidemiology of Stem Rust of Wheat at Lincoln, Nebraska, in 1965.	FORT DETRICK FREDERICK MD	Peet,Clyde E.,Line,Roland F.	3/1/1971	40	SMUFD-TR-115,AMXFD-AE-T-49892	Not available	U	B - 03	Distribution: USGO: others to Commanding Officer, Fort Detrick, Attn: AMXFD-AE-T. Frederick, Md. 21701.	Technical rept.,
AD0470689"	DISEASE TRANSMISSION BY AIRCRAFT	SCHOOL OF AEROSPACE MEDICINE BROOKS AFB TX	Ritzinger, Frederick R.	5/1/1965	15	SAM-TR-65-37,REVIEW-4-65	SAM	U	C - 02	Distribution authorized to U.S. Gov't. agencies and their contractors; Administrative/Operational Use; May 1965. Other requests shall be referred to School of Aerospace Medicine, Brooks AFB, TX 78235-5301., Availability: Document partially illegible.	Aeromedical reviews
ADB105844"	Improvement of Some Forms of State Sanitary Inspection of the Use of Pesticides,	FOREIGN TECHNOLOGY DIV WRIGHT-PATTERSON AFB OH	Gavryuk,A. P.,Samotuga,V. V.,Bondarenko,Yu. G.,Popov,L. G.,Druzhbitskaya,G. G.	9/26/1986	8	FTD-ID(RS)t-0781-86	Not available	U	C - 02	Distribution limited to U.S. Gov't. agencies and their contractors; Copyright; Specific Authority; 26 Sep 86. Other requests must be referred to FTD/STINFO, Wright-Patterson AFB, OH 45433.	Not available

ADB204390"	The Chemical Prophylaxis of Influenza in Military Collectives,	NATIONAL GROUND INTELLIGENCE CENTER CHARLOTTESVILLE VA	YeFinmov, Ye I.,Razgulin, S. A.	9/8/1995	7	NGIC-HT-0222-95	NGIC	U	C - 02	Distribution authorized to U.S. Gov't. agencies and their contractors; Specific Authority; 1 Jan 88. Other requests shall be referred to U.S. Army National Ground Intelligence Center, 220 7th Street, NE., Charlottesville, VA 22902-5396.	Not available
AD1009735"	A system to Predict and Analyze Novel and Emerging Diseases Enabled by Models of Infection Conditions (PANDEMIC)	Charles River Analytics Inc Cambridge United States	Prue,Brian	4/29/2016	80	R1504309	Not available	U	B - 03	U.S. Government agencies only;Proprietary Information;29 Apr 2016.Other request shall be referred to U.S. Army Medical Research and Materiel Command , Fort Detrick,MD,21702-5014, U.S. Army Medical Research and Materiel Command .This document contains export-controlled technical data.	SBIR Report,09 Sep 2015,29 Apr 2016
ADB388094"	UCLA High Speed, High Volume Laboratory Network for Infectious Diseases	CALIFORNIA UNIV LOS ANGELES	Clemens, John	9/1/2012	98	Not available	USAMRMC	U	B - 03	Distribution authorized to U.S. Gov't. agencies only; Proprietary Information; SEP 2012. Other requests shall be referred to U.S. Army Medical Research and Materiel Command, 504 Scott Street, Fort Detrick, MD 21702-5012.	Annual rept. 1 Sep 2011-31 Aug 2012
ADB006840"	The Study of Dengue Fever in the Caribbean	CEDARS OF LEBANON HOSPITAL MIAMI FL	Ehrenkranz, N. J.,Ventura, Arnoldo K.	5/1/1975	42	Not available	USAMRDC	U	B - 03	Distribution authorized to U.S. Gov't. agencies only; Proprietary Information; JUN 1974. Other requests shall be referred to Commander, Army Medical Research and Development Command, Attn: SGRD-SSI. Washington, DC 20314.	Final rept. 1 Aug 1969-30 Jan 1975

AD0213994"	SECOND ASIAN INFLUENZA EPIDEMICS OCCURRING IN VACCINATED MEN ABOARD U. S. NAVY VESSELS	NAVAL MEDICAL RESEARCH UNIT NO 2 MANILA (PHILIPPINES)	Beam, Walter E., Jr., Grayson, J. Thomas, Watten, Raymond H.	1/6/1959	16	Not available	Not available	U	C - 02	Availability: Document partially illegible.	Not available
ADB969829"	Studies on Yellow Fever in Ethiopia,	ARMY MEDICAL RESEARCH INST OF INFECTIOUS DISEASES FORT DETRICK MD	Andral, L., Bres, P., Serie, C., Casals, J., Panther, R.	1/1/1969	14	USAMRIID-MUL-817	USAMRIID	U	B - 03	Distribution authorized to U.S. Gov't. agencies only; Critical Technology; 10 Jun 92. Other requests shall be referred to USAMRIID, Library, Fort Detrick, Frederick, MD 21702-5011.	Not available
ADB969833"	Studies on Endemic Glandular Fever,	ARMY MEDICAL RESEARCH INST OF INFECTIOUS DISEASES FORT DETRICK MD	Sato, Kiyoshi, Ohtawara, Toyokazu, Yamada, Tatsuyoshi, Kataoka, Hidemi	1/1/1925	14	USAMRIID-MUL-0678	USAMRIID	U	B - 03	Distribution authorized to U.S. Gov't. agencies only; Critical Technology; 10 Jun 92. Other requests shall be referred to USAMRIID, Library, Fort Detrick, Frederick, MD 21702-5011.	Not available
AD0486310"	ANNUAL PROGRESS REPORT, FY 1965.	MEDICAL LAB (406TH) SAN FRANCISCO CALIF 96343	Metzger, Joseph F.	9/30/1965	196	Not available	Not available	U	C - 02	Distribution: No Foreign without approval of Army Medical Research and Development Command, Washington, D. C. 20315.	Rept. for 1 Jul 64-30 Jun 65,
AD0476229"	AN EPIDEMIOLOGICAL AND IMMUNOLOGICAL STUDY OF CUTANEOUS VIRAL INFECTIONS IN MAN.	CALIFORNIA UNIV SAN FRANCISCO MEDICAL CENTER	Epstein, William L.	1/14/1966	7	Not available	Not available	U	E - 04	Distribution: DoD only: others to Commanding General, Army Medical Research and Development Command, Washington, D. C.	Annual rept. 31 Jul 65-31 Jul 66,
ADB330603"	Development of an Indications and Warnings System for Threatening Plant Pathogens: A Remote Sensing, GPS, and GIS Approach	IOWA STATE UNIV AMES	Nutter Jr., Forrest W., Basart, John P., Esker, Paul E., Kane, Kevin, Ahmad, Khalil, van Rij, Neil	6/1/2007	57	Not available	USAMRMC	U	B - 03	Distribution authorized to U.S. Gov't. agencies only; Proprietary Information; JUN 2007. Other requests shall be referred to U.S. Army Medical Research and Materiel Command, 504 Scott St., Fort Detrick, MD 21702-5012.	Final rept. 23 May 2005-22 May 2007

AD0825224"	QUARTERLY REPORT NUMBER ONE - FY 1968	NATIONAL COMMUNICABLE DISEASE CENTER ATLANTA GA	Not available	11/30/1967	34	Not available	SMUFD	U	C - 02	Distribution authorized to U.S. Gov't. agencies and their contractors; Critical Technology; 30 NOV 1967. Other requests shall be referred to Commanding Officer, Army Biological Labs, Attn: Technical Releases Section. Frederick, Md. 21701. Document partially illegible. This document contains export-controlled technical data.	Not available
ADB025827"	On a Nonlinear Integral Equation Arising in Mathematical Epidemiology	MATHEMATISCH CENTRUM AMSTERDAM (NETHERLANDS) AFDELING TOEGEPASTE WISKUNDE	Diekmann, O.	9/1/1977	12	TW-170/77	X5	U	E - 04	Distribution authorized to DoD only; Foreign Government Information; SEP 1977. Other requests shall be referred to Netherlands Embassy, 4200 Linnean Ave., NW, Washington, DC 20008.	Not available
AD1088471"	Advancing a Promising Tuberculosis Vaccine Candidate: MTBVAC	International AIDS Vaccine Initiative New York United States	Ginsberg,Ann,Lempicki, Maria	10/1/2019	22	Not available	Not available	U	B - 03	U.S. Government agencies only;Proprietary Information;;01 Oct 2019.Other request shall be referred to US Army Medical Research and Materiel Command,Fort Detrick,MD,21702-5012,US Army Medical Research and Materiel Command.	Technical Report,30 Sep 2018,29 Sep 2019
AD0875103"	Rickettsial Diseases: A. Trench Fever B. Epidemic Typhus.	HARVARD SCHOOL OF PUBLIC HEALTH BOSTON MASS DEPT OF MICROBIOLOGY	Murray,Edward S.,Vinson,J. William	9/15/1970	22	Not available	Not available	U	E - 04	Distribution: DoD only: others to Commanding General, Army Medical Research and Development Command, Attn: MEDDH-SI. Washington, D. C. 20314.	Annual progress rept. 1 Jun 69-31 May 70,



ADB061452"	Genesis of Arthropod-Borne Viral Epidemics.	CORNELL UNIV MEDICAL COLL NEW YORK DEPT OF MICROBIOLOGY	Wiebe,Michael E.	2/1/1980	29	Not available	Not available	U	B - 03	Distribution limited to U.S. Gov't. agencies only; Proprietary Info.; Feb 80. Other requests for this document must be referred to Commander, U.S. Army Medical Research and Development Command, Attn: SGRD-SI. Fort Detrick, Frederick, MD 21701.	Annual progress rept. no. 3, 1 Feb 79-31 Jan 80,
AD0838714"	QUARTERLY REPORT NUMBER FOUR 1 APRIL-30 JUNE 1968 From U.S. Department of Health, Education and Welfare, Public Health Service, Health Services and Mental Health Administration, CDC, Atlanta, GA	NATIONAL COMMUNICABLE DISEASE CENTER ATLANTA GA	Brachman, Philip S.	7/1/1968	24	Not available	SMUFD	U	C - 02	Distribution authorized to U.S. Gov't. agencies and their contractors; Administrative/Operational Use; JUL 1968. Other requests shall be referred to Commanding Officer, Fort Detrick, Attn: Technical Releases Branch. Frederick, MD 21701. This document contains export-controlled technical data.	Not available
ADB167624"	New Pathogenic Trait Encoded by Yersinia pseudotuberculosis pVM82 Plasmid,	ARMY MEDICAL RESEARCH INST OF INFECTIOUS DISEASES FORT DETRICK MD	Gintsburg, A. L.,Shubin, F. N.,Shovadaeva, G. A.,Kulichenko, A. N.,Yanishevskii, N. W.	1/1/1987	8	USAMRIID-MUL-929	USAMRIID	U	B - 03	Distribution authorized to U.S. Gov't. agencies only; Specific Authority; 1 Oct 92. Other requests shall be referred to USAMRIID/Lib., Fort Detrick, Frederick, MD 21702-5011.	Not available
AD0877247"	Quarterly Report Number 1 - FY 1971.	NATIONAL COMMUNICABLE DISEASE CENTER ATLANTA GA	Brachman,Philip S.	10/1/1970	25	Not available	Not available	U	C - 02	Distribution: No Foreign without approval of Commanding Officer, Fort Detrick, Attn: Technical Releases Branch. Frederick, Md. 21701.	Rept. for 1 Jul-30 Sep 70,

ADB072511"	Genesis of Arthropod-Borne Viral Epidemics.	CORNELL UNIV MEDICAL COLL NEW YORK DEPT OF MICROBIOLOGY	Wiebe,Michael E.	3/1/1982	23	Not available	Not available	U	B - 03	Distribution limited to U.S. Gov't. agencies only; Proprietary Info.; Mar 82. Other requests for this document must be referred to Commanding General, U.S. Army Medical Research and Development Command, Fort Detrick, Frederick, MD 21701.	Final rept. Jul 77-31 Dec 81, Annual rept. 1 Feb 80-31 Dec 81,
ADB394668"	The SARS Quarantine in the Greater Toronto Area: A Case Study. Analysis of Quarantine Policy and Risk Communication	DEFENSE FORECASTS INTERNATIONAL INC WASHINGTON DC	Not available	5/31/2004	124	Not available	DTRA	U	E - 04	Distribution authorized to DoD only; Administrative/Operational Use; MAY 2004. Other requests shall be referred to Defense Threat Reduction Agency, 8725 John J. Kingman Rd., Ft. Belvoir, VA 22060-6201.	Final rept.
ADB089323"	Risk Propensity, Action Readiness and the Roles of Societal and Individual Decision Makers (Risiko-Geneigdheid, Akteibereidheid en de rol van de Overheid en het Individuals Beslissers),	INSTITUTE FOR PERCEPTION RVO-TNO SOESTERBERG (NETHERLANDS)	Lichtenstein,S.,Wagenaar,W. A.,Keren,G. B.,Schaaf,T. W. van der	8/1/1984	22	IZF-1984-27,TDCK-79524	79524	U	C - 12	Distribution: DTIC users only.	Not available
ADB412157"	Stochastic Analysis, Applied Probability and Statistics: Network Dynamic Processes Under Stochastic Perturbations	UNIVERSITY OF SOUTH FLORIDA TAMPA	Ladde, Gangaram S.	8/4/2015	107	ARO-59433-MA.34	59433-MA.34,ARO	U	B - 03	Distribution authorized to U.S. Gov't. agencies only; Proprietary Information; 04 AUG 2015. Other requests shall be referred to U.S. Army Research Office, P.O. Box 12211, Research Triangle Park, NC 27709-2211.	Final rept. 24 Feb 2012-6 Jun 2015

ADB112867"	Tropical Diseases and the Maritime Transportation Thereof (Maladies Tropicales Et Transports Maritimes),	NAVAL INTELLIGENCE SUPPORT CENTER WASHINGTON DC TRANSLATION DIV	Le Bras,M.,Dupont,A.	6/5/1987	8	NISC-TRANS-8336	Not available	U	B - 03	Distribution limited to U.S. Gov't. agencies only; Copyright; Proprietary Info.; 16 Jun 87. Other requests must be referred to NISC, Trans. Div. NISC-62, 4301 Suitland Rd., Washington, DC 20390.	Not available
ADB349960"	Impact of HIV/AIDS in the U.S. Armed Forces	ARMY WAR COLL CARLISLE BARRACKS PA	Copeland, Aldena D.	3/1/2009	42	Not available	USAWC	U	B - 03	Distribution authorized to U.S. Gov't. agencies only; Administrative/Operational Use; MAY 2006. Other requests shall be referred to US Army War College, Carlisle Barracks, PA 17013-5050.	Strategy Research Project
AD0213996"	PHARYNGOCONJUNCTIVAL FEVER IN TAIWAN. A REPORT OF FOUR CASES CAUSED BY ADENOVIRUS TYPE 3,	NAVAL MEDICAL RESEARCH UNIT NO 2 MANILA (PHILIPPINES)	Lee, C. Y.,Johnston, P. B.	1/20/1959	12	Not available	Not available	U	C - 02	Distribution authorized to U.S. Gov't. agencies only; Other requests shall be referred to NAVAL MEDICAL RESEARCH UNIT NO 2 MANILA (PHILIPPINES) Availability: Document partially illegible.	Not available
ADB163907"	Experience in Optimizing the Diagnostics of Dysentery Agents (Erfahrungen bei der Optimierung der Diagnostic von Ruhrerregern),	ARMED FORCES MEDICAL INTELLIGENCE CENTER FORT DETRICK FREDERICK MD	Fink, E. J.,Henkel, B.,Herzog, H.,Wogawa, B.	4/29/1992	11	AFMIC-HT-068-92	AFMIC	U	B - 03	Distribution authorized to U.S. Gov't. agencies only; Copyright, Proprietary Info.; 29 Apr 92. Other requests shall be referred to AFMIC-ISD, Fort Detrick, Frederick, MD 21702-5004.	Not available
AD0415368"	AN EPIDEMIOLOGICAL GAME: SIMULATION IN PUBLIC HEALTH,	SYSTEM DEVELOPMENT CORP SANTA MONICA CALIF	Bogdanoff,Earl	9/12/1963	11	Not available	Not available	U	C - 02	Distribution authorized to U.S. Gov't. agencies and their contractors; Other requests shall be referred to SYSTEM DEVELOPMENT CORP SANTA MONICA CALIF	Not available

AD0808808"	EPIDEMIOLOGY OF WHEAT STRIPE RUST	OREGON STATE UNIV CORVALLIS	Powelson, R. L.	12/31/1966	19	Not available	DA	U	C - 02	Distribution authorized to U.S. Gov't. agencies and their contractors; Administrative/Operational Use; 31 DEC 1966. Other requests shall be referred to Army Biological Laboratories, Fort Detrick, Frederick, MD 21701. Document partially illegible.	Annual progress rept. 1 Jan-31 Dec 1966
ADB205767"	75 Years of Sanitary-Epidemiological Service in Poland,	ARMED FORCES MEDICAL INTELLIGENCE CENTER FORT DETRICK FREDERICK MD	Kostrzewski, Jan	12/4/1995	13	AFMIC-HT-042-95	AFMIC	U	E - 04	Distribution authorized to DoD only; Copyright; Proprietary Info.; 4 Dec 95. Other requests shall be referred to AFMIC-MI-1A, Ft. Detrick, Frederick, MD 21702-5004.	Not available
ADB366087"	Autonomic Software Protection System (ASPS)	AVIRTEK INC TUCSON AZ	Chadaga, Tejaswini	6/1/2010	41	AVIRTEK-SHP0106Z,AFRL-RY-WP-TR-2010-1128	TR-2010-1128,AFRL-RY-WP	U	B - 03	Distribution authorized to U.S. Gov't. agencies only; Proprietary Information; JUN 2010. Other requests shall be referred to Air Force Research Laboratory/Ryta, Wright-Patterson AFB, OH 45433-7320.	Final rept. 11 Jun 2009-5 May 2010
ADB284930"	The Plague Madagascar's Contribution to Current Knowledge	ARMY MEDICAL RESEARCH INST OF INFECTIOUS DISEASES FORT DETRICK MD	Girard, G.	11/1/2002	9	USAMRIID-MUL-1197	USAMRIID	U	B - 03	Distribution authorized to U.S. Gov't. agencies only; Administrative or Operational Use; Nov 2002. Other requests shall be referred to USAMRIID, 1425 Porter Street, Fort Detrick, MD 21702	Not available

ADB358552"	The U.S. Military Human Immunodeficiency Virus (HIV) Research Program	HENRY M JACKSON FOUNDATION FOR THE ADVANCEMENT OF MILITARY MEDICINE ROCKVILLE MD	Robb, Merlin L.	9/1/2009	129	Not available	USAMRMC	U	B - 03	Distribution authorized to U.S. Gov't. agencies only; Proprietary Information; SEP 2009. Other requests shall be referred to US Army Medical Research and Materiel Command, 504 Scott Street, Ft. Detrick, MD 21702-5012.	Annual rept. 18 Sep 2007-14 Aug 2009
ADB029047"	Run for your Life. A Note on the Asymptotic Speed of Propagation of an Epidemic	MATHEMATISCH CENTRUM AMSTERDAM (NETHERLANDS) AFDELING TOEGEPASTE WISKUNDE	Diekmann, O.	5/1/1978	25	TW-176/78	X5	U	E - 04	Distribution authorized to DoD only; Foreign Government Information; MAY 1978. Other requests shall be referred to Netherlands Embassy, 4200 Linnean Ave., NW, Washington, DC 20008.	Not available
ADB025976"	Genesis of Arthropod-Borne Viral Epidemics	CORNELL UNIV MEDICAL COLL NEW YORK DEPT OF MICROBIOLOGY	Wiebe, Michael E.	2/1/1978	19	Not available	USAMRDC	U	B - 03	Distribution authorized to U.S. Gov't. agencies only; Proprietary Information; FEB 1978. Other requests shall be referred to Commander, Army Medical Research and Development Command, Attn: SGRD-AJ. Washington, DC 20314.	Annual progress rept. no. 1, 1 Jul 1977-15 Feb 1978
AD1052704"	A Novel Antifibrotic for Chronic Kidney Disease	Angion Biomedica Corp Uniondale United States	Narayan, Prakash	12/1/2017	47	Not available	Not available	U	B - 03	U.S. Government agencies only;Proprietary Information;;01 Dec 2017.Other request shall be referred to U.S. Army Medical Research and Materiel Command ,Fort Detrick,MD,21702-5012, U.S. Army Medical Research and Materiel Command .	Technical Report,05 Sep 2014,04 Sep 2017

ADB336934"	Simulation-Based Planning Tool for Infectious Disease Outbreak, i.e., Pandemic Influenza	SIMQUEST LLC SILVER SPRING MD	Meglan, Dwight	12/1/2007	87	Not available	USAMRMC	U	B - 03	Distribution authorized to U.S. Gov't. agencies only; Specific Authority; Proprietary Information; DEC 2007. Other requests shall be referred to U.S. Army Medical Research and Materiel Command, 504 Scott St., Ft. Detrick, MD 21702-5012.	Final rept. 1 Jun-30 Nov 2007
ADB191706"	Clinical Epidemiology of Plague in Madagascar.	ARMY MEDICAL RESEARCH INST OF INFECTIOUS DISEASES FORT DETRICK MD	Blanchy, S.,Ranaivoson, G.,Rakotojanabela, A.	12/1/1992	27	USAMRIID-MUL-1016	USAMRIID	U	B - 03	Distribution authorized to U.S. Gov't. agencies only; Proprietary Information; DEC 1992. Other requests shall be referred to USAMRIID, Library, Fort Detrick, Frederick, MD 21782-5011. Document partially illegible.	Not available
AD1056531"	Finding Near-Optimal Groups of Epidemic Spreaders in a Complex Network	MILITARY ACADEMY WEST POINT NY WEST POINT United States	Moores,Geoffrey,Shakarian,Paulo,Macdonald,Brian,Howard,Nicholas,Gomez-Gardenes,Jesus	4/2/2014	12	62062-NS.11	62062-NS.11	U	B - 03	U.S. Government agencies only;Proprietary Information;;02 Apr 2014.Other request shall be referred to U.S. Army Research Office ,Research Triangle Park,NC,27709-2211,U.S. Army Research Office .	Journal Article - Open Access
ADB407644"	Defense Forces HIV SABERS (Seroprevalence and Behavioral Epidemiology Risk Survey), Rwanda 2012	NAVAL HEALTH RESEARCH CENTER SAN DIEGO CA	Harbertson, Judith,Grillo, Michael,Zimulinda, Eugene,Murego, Charles,Brodine, Stephanie,May, Suzanne,Sebagabo, Marcellin,Araneta, Maria R.,Cronan, Terry,Shaffer, Richard	11/1/2012	120	NHRC-13-02	NMRC/MD	U	C - 02	Distribution authorized to U.S. Gov't. agencies and their contractors; Administrative/Operational Use; JAN 2013. Other requests shall be referred to Commanding Officer, Naval Health Research Center, 140 Sylvester Rd., San Diego, CA 92106.	Technical rept. Oct 2008-Dec 2011

AD1033286"	Investigating the Mechanisms of Leukemia Initiation in the Context of Obesity	Cincinnati Childrens Hospital Medical Center Cincinnati United States	Reynaud,Damien	9/1/2016	42	Not available	Not available	U	B - 03	U.S. Government agencies only;Proprietary Information;;01 Sep 2016.Other request shall be referred to U.S. Army Medical Research and Materiel Command , Fort Detrick,MD,21702, U.S. Army Medical Research and Materiel Command .This document contains export-controlled technical data.	Technical Report,01 Sep 2015,31 Aug 2016
AD0853280"	Meningitis and Meningoencephalitis Caused by Enteroviruses of Echo Group and Coxsackie Group,	ARMY FOREIGN SCIENCE AND TECHNOLOGY CENTER WASHINGTON D C	Mocic,Mirjana	4/10/1969	16	FSTC-HT-23-923-68	Not available	U	B - 03	Distribution: USGO: others to Commander, Army Foreign Science and Technology Center, Washington, D. C. 20315.	Not available
ADB380519"	MEDMAPP: Monitoring Epidemics through Data Management, Alignment, Pattern Analysis and Prediction	SCIENTIFIC SYSTEMS COMPANY INC WOBURN MA	Gandhe, Avinash,Yu, Ssu-Hsin,Amin, Jayesh,Allwes, Deborah,Simpson, Jennifer,Gutierrez, Carlos,Smith, Robert E.	5/31/2012	65	SSCI-1556-FR	ONR	U	B - 03	Distribution authorized to U.S. Gov't. agencies only; Proprietary Information; 01 FEB 2012. Other requests shall be referred to Office of Naval Research, 875 N. Randolph St., Arlington, VA 22203-1995.	Final rept. 18 Nov 2011-31 May 2012
ADB166428"	Instructions for Using Live Dry Anthracic Vaccine STI.	ARMY MEDICAL RESEARCH INST OF INFECTIOUS DISEASES FORT DETRICK MD	Not available	1/1/1991	5	USAMRIID-MUL-903	Not available	U	B - 03	Distribution authorized to U.S. Gov't. agencies only; Proprietary Info.; 17 Aug 92. Other requests shall be referred to USAMRIID, Bldg. 1425, Ft. Detrick, Frederick, MD 21702-5011.	Not available
AD0923612"	Studies on the Prevention, Control and Treatment of Epidemic Influenza.	MICHIGAN UNIV ANN ARBOR	Davenport,Fred M.	8/1/1974	22	Not available	Not available	U	B - 03	Distribution limited to U.S. Gov't. agencies only; Proprietary Info.; Jun 74. Other requests for this document must be referred to Commander, Army Medical Research and Development Command, Attn: SGRD-IDS. Washington, D. C. 20314.	Annual rept. 1 Jul 73-30 Jun 74,

ADB340434"	Distributed Bioinformatics Analysis of Avian (Bird) Flu Using Global Computational Data Grid	CALIFORNIA UNIV SAN DIEGO LA JOLLA	Arzberger, Peter W.,Li, Wilfred W.,Alam, Maqsudul,Jeong, Karpjoo,Lin, Jung-Hsin,Nan, Kai,Tatebe, Osamu,Wahab, Habibah,Wei, Xiaohui	2/1/2008	138	Not available	USAMRMC	U	B - 03	Distribution authorized to U.S. Gov't. agencies only; Proprietary Information; FEB 2008. Other requests shall be referred to US Army Medical Research and Materiel Command, 504 Scott Street, Ft. Detrick, MD 21702-5012.	Annual rept. 19 Jan 2007-18 Jan 2008
ADB343704"	C-130 Active Noise and Vibration System	AIR MOBILITY WARFARE CENTER FORT DIX NJ AIR MOBILITY BATTLELAB	Duarte, Joseph J.	2/1/2004	31	AMB-00-010	AMWC/WCB	U	E - 04	Distribution authorized to DoD only; Critical Technology; FEB 2004. Other requests shall be referred to U.S. Air Force Air Mobility Battlelab, 5656 Texas Avenue, Fort Dix, NJ 08640-5403. This document contains export-controlled technical data.	After initiative rept. Sep 2001-Feb 2004
ADB324501"	Diabetes Prevention and Treatment Programs for Western PA	PITTSBURGH UNIV MEDICAL CENTER PA	Siminerio, Linda M.	1/1/2007	78	Not available	USAMRMC	U	B - 03	Distribution authorized to U.S. Gov't. agencies only; Proprietary Information; JAN 2007. Other requests shall be referred to U.S. Army Medical Research and Materiel Command, 504 Scott St., Fort Detrik, MD 21702-5012.	Annual rept. 31 Dec 2005-30 Dec 2006
ADB382846"	Identification of Biomarkers in Human & Non-Human Primate Pre-Symptomatic Clinical Samples - Lassa Fever in Sierra Leone	GLOBAL VIRAL FORECASTING INITIATIVE (GVFI) SAN FRANCISCO CA	Fair, Joseph	6/1/2012	23	Not available	USAMRMC	U	B - 03	Distribution authorized to U.S. Gov't. agencies only; Proprietary Information; JUN 2012. Other requests shall be referred to U.S. Army Medical Research and Materiel Command, 504 Scott Street, Fort Detrick, MD 21702-5012.	Final rept. 19 Sep 2011-31 May 2012



ADB120662"	Hemorrhagic Fevers,	ARMY MEDICAL RESEARCH INST OF INFECTIOUS DISEASES FORT DETRICK MD	Radaev, M.,Vasilenko, Sv.,Gubev, E.,Kuzmov, K.	1/1/1980	258	Not available	Not available	U	B - 03	Distribution limited to U.S. Gov't. agencies only; Proprietary Info.; 27 Apr 88. Other requests must be referred to Army Medical Research Inst. of Infectious Diseases, Fort Detrick, MD 21701.	Not available
ADB021332"	The Etiology of Acute Infectious Nonbacterial Enteritis	MASSACHUSETTS UNIV MEDICAL SCHOOL WORCESTER	Blacklow, Neil R.	7/1/1977	21	Not available	USAMRDC	U	B - 03	Distribution authorized to U.S. Gov't. agencies only; Proprietary Information; JUL 1977. Other requests shall be referred to Commander, Army Medical Research and Development Command, Attn: SGRD-RP. Washington, DC 20314.	Annual progress rept. 1976-1977
AD0450371"	EPIDEMIOLOGY OF WHEAT STRIPE RUST.	OREGON STATE UNIV CORVALLIS	Powelson, R. L.	8/10/1964	2	Not available	Not available	U	C - 02	Distribution: NO FORN. Document partially illegible.	Semi-annual progress rept., 1 Feb-31 July 64,
ADB137796"	Morphological Studies of Experimental Epidemic Encephalitis (Summer Encephalitis) in Monkeys. Anatomic-Histological Changes in Nasally Infected Monkeys Especially with Respect to Internal Organs,	ARMY MEDICAL RESEARCH INST OF INFECTIOUS DISEASES FORT DETRICK MD	Miyake, Masashi,Takaki, Fumikazu	1/1/1989	16	USAMRIID-MUL-0768	Not available	U	B - 03	Distribution authorized to U. S. Gov't. agencies only; Proprietary Information; 14 Nov 89. Other requests shall be referred to USAMRIID, Bldg. 1425, Ft. Detrick, Frederick, MD 21701-5011. Availability: Document partially illegible.	Not available
AD0477761"	STUDIES ON THE ETIOLOGY AND EPIDEMIOLOGY OF ACUTE RESPIRATORY INFECTIONS.	NORTH CAROLINA UNIV CHAPEL HILL	Denny ,Floyd W.,Clyde,Wallace A. ,Jr.,Glezen,W. Paul	3/1/1966	24	Not available	Not available	U	E - 04	Distribution: DoD only: others to Commanding General, Army Medical Research and Development Command, Washington, D. C. 20315.	Annual progress rept. 1 Mar 65-28 Feb 66,

ADB328220"	Diabetes Prevention and Treatment Programs for Western PA	PITTSBURGH UNIV MEDICAL CENTER PA	Siminerio, Linda M.	1/1/2006	544	Not available	USAMRMC	U	B - 03	Distribution authorized to U.S. Gov't. agencies only; Proprietary Information; JAN 2006. Other requests shall be referred to U.S. Army Medical Research and Materiel Command, 504 Scott St., Ft. Detrick, MD 21702-5012.	Annual rept. 15 Aug 2004-30 Dec 2005
ADB355284"	Broad Spectrum Antiviral Host Oriented Therapeutics	FUNCTIONAL GENETICS INC GAITHERSBURG MD	Diaz, Leyla	9/1/2009	17	Not available	USAMRMC	U	B - 03	Distribution authorized to U.S. Gov't. agencies only; Proprietary Information; SEP 2009. Other requests shall be referred to US Army Medical Research and Materiel Command, 504 Scott Street, Ft. Detrick, MD 21702-5012.	Final rept. 1 Sep 2006-31 Aug 2009
ADB162540"	An Anthrax Epidemic in Switzerland	ARMY MEDICAL RESEARCH INST OF INFECTIOUS DISEASES FORT DETRICK MD	Pfisterer, R. M.	3/18/1992	27	USAMRIID-MUL-896	USAMRIID	U	B - 03	Distribution authorized to U.S. Gov't. agencies only; Proprietary Information; 18 MAR 1992. Other requests shall be referred to Army Medical Research Institute for Infectious Diseases, USAMRIID, Attn: Library, Fort Detrick, MD 21702-5011.	Not available
ADB303403"	Development of a Broadly Protective Vaccine for Alphaviruses through DNA Shuffling	MAXYGEN INC REDWOOD CITY CA	Whalen, Robert G.,Paidhungat, Madan,Dupuy, Lesley,Fong, Steven,Locher, Christopher	7/1/2004	12	Not available	USAMRMC	U	B - 03	Distribution authorized to U.S. Gov't. agencies only; Proprietary Information; Jul 2004. Other requests shall be referred to US Army Medical Research and Materiel Command, 504 Scott Street, Ft. Detrick, MD 21702-5012	Annual rept. 1 Jul 2003-30 Jun 2004

AD0913040"	Etiology of Acute Respiratory Diseases.	CALIFORNIA STATE DEPT OF PUBLIC HEALTH BERKELEY VIRAL AND RICKETTSIAL DISEASE LAB	Lennette,Edwin H.,Schieble,Jack H.,Magoffin,Robert L.	8/15/1973	17	Not available	Not available	U	B - 03	Distribution limited to U.S. Gov't. agencies only; Proprietary Info.; Jun 73. Other requests for this document must be referred to Commander, Army Medical Research and Development Command, Attn: SGRD-IDS. Washington, D. C. 20314.	Annual rept. 1 Jun 72-31 May 73,
ADB184730"	Science Challenging Aids. Abstracts: Volume 2. International Conference on AIDS (7th) Held in Florence, Italy on 16-21 June 1991	ISTITUTO SUPERIORE DI SANITA ROME (ITALY)	Not available	6/21/1991	537	Not available	X5	U	C - 02	Distribution authorized to U.S. Gov't. agencies and their contractors; Foreign Government Information; 21 JUN 1991. Other requests shall be referred to Italian Embassy, 3000 Whitehaven Street, NW, Washington, DC 20008.	Conference proceedings
ADB204538"	The Chemical Prophylaxis of Influenza in Military Collectives,	ARMED FORCES MEDICAL INTELLIGENCE CENTER FORT DETRICK FREDERICK MD	Yefimov, Ye. I.,Razgulin, S. A.	9/28/1995	6	AFMIC-HT-029-95,NGIC-HT-0222-95	HT-0222-95,AFMIC	U	E - 04	Distribution authorized to DoD only; Copyright; Proprietary Info.; 28 Sep 95. Other requests shall be referred to AFMIC-MI-1A, Ft. Detrick, Frederick, MD 21702-5004.	Not available
AD0858445"	L Forms of Group A Streptococci.	NEW MEXICO UNIV ALBUQUERQUE SCHOOL OF MEDICINE	Mortimer,Edward A. , Jr	8/15/1969	23	Not available	Not available	U	E - 04	Distribution: DoD only: others to Commanding General, Army Medical Research and Development Command, Attn: MEDDH-SI. Washington, D. C. 20315.	Annual progress rept. 1 Jul 68-30 Jun 69,
ADB090237"	Medical Safety of Long Foot and Vehicle Marches as Well as Railroad Transports (Medizinische Sicherstellung von Langeren Fusse- und Kfz-Marschen Sowie Eisenbahntransporten),	ARMED FORCES MEDICAL INTELLIGENCE CENTER FORT DETRICK FREDERICK MD	Martens,W. R.,Pfeil,M. D. B.	3/5/1985	14	AFMIC-HT-016-85-B	Not available	U	B - 03	Distribution limited to U.S. Gov't. agencies only; Copyright, Proprietary Info.; 5 Mar 85. Other requests must be referred to AFMIC-IS, Fort Detrick, Frederick, MD 21701.	Not available

ADB319343"	Varieties of Pasteurella Pestis: New Hypothesis	DIRECTOR OF MEDICAL LAB OF COSTERMANSVILLE (CONGO)	Devignat, R.	1/1/1951	25	Not available	X5	U	B - 03	Distribution authorized to U.S. Gov't. agencies only; Proprietary Information; JAN 1951. Other requests shall be referred to U.S. Army Medical Research Inst. of Infectious Diseases, Library, 1425 Porter St., Ft. Detrick, MD 21702-5011.	Journal article
ADB016779"	In the United States: 'Time is Life' (Aux Etats-Unis: 'Le Temps c'est la Vie')	ARMY MEDICAL INTELLIGENCE AND INFORMATION AGENCY FORT DETRICK MD	Michel, Remy	2/17/1977	5	USAMIIA-K-7040	USAMIIA	U	B - 03	Distribution authorized to U.S. Gov't. agencies only; Proprietary Information; 22 FEB 1977. Other requests shall be referred to Army Medical Intelligence and Information Agency, Attn: SGMI-IS, Washington, DC 20314.	Not available
ADB020996"	Studies on Influenza Subunit Vaccines	MICHIGAN UNIV ANN ARBOR	Eckert, Edward A.	9/1/1977	27	Not available	USAMRDC	U	B - 03	Distribution authorized to U.S. Gov't. agencies only; Proprietary Information; AUG 1977. Other requests shall be referred to Army Medical Research and Development Command, Attn: SGRD-RP, Washington, DC 20314.	Annual rept. 1 Aug 1976-30 Jul 1977
AD0820572"	STUDIES OF ARTHROPOD- BORNE VIRUSES.	CORNELL UNIV NEW YORK MEDICAL COLL	Scherer, William F.	6/30/1967	12	Not available	Not available	U	E - 04	Distribution: DoD only: others to Commanding General, Army Medical Research and Development Command, Washington, D. C. 20315.	Annual progress rept. 1 Mar 66-30 Jun 67,

ADB178547"	Joint Service Operational Requirement (JSOR) for Meningitis B Vaccine	ARMY TRAINING AND DOCTRINE COMMAND FORT MONROE VA	Not available	6/14/1989	19	CARDS-JSOR-1482	TRADOC	U	D - 16	Distribution authorized to DoD and DoD contractors only; Critical Technology; 30 JUN 1989. Other requests shall be referred to U.S. Army Training and Doctrine Command, Attn: ATCD-SE, Fort Montroe, VA 23651-5000. This document contains export-controlled technical data.	In-progress rept.
AD1016841"	Rapid Broad-Spectrum Anti-Microbial Immunity by Phage-Antibody Delivery and Selective VH Germline Stimulation	Dana-Farber Cancer Institute, Inc Boston United States	Marasco, Wayne A., Zhu, Quan K.	7/19/2016	280	ARO-58220-LS-DRP.8	ARO-58220-LS-DRP.8	U	B - 03	U.S. Government agencies only; Proprietary Information; 19 Jul 2016. Other request shall be referred to U.S. Army Research Office, Research Triangle Park, NC, 27709, U.S. Army Research Office.	Technical Report, 15 Jul 2010, 31 Jul 2015
ADB233535"	Oral Vaccination Against Anthrax Using a Transgenic Plant Expressing Protective Antigen.	CROPTech DEVELOPMENT CORP BLACKSBURG VA	Oishi, Karen K.	10/1/1997	39	Not available	USAMRMC	U	B - 03	Distribution authorized to U.S. Gov't. agencies only; Specific Authority; Feb 98. Other requests shall be referred to U.S. Army Medical Research and Materiel Command, 504 Scott St., Fort Detrick, MD 21702-5012.	Annual rept. 23 Sep 96-22 Sep 97,
AD0913934"	Meningococcus: Bacteriological, Serological and Epidemiological Studies.	STATE UNIV OF NEW YORK UPSTATE MEDICAL CENTER SYRACUSE	Feldman, Harry A.	8/1/1973	20	Not available	Not available	U	B - 03	Distribution limited to U.S. Gov't. agencies only; Proprietary Info.; Jun 73. Other requests for this document must be referred to Commander, Army Research and Development Command, Attn: SGRD-IDS. Washington, D. C. 20314.	Annual Progress rept. 1 Jun 72-31 May 73,

ADB371581"	Toxicology Study of H1N1 Vaccine Candidate HAC1 in Rabbits	MIDWEST RESEARCH INST KANSAS CITY MO	Croutch, Claire	8/5/2010	1920	ARO-57247-LS-DRP.1	57247-LS-DRP.1,ARO	U	B - 03	Distribution authorized to U.S. Gov't. agencies only; Proprietary Information; 05 AUG 2010. Other requests shall be referred to U.S. Army Research Office, P.O. Box 12211, Research Triangle Park, NC 27709-2211.	Technical rept.
ADB381371"	Critical Medical Materiel Caches: Military Stockpiles	ARMY SOUTH FORT SAM HOUSTON TX	Woodard, Scott C.	5/2/2012	33	Not available	ARSOUTH	U	E - 04	Distribution authorized to DoD only; Administrative/Operational Use; 02 MAY 2012. Other requests shall be referred to U.S. Army South, 4130 Stanley Rd., Ste. 700, Fort Sam Houston, TX 78234.	Briefing charts
AD0219827"	ABSENCE OF INTESTINAL VIRAL FLORA IN INFANTS DURING EPIDEMIC OF ESCHERICHIA COLIGASTROENTERITIS (24703)	WALTER REED ARMY INST OF RESEARCH WASHINGTON D C	YOUNG,VIOLA MAE,WARREN,JOEL,LIND BERG,ROBERT B.	12/15/1958	1	Not available	Not available	U	C - 02	Distribution authorized to U.S. Gov't. agencies and their contractors; Other requests shall be referred to WALTER REED ARMY INST OF RESEARCH WASHINGTON D C	Not available
ADB043846"	Ebola Virus Epidemic in Zaire in 1976 (L'epidemie a virus ebola),	ARMY MEDICAL INTELLIGENCE AND INFORMATION AGENCY FORT DETRICK MD	Raffier,G.	12/12/1979	14	USAMIIA-K-9744	Not available	U	B - 03	Distribution limited to U.S. Gov't. agencies only; Copyright, Proprietary Info.; 14 Dec 79. Other requests for this document must be referred to Director, Army Medical Intelligence and Information Agency, Attn: SGMI-IS. Fort Detrick, Frederick, MD 21701. Availability: Document partially illegible.	Not available

AD1073741"	Stochasticity and the Limits to Confidence When Estimating Ro of Ebola and Other Emerging Infectious Diseases	GEORGIA TECH RESEARCH CORP ATLANTA ATLANTA United States	Taylor,Bradford P.,Dushoff,Jonathan,Weitz,Joshua S.	8/11/2016	12	63814-NS.2	63814-NS.2	U	B - 03	U.S. Government agencies only;Proprietary Information;;11 Aug 2016.Other request shall be referred to U.S. Army Research Office,Research Triangle Park,NC,27709-2211,U.S. Army Research Office.	Journal Article - Open Access
ADB206510"	Epidemiology of Lyme Borreliosis,	ARMED FORCES MEDICAL INTELLIGENCE CENTER FORT DETRICK FREDERICK MD	Dimitrovic, Radmila,Djordjevic, Dj,Drndarevic, D.,Antonijevic, B.,Zivkovic-Lesic, Lj.	1/18/1996	16	AFMIC-HT-034-95	AFMIC	U	E - 04	Distribution authorized to DoD only; Proprietary Info.; 18 Jan 96. Other requests shall be referred to AFMIC-MI-1A, Fort Detrick, Frederick, MD 21702-5004.	Not available
ADB022785"	Thresholds and Travelling Waves for the Geographical Spread of Infection	MATHEMATISCH CENTRUM AMSTERDAM (NETHERLANDS) AFDELING TOEGEPASTE WISKUNDE	Diekmann, O.	8/1/1977	34	TW-166/77	X5	U	E - 04	Distribution authorized to DoD only; Foreign Government Information; 18 MAY 2001. Other requests shall be referred to Netherlands Embassy, 4200 Linnean Avenue, NW, Washington, DC 20008-3896.	Not available
AD0808855"	PREVALENCE AND DISTRIBUTION OF ARBOVIRUSES	HADASSAH MEDICAL SCHOOL JERUSALEM (ISRAEL)	Goldblum, Natan	12/1/1966	13	ARDG(E)-E-833	E-833,ARDG(E)	U	B - 03	Distribution authorized to U.S. Gov't. agencies only; Administrative/Operational Use; DEC 1966. Other requests shall be referred to Army Research and Development Group (Europe), APO New York 09757. Document partially illegible.	Final technical rept. Apr 1965-Mar 1966
ADB962677"	The 1959 Yellow Fever Epidemic in Ethiopia (Sudan-Ethiopian Border) (Sur L'Epidemie de Fievre Jaune de L'Annee 1959 en Ethiopie),	ARMY MEDICAL RESEARCH INST OF INFECTIOUS DISEASES FORT DETRICK MD	Berdonneau,R.,Serie,Ch., Panthier,R.,Hannoun,Cl., Papaioannou,S. Cu.	1/1/1961	13	USAMRIID-MUL-721	Not available	U	B - 03	Distribution limited to U.S. Gov't. agencies only; Test and Evaluation; 31 Aug 87. Other requests must be referred to USAMRIID Library, Bldg. 1425, Fort Detrick, Frederick, MD 21701.	Not available

AD1086618"	New Tools for Investigating Enteric Neural Circuit Dysfunction in Obesity and Type 2 Diabetes	Childrens Hospital Boston United States	Rao,Meenakshi	10/1/2019	16	Not available	Not available	U	B - 03	U.S. Government agencies only;Proprietary Information;;01 Oct 2019.Other request shall be referred to U.S. Army Medical Research and Materiel Command ,Fort Detrick,MD,21702-5012, U.S. Army Medical Research and Materiel Command .	Technical Report,30 Sep 2018,29 Sep 2019
AD0862521"	Quarterly Report Number 1-FY 1970	NATIONAL COMMUNICABLE DISEASE CENTER ATLANTA GA	Brachman, Philip S.	10/1/1969	11	Not available	SMUFD	U	C - 02	Distribution authorized to U.S. Gov't. agencies and their contractors; Administrative/Operational Use; OCT 1969. Other requests shall be referred to Commanding Officer, Fort Detrick, Attn: Technical Releases Branch/TID, Frederick, MD 21701., Availability: Document partially illegible., This document contains export-controlled technical data.	Rept. for 1 Jul-30 Sep 1969
ADB381155"	Homeland Defense and Public Health & Medical Defense Support of Civil Authorities (DSCA): An Overview	ASSISTANT SECRETARY OF DEFENSE (HEALTH AFFAIRS) WASHINGTON DC	Chen, D. W.	4/30/2012	75	Not available	OASD/HA	U	E - 04	Distribution authorized to DoD only; Administrative/Operational Use; 30 APR 2012. Other requests shall be referred to Office of the Assistant Secretary of Defense for Health Affairs, 1200 Defense Pentagon, Room 3D886, Washington, DC 20301-1200.	Briefing charts



ADB361789"	BRCA1 Function in Epithelial-Stromal Interactions During Breast Cancer Development	TEXAS UNIV HEALTH SCIENCE CENTER AT SAN ANTONIO DEPT OF MOLECULAR MEDICINE	Li, Rong	3/1/2009	36	Not available	USAMRMC	U	B - 03	Distribution authorized to U.S. Gov't. agencies only; Proprietary Information; MAR 2009. Other requests shall be referred to US Army Medical Research and Materiel Command, 504 Scott Street, Ft. Detrick, MD 21702-5012.	Final rept. 15 Feb 2006-14 Feb 2009
AD0819201"	STUDIES ON THE PREVENTION, CONTROL, AND TREATMENT OF EPIDEMIC INFLUENZA.	MICHIGAN UNIV ANN ARBOR SCHOOL OF PUBLIC HEALTH	Francis,Thomas , Jr	6/30/1967	33	Not available	Not available	U	E - 04	Distribution: DoD only: others to Commanding General, Army Medical Research and Development Command, Washington, D. C. 20315.	Annual progress rept. 1 Nov 66-30 Jun 67,
ADB371583"	Challenge Dose Range-Finding Study of Influenza Virus A/CA/04/2009 (H1N1) in Ferrets	MIDWEST RESEARCH INST KANSAS CITY MO	Croutch, Claire	3/15/2011	358	ARO-57247-LS-DRP.2	57247-LS-DRP.2,ARO	U	B - 03	Distribution authorized to U.S. Gov't. agencies only; Proprietary Information; 15 MAR 2011. Other requests shall be referred to U.S. Army Research Office, P.O. Box 12211, Research Triangle Park, NC 27709-2211.	Technical rept.
ADB360953"	U.S. National Obesity: A Challenge for Army Recruiting	ARMY WAR COLL CARLISLE BARRACKS PA	Brewington, Patrick P.	3/18/2010	34	Not available	USAWC	U	B - 03	Distribution authorized to U.S. Gov't. agencies only; Administrative/Operational Use; MAY 2006. Other requests shall be referred to US Army War College, Carlisle Barracks, PA 17013-5050.	Strategy research project
ADP206097"	The Dynamic Behavior of a Data Dissemination Protocol for Network Programming at Scale	CALIFORNIA UNIV BERKELEY COMPUTER SCIENCE DIV	Hui, Jonathan W.,Culler, David	11/1/2004	14	Not available	AFRL-IF-WP	U	C - 02	Distribution authorized to U.S. Gov't. agencies and their contractors; Administrative/Operational Use; MAY 2006. Other requests shall be referred to Air Force Research Lab., Attn: AFRL/IFSC, Wright-Patterson AFB, OH 45433-7334.	Conference paper

ADB083153"	An Epidemic of Hemorrhagic Fever (Epidemija Krimske Hemoragicne Groznice),	ARMY MEDICAL RESEARCH INST OF INFECTIOUS DISEASES FORT DETRICK MD	Stamatovic,L.,Panev,D.,G erovski,V.,Miladinovic,T., Grdanoski,S.	1/1/1983	15	USAMRIID-643	Not available	U	B - 03	Distribution limited to U.S. Gov't. agencies only; Proprietary Info.; 14 Jun 84. Other requests must be referred to U.S. Army Medical Research Institute of Infectious Disease, Ft. Detrick, MD 21701.	Not available
ADB285918"	Classification Guide for Chemical/Biological Defense Information	DEPARTMENT OF ENERGY WASHINGTON DC	Not available	7/1/2002	58	CG-CB-2	DOE	U	D - 16	Distribution authorized to DoD and DoD contractors only; Administrative or Operational Use; Jul 2002. Other requests shall be referred to Dept. of Energy, Washington, DC 20585	Not available
ADB346233"	Establishing a National Health Security Strategy	ARMY WAR COLL CARLISLE BARRACKS PA	Stewart, Della W.	3/14/2008	48	Not available	HHS	U	B - 03	Distribution authorized to U.S. Gov't. agencies only; Administrative/Operational Use; MAY 2006. Other requests shall be referred to US Army War College, Carlisle Barracks, PA 17013-5050.	Research paper
AD0809092"	STUDIES ON THE PREVENTION, CONTROL, AND TREATMENT OF EPIDEMIC INFLUENZA.	MICHIGAN UNIV ANN ARBOR SCHOOL OF PUBLIC HEALTH	Francis,Thomas , Jr	10/31/1966	30	Not available	Not available	U	E - 04	Distribution: DoD only: others to Commanding General, Army Medical Research and Development Command, Washington, D. C. 20315.	Annual progress rept. 1 Nov 65-31 Oct 66,
ADB337067"	Infectious Diseases as a Weapon; Vigilance is Needed	ARMY MEDICAL RESEARCH INST OF INFECTIOUS DISEASES FORT DETRICK MD	Kingma, J. H.,Van Wijngaarden, J. K.	12/8/2001	3	USAMRIID-MUL-1262	MUL-1262,USAMRIID	U	B - 03	Distribution authorized to U.S. Gov't. agencies only; Administrative/Operational Use; DEC 2001. Other requests shall be referred to US Army Medical Research Institute of Infectious Diseases, Library, 1425 Porter Street, Ft. Detrick, MD 21702-5011.	Journal article

ADB338157"	Development of a Vaccine Manufacturing Platform Technology	HAWAII BIOTECHNOLOGY GROUP INC AIEA	Weeks-Levy, Carolyn	7/1/2007	115	Not available	USAMRMC	U	B - 03	Distribution authorized to U.S. Gov't. agencies only; Proprietary Information; JUL 2007. Other requests shall be referred to U.S. Army Medical Research and Materiel Command, 504 Scott St., Ft. Detrick, MD 21702-5012.	Annual rept. 1 Jul 2006-30 Jun 2007
AD1031828"	Lysomal Metabolomics: A Novel Approach to mTOR Activation and Metabolic Diseases	Whitehead Institute for Biomedical Research Cambridge United States	Freinkman, Elizaveta, Abu-Remaileh, Monther, Wyant, Gregory	2/1/2017	26	Not available	Not available	U	B - 03	U.S. Government agencies only; Proprietary Information; 01 Feb 2017. Other request shall be referred to U.S. Army Medical Research and Materiel Command, Fort Detrick, MD, 21702-5012, U.S. Army Medical Research and Materiel Command.	Technical Report, 15 Aug 2015, 30 Nov 2016
ADB380529"	Disease Early Warning Sensory System	IST RESEARCH LLC FREDERICKSBURG VA	Paterson, Ryan, Huffman, Todd, Paterson, Jennifer	5/31/2012	29	Not available	ONR	U	B - 03	Distribution authorized to U.S. Gov't. agencies only; Proprietary Information; 01 FEB 2012. Other requests shall be referred to Office of Naval Research, 875 N. Randolph St., Arlington, VA 22209-1995.	Final rept. 18 Oct 2011-31 May 2012
AD0888752"	Prevention of Influenza and Other Respiratory Diseases.	COLORADO UNIV DENVER MEDICAL CENTER	Meiklejohn, Gordon, Eickhoff, Theodore C.	9/1/1971	23	Not available	Not available	U	B - 03	Distribution limited to U.S. Gov't. agencies only; Test and Evaluation; 1 Nov 71. Other requests for this document must be referred to Commanding General, Army Research and Development Command, Attn: MEDDH-SI. Washington, D. C. 20314.	Annual progress rept. 1 Jun 70-31 May 71,
Highest Classification: Unclassified											

Highest Classification: Unclassified												
Search: (epidemic OR coronavirus OR pandemic)												
Accession Number	Title	Corporate Author	Personal Authors	Report Date	Pagination	Report Numbers	Monitor Series	Report Classification	Distribution Codes	Distribution Statement	Descriptive Note	Abstract
ADA139365	Study of African Trypanosomiasis and Leishmaniasis. Volume 1. Summary.	ARMY MEDICAL RESEARCH UNIT- KENYA APO NEW YORK 09675	Reardon,M. J.,Muriithi,I. E.,Chulay,J. D.,Hendricks,L. D.,Wellde,B. T.	12/1/1983	11	Not available	Not available	U	A - 01	Approved for public release; distribution is unlimited.	Final rept. Oct 82-14 Nov 83,	Investigators continued to monitor the antigenic stability of parasites from western Kenya. Current evidence indicates that there was a significant antigenic shift in the 1980-81 outbreak. Epidemiology and treatment record analysis studies continued. A treatment center was opened in western Kenya situated north of the Lambwe Valley endemic area and to the east of the Ugandan epidemic area. This center will serve as a routine treatment facility and research facility for the evaluation of standard drugs available and USMRDC developed drugs effective in screens against human African trypanosomiasis. An experimental compound WR 163577 is being evaluated in the goat model against T. brucei infection.
ADA424775	Relationship Between Self-Report Physical Activity and Environmental Variables in Parents of Adolescents	SAN DIEGO STATE UNIV CA	Not available	7/14/2004	63	AFIT	AFIT-CI-04-416	U	A - 01	Approved for public release; distribution is unlimited.	Not available	some of the many benefits known to be derived from regular physical activity were outlined, including reduced risks of dying prematurely or dying from cardiovascular diseases (U.S. Department of Health and Human Services USDHHS, 1996). Physical activity reduced the risks of developing diabetes, high blood pressure, and colon cancer. In addition, regular physical activity reduced feelings of depression and anxiety, helped control weight, and contributed to general psychological well-being.
AD0675102	PROBLEMS OF EPIDEMIOLOGICAL GEOGRAPHY. REPORT 8. STRUCTURE OF A ZOONOSIS NOSOAREAL	ARMY BIOLOGICAL LABS FREDERICK MD	Elkin, I. I.,Yashchkul, V. K.	2/1/1968	8	SMUFD-TRANS-2223	ABL/MD	U	A - 01,23	Approved for public release; distribution is unlimited. Document partially illegible.	Not available	When studying the geography of zoonotic diseases of man, it is important to separate out the areas of interaction between the populations of the causative agent and the collectives of people, in order to carry out complex anti-epidemic measures. It is primarily these areas of interaction which are the main structural units of a zoonosis nosoareal. Since human incidence is concentrated mainly within the limits of such areas of interaction, they can be defined as nosofoci. Designated as nosofoci should be those populated concrete geographical territories of a human collective, which on the strength of specific conditions of material life interact with the populations of the zoonosis causative agent.
ADA073532	Head Injury Pathology and its Clinical, Safety and Administrative Significance,	ARMY AEROMEDICAL RESEARCH LAB FORT RUCKER AL	Knapp,Stanley C.,Erhardt,Thomas M.	4/1/1976	27	USAARL-76-22	Not available	U	A - 01	Approved for public release; distribution is unlimited.	Not available	The occurrence of head trauma is so common that its true importance as a major statistic associated with accidental injury and death may be overlooked. A review of head trauma in war, vehicular accidents, sports, and aviation demonstrates that while the head constitutes roughly 9 percent of the body's weight, surface area and volume, it is implicated in 7 out of 10 body injuries. Generally speaking, head trauma causes an unacceptable 1 in 4 deaths and for motorcycling it causes a staggering 1 out of every 2 deaths. Head protective devices have been available since antiquity; but except in isolated circumstances they cannot be shown to have had a mitigating effect on the magnitude of the injury rate. Yet, the technology exists to prevent head-injury deaths and to greatly reduce injury severity in survivable accidents, especially in aviation. While it is accepted that helmets, indeed, provide significant protection, most systems of accident investigation, injury analysis and data recording do not recognize head trauma as endemic or even epidemic. Thus, the problem has not been approached epidemiologically. Instead, the bulk of head injury research is directed toward improved treatment and prevention of disability. These efforts are on the secondary and tertiary levels of prevention.
AD0815560	FROM THE PREVIOUS INTERNATIONAL COLLABORATION IN THE STRUGGLE WITH INFECTIOUS DISEASES (1920--1930)	ARMY BIOLOGICAL LABS FREDERICK MD	Vengrova, I. V.	1/1/1966	13	TRANS-1738	ABL/MD	U	A - 01	Approved for public release; distribution is unlimited.	Not available	Not available

ADA228367	The International Conference on Hemorrhagic Fever with Renal Syndrome (1st) Held in Seoul, Korea on 4-6 May 1989	KOREA UNIV SEOUL INST FOR VIRAL DISEASES	Lee, Ho. W.	5/1/1990	89	Not available	USAMRDC	U	A - 01	Approved for public release; distribution is unlimited.	Final proceedings rept.	Symposium Topics included: Some characteristic findings on the experimentally infected rats with Seoul virus; Epidemiologic studies of Hantavirus infection among urban rats in Japan; Seroprevalence of antibodies to Hantaan virus among US Marines deployed to Korea; Epidemiology and rapid diagnosis of nephropathia epidemic (NE) in Finland; Evidence for hemorrhagic fever with renal syndrome at the Andaman and Nicobar Islands.
ADA487213	The Prioritization of Critical Infrastructure for a Pandemic Outbreak in the United States Working Group	NATIONAL INFRASTRUCTURE ADVISORY COUNCIL WASHINGTON DC	Denlinger, Rebecca F.,Marsh, Martha H.,Rohde, Bruce A.	1/16/2007	130	Not available	DHS	U	A - 01	Approved for public release; distribution is unlimited.	Final rept.	Though its timing, severity, and ultimate strain remain a mystery, a pandemic promises to test the critical infrastructure of both the United States and the world. Public health officials have long maintained the potential for pandemic influenza is not a matter of if, but rather a matter of when. To avoid an economic and social catastrophe, pandemic preparedness demands full public- and private-sector participation. With that in mind, U.S. Department of Homeland Security (DHS) Secretary Michael Chertoff joined Secretary Leavitt in May 2006 to ask the National Infrastructure Advisory Council (NIAC) to provide them and President Bush with recommendations regarding the prioritization and distribution of pandemic countermeasures to the essential workers in our nation's Critical Infrastructure and Key Resource (CI/KR) sectors. Given the scope and scale of a pandemic, the Federal government has repeatedly asserted it cannot handle all pandemic preparedness, response, and recovery efforts on its own. In their letter to the NIAC, the Secretaries highlighted the necessity for the public and private sectors to prepare for this serious threat. The Secretaries also emphasized their understanding that successful pandemic planning requires coordination across all CI/KR sectors.
AD0768106	A Discrete Time Population Control Model with Set-Up Cost,	RAND CORP SANTA MONICA CALIF	Jaquette,David L.	4/1/1973	15	P-5009	Not available	U	A - 01	Approved for public release; distribution is unlimited.	Not available	A discrete time stochastic model is often used to describe a natural animal, pest, or epidemic population. Control action, representing harvesting, exterminating, etc., can be taken periodically to reduce the current population level, and so modify the future growth of the population. Dynamic programming can be used to determine optimal control policies for models where growth and control produce economically measurable benefits and/or costs. When controlling action incurs a setup charge plus a cost component linear in the amount of state reduction produced the optimal policy is found to be characterized by a pair ((s sub n),(S sub n)), where reduction is made in period n to state (s sub n) if the native population is found to be above state (S sub n). Analogy with inventory theory is exploited in proving the result. (Author)
ADB060659	Prevention of Influenza and other Respiratory Diseases	COLORADO UNIV HEALTH SCIENCES CENTER DENVER DENVER United States	Meiklejohn,Gordon,Eic khoff,Theodore C.,Mostow,Steven R.	10/1/1981	32	Not available	Not available	U	A - 01	Approved for public release; distribution is unlimited.	Technical Report,01 Feb 1980,30 Jun 1981	The incidence of influenza A and B at Lowry AFB from 1977 to 1981 is reviewed. Following the large epidemic in 1978 of H1N1 influenza, when no vaccine was available, the H1N1 virus caused low incidence smouldering outbreaks in vaccinated personnel in 1979 and 1981. A small outbreak of influenza B occurred in 1978-79, affecting mainly permanent party. A few cases of H3N2 influenza occurred in 1977-78 and 1980-81. It appeared that vaccine was providing good levels of protection to military personnel in the face of large scale outbreaks in the surrounding civilian community. During the last 3 years, rates of febrile U.R.I. in students have at no time exceeded 8.8/1000/week. The 'protective' H.O. antibody level for H1N1 was above 64 when tested with A/Brazil/78 and was 16 when tested with A/Denver/81, a strain isolated at Lowry in 1981. Serum pairs for 200 recruits who received vaccine containing 14 microg each of A/Bangkok, A/Brazil and B/Singapore were tested to determine the adequacy of response. The response was satisfactory and indicated that only a single rather than a double immunization schedule was necessary. Comparison of methods for recovery of virus from throat washings were reviewed. For H1N1 strains, R.M.K. provided a 72 recovery rate and canine kidney only 36%. Isolation was difficult in chick embryo. Influenza B strains also were most readily isolated in R.M.K. No single serologic test was able to pick up all cases and it appears necessary to continue to use C.F. and H.I. tests, the latter including new strains and ether-split antigens.

ADA518085	Combat Drug Zone 2010: The United States Southwest Border	ARMY WAR COLL CARLISLE BARRACKS PA	Kent, Stephen G.	3/1/2010	27	Not available	USAWC	U	A - 01	Approved for public release; distribution is unlimited.	Research paper	America's indulgence in drugs has been a historical, cultural, and social aspect of history for numerous decades. Government inefficiency, conflicting government objectives, international politics, and societal norms, coupled with the impact of globalization, have greatly influenced conditions in the drug world. The net result has been a significant increase in the trajectory of demand, trafficking, violence, and associated second and third order effects. While a majority of Americans can readily identify with the everyday realities and stressors of life, few are cognizant of the looming crisis of narco-trafficking along the U.S.-Mexico border. Given the proximity of the major friction points in this drug war, spillover effects and regional security effects are increasingly amplified, and they can potentially affect every citizen in the United States. This analysis examines the factors contributing to the rise in drug trafficking along the southwest border of the United States, discusses the multiple second and third order effects of this trafficking, and examines policy alternatives for the U.S. Government in combating it. Statistics and experience illustrate that past and present U.S. policies have not created the desired effect on narco-trafficking. Even with the post-9/11 increase in security and increased counter-drug budgets, the illicit drug trade in the Southwest is flourishing. The Mexican border drug epidemic requires urgent and careful action by the U.S. Government.
ADA418019	Molecular Pathogenesis of Rickettsioses and Development of Novel Anti-Rickettsial Treatment by Combinatorial Peptide-Based Libraries	TEXAS UNIV MEDICAL BRANCH AT GALVESTON	Walker, David H.	2/1/2003	31	Not available	USAMRMC	U	A - 01	Approved for public release; distribution is unlimited.	Annual rept. 1 Feb 2002- 31 Jan 2003	The purpose of this study is to utilize adaptein libraries coded within pantropic retroviral vectors that confer protection against rickettsial pathogens and to study the molecular pathogenesis of rickettsioses. The following specific aims were proposed: 1) To establish heterogeneous cell populations, with each cell expressing a unique member of a complex combinatorial peptide-based (e.g. adaptein) library and challenge with R. prowazekii, R. rickettsii, and O. tsutsugamushi; 2) To determine the role of NF-kB, cytokines (TNFalpha, IFN-gamma, RANTES), ROS and NO in intracellular killing of rickettsia-infected monolayers containing adapteins; and 3) To characterize signal transduction pathways modulating the cytoskeletal events responsible for the increased vascular permeability. During the first year of this project we were able to construct two dozen libraries encoding combinatorial 6-mer, 12-mer, and 18-mer peptides. We successfully produced these libraries in bacterial cells and transfected two different cell lines with recombinant retroviruses containing the libraries with high efficiency for rickettsial challenges. We have also developed in vitro models of endothelial barrier using rat derived microvascular endothelial cells. Measurements of endothelial permeability using FITC-dextran in transwell settings and using ECIS have been performed. Elevation of intracellular calcium in infected cell monolayers and activation of calmodulin have also been demonstrated.
ADA602353	Development of Antibacterials Targeting the MEP Pathway of Select Agents	GEORGE MASON UNIV FAIRFAX VA	Couch, Robin	5/1/2014	16	Not available	USAMRMC	U	A - 01	Approved for public release; distribution is unlimited.	Annual rept. 10 Feb 2013- 9 Feb 2014	The threat of bioterrorism and the use of biological weapons against both military personnel and civilian populations has become an increasing concern for governments around the world. The 1984 Rajneeshee Salmonella attack, 2001 anthrax letter attacks, 2003 SARS outbreak, 2009 H1N1 swine flu pandemic, and the current US flu epidemic all illustrate our vulnerability to both deliberate and natural outbreaks of infectious disease and underscore the necessity of effective antimicrobial and antiviral therapeutics. The prevalence of antibiotic resistant strains and the ease by which antibiotic resistance can be engineered into bacteria further highlights the need for continued development of novel antibiotics against new bacterial targets. This research project directly addresses this need through the development of a broad spectrum inhibitor of the biothreat agents Francisella tularensis and Yersinia pestis. During this period of performance, we have optimized assays with the Y. pestis MEP synthase and the F. tularensis MEP cytidylyltransferase for use in HTS. The screening of natural product and rationally designed libraries has identified a novel inhibitor that binds to an allosteric site on MEP synthase. We confirmed this allosteric activity with the MEP synthase homologs obtained from F. tularensis and M. tuberculosis. This allosteric site has not been previously identified and represents a new site for the rational design of a new chemical class of antimicrobial drugs targeting MEP synthase. Additionally, our screening has highlighted a rationally designed bisubstrate inhibitor of MEP synthase that behaves as a tightly bound inhibitor, binding to the NADPH site and causing a conformation change that subsequently locks the inhibitor into the DXP site. And our initial screening has also identified an effective inhibitor of MEP cytidylyltransferase.

AD1034210	Pandemic Influenza Preparedness Recommendations	Defense Health Agency/Defense Health Board Falls Church United States	Not available	10/4/2007	6	Not available	Not available	U	A - 01	Approved for public release; distribution is unlimited.	Technical Report	At the request of Deputy Assistant Secretary of Defense for Force Health Protection and Readiness (DASD (FHP and R) the Pandemic Influenza (PI) Preparedness Select Subcommittee of the Defense Health Board has developed a series of recommendations regarding the Department of Defense pandemic influenza preparedness and control strategy. These recommendations are hereby submitted to the Defense Health Board for consideration, at a future open meeting of the Board.
AD0763161	Viability and Indication of Pathogenic Microbes in the Environment,	FOREIGN TECHNOLOGY DIV WRIGHT-PATTERSON AFB OHIO	Kiktenko,V. S.	6/19/1973	14	FTD-MT-24-141-73	Not available	U	A - 01	Approved for public release; distribution is unlimited.	Not available	The accumulation of materials on the viability of microbes has moved along three channels: observation of flare-ups of epidemics; experimental checking of the viability of parasitic microbes under laboratory conditions; and checking the viability of parasitic microbes under field conditions. The viability of parasitic microbes can be clarified currently only with consideration of the interaction of the organism with the environment and adaptation to it. According to this school of thought, the stability of a causative agent in the environment is determined by the specific mechanism through which they are transferred from one organism to another. The following rule is general and adequately substantiated: the more highly perfected the mechanism of transfer of the contaminating principle, the shorter the period during which the parasitic microbe is in the environment - i.e., the mechanism of transfer of infection predetermines the degree of stability of the microbe. On the basis of these positions the author considers the stability of the agents of the basic groups of infections in the environment.
ADA080907	Recovery from Nuclear Attack, and Research and Action Programs to Enhance Recovery Prospects	INTERNATIONAL CENTER FOR EMERGENCY PREPAREDNESS WASHINGTON DC	Greene, Jack C.,Stokley, Robert W.,Christian, John K.	12/1/1979	96	Not available	FEMA	U	A - 01,23	Approved for public release; distribution is unlimited. Document partially illegible.	Final rept. Aug 1978-Dec 1979	PART 1 of the report, entitled RECOVERY FROM NUCLEAR ATTACK, presents a nontechnical summary of reserach findings. It is organized to address the following 'obstacles-to-recovery:' Life Support Inadequacies, Epidemics and Diseases, Economic Breakdown, Late Radiation Effects, Ecological Effects, Genetic Damage. PART 11 entitled RESEARCH AND ACTION PROGRAMS TO ENHANCE RECOVERY PROSPECTS presents a number of low-cost proposal primarily directed at developing practical but comprehensive management plans. PART 111 is entitled PERSPECTIVES. It presents in Question-and-Answer form a number of reflections, derived mostly from the conferences, on such topics as economic modeling, functioning in a radioactive environment, and the Soviet civil defense.
ADA419113	Large Epidemic of Respiratory Illness Due to Adenovirus Types 7 and 3 in Healthy Young Adults	NAVAL HEALTH RESEARCH CENTER SAN DIEGO CA	Ryan, Margaret A.,Gray, Gregory C.,Smith, Besa,McKeehan, Jamie A.,Hawksworth, Anthony W.	3/1/2002	8	NHRC-00-33	BUMED	U	A - 01	Approved for public release; distribution is unlimited.	Rept. for Aug-Dec 1997	This epidemic at the Naval Recruit Training Command in Great Lakes, IL in 1997, was the largest outbreak of adenovirus types 7 and 3 reported in recent history. Surveillance for disease, special laboratory testing, and linking of many large data sources allowed for clinical characterization and description of epidemiologic risk factors for adult adenovirus infections. The outbreak also portends challenges for the military until adenovirus vaccine production is reestablished.
ADA408913	Prospective Study of Respiratory Infections at the U.S. Naval Academy	NAVAL HEALTH RESEARCH CENTER SAN DIEGO CA	Gray, Gregory C.,Schultz, Robert G.,Gackstetter, Gary D.,McKeehan, Jamie A.,Aldridge, Kathleen V.	9/1/2001	7	NHRC-00-28	BUMED	U	A - 01	Approved for public release; distribution is unlimited.	Rept. for 1998-1999	During the winters of 1995 through 1997, college students (midshipmen) at the US Naval Academy suffered epidemics of upper respiratory tract infections of unknown causes. We sought to determine to measure the impact of respiratory diseases and to determine etiology. Over the 11 months of active surveillance, 85 midshipmen sought medical attention for acute respiratory disease and were evaluated with PCR, serologic studies, and culture for acute respiratory disease etiology. Among these 85, there was considerable evidence for respiratory pathogen infection: Chlamydia pneumoniae in 52.6%, Mycoplasma pneumoniae in 33.3%, influenza in 14.2%, Streptococcus pneumoniae in 7.3%, and adenovirus in 1.2%, Twenty-two percent of the cases had more than one pathogen identified and 18.8% were negative for all pathogens under study. The ill plebes had an average oral temperature of 38.6 degrees centigrade and missed an average of 2.9 days of training. 873 (81%) the 1077 plebes who completed a end-of-training questionnaire complained of having 1 or more respiratory symptoms (>12 hours) during their first year of training. Of these, 132 (15%) reported that the symptoms moderately or greatly affected their performance. Study data suggested that respiratory infections were frequent, had significant impact upon training, and were often due to bacterial pathogens.

AD0836226	EXPERIMENTAL TRANSMISSION OF EXANTHEMATIC TYPHUS THROUGH BODY LICE	FORT DETRICK FREDERICK MD	Nicolle, Charles,Comte, C.,Conseil, E.	7/1/1963	5	SMUFD-TRANS-894	ABL/MD	U	A - 01	Approved for public release; distribution is unlimited.	Conference proceedings	The experiments show that it is possible to transmit exanthematic typhus from a Chinese macaca who had been infected to a new Chinese macaca by means of a body louse. The application of this datum to etiology and to prophylaxy of the malady in man should be made. The measures against typhus inroads must aim at the destruction of the parasites; they will especially aim at the body, the body garments, the clothes and the bedding of the patients.
ADA004664	A New Technique for Evaluating Antigenic Relatedness Among Viruses	MARYLAND UNIV COLLEGE PARK COLLEGE PARK United States	Hetrick, Frank M.	1/29/1975	7	Not available	Not available	U	A - 01	Approved for public release; distribution is unlimited.	Technical Report, 01 Mar 1971, 31 Dec 1974	The major objectives of the work were to evaluate the effectiveness of the macrophage migration inhibition (MMI) test for: (a) differentiating between closely related viruses that cross-react in the standard serological tests available and (b) rapid identification of a viral agent in a diagnostic context. Essentially, objective (a) was realized but objective (b) was not. The MMI test was found to be an effective means of differentiating two serologically cross-reacting strains of infectious bronchitis virus, an avian coronavirus, two nuclear polyhedrosis viruses which are being investigated for possible use in the biological control of insects, and Adenovirus types 1, 4, 5, and 7.
ADA442103	National Defense University Symposium on Propects for Security in the Middle East, Panel 3 - Proliferation and Arms Control - Regional Reactions	NATIONAL WAR COLL WASHINGTON DC	Litwak, Robert S.	4/20/2005	10	NDU/NWC	Not available	U	A - 01	Approved for public release; distribution is unlimited.	Not available	Arguing that the decisive use of force to topple the Saddam Hussein regime had precipitated Qaddafi's decision while former Clinton administration officials claimed that it was the culmination of a decade-long process. The current nuclear crisis with Iran is playing out against the backdrop of these twill precedents. What are the lessons and implications of these precedent-setting experiences for the development of effective nonproliferation strategies? The stakes are high as experts now posit that the international system now faces the specter of a "tipping point" in which the acquisition of nuclear weapons by one additional state could trigger a "proliferation epidemic" as other states reconsider their nuclear restraint."
AD1036708	Economic Evaluation of the Initiative Control of Tuberculosis in Large Metropolitan Cities in Lima, Peru	UNIFORMED SERVICES UNIV OF THE HEALTH SCIENCES BETHESDA MD BETHESDA United States	Escate, Cesar M.	3/22/2016	155	Not available	Not available	U	A - 01	Approved for public release; distribution is unlimited.	Technical Report	Tuberculosis (TB) is still a major public health concern worldwide and, according to the World Health Organization (WHO), in 2013 there were an estimated 9 million new cases of TB. On the other hand, it is widely recognized that the burden of TB is often greater in urban than rural settings, both in developing and industrialized countries. This fact is certainly true in Latin America and the Caribbean (LAC) and in Peru too. Lima - the capital of Peru - has twenty-five percent of the countrys urban poor, and reports 60% of the tuberculosis cases for the entire country, as well as 85% of drug resistant tuberculosis cases. In response to this scenario, PAHO has designed the Control of Tuberculosis in large metropolitan cities in LAC initiative, with the goal of reducing the impact of the TB epidemic through a comprehensive intervention that cover all the main barriers of the TB control in large cities. Peru has implemented this focalized intervention to reduce one of the main problems of TB control in Lima, which is treatment default affecting both the successful treatment and the transmission of TB in the community. The focalized intervention is based on daily monitoring of the patient treatment, 100% compliance with a baseline comprehensive assessment, and home visits and counseling if the patients missed one day of treatment. This study had three objectives. First, to determine the incremental effectiveness of the focalized intervention compared to the existing program; to determine the cost-effectiveness and cost-utility of the focalized intervention compared to the existing program; and to determine the cost-benefits of the focalized intervention compared to the existing program. We used a provider perspective.



ADA564821	Improving Protection against Viral Aerosols Through Development of Novel Decontamination Methods and Characterization of Viral Aerosol	FLORIDA UNIV GAINESVILLE DEPT OF ENVIRONMENTAL ENGINEERING SCIENCES	Woo, Myung-Huei	4/1/2012	166	AFRL-RX-TY-TP-2012-0040	TP-2012-0040,AFRL-RX-TY	U	A - 01	Approved for public release; distribution is unlimited.	Doctoral Thesis	Although respirators and filters are designed to prevent the spread of pathogenic aerosols, a stockpile shortage is anticipated during the next flu pandemic. Contact transfer and reaerosolization are also concerns. An option to address these potential problems is to decontaminate used respirators/filters for reuse. In this research a droplet/aerosol loading chamber was built and used in decontamination testing to proved a fair comparison of the performance of different decontamination techniques, including antimicrobial chemical agents, microwave irradiation and ultraviolet (UV) irradiation, which were incorporated into filtration systems and tested. The inactivation efficacy of dialdehyde cellulose and starch filters s biocidal filters was investigated. In sufficiently humid conditions both media showed higher removal efficiency and better disinfection capability at lower pressure drop than conventional media. In microwave-assisted filtration systems temperature (T) was found to be a key factor. Relative humidity (RH) was another pivotal parameter at warm-to-hot-water temperatures but became insignificant above 90 C. An examination of the effect of T and RH on UV inactivation revealed that absorption of UV by water and shielding of viruses inside aggregates suppressed inactivation. Varying the spray medium showed that artificial saliva (AS) and beef serum extract (BE) produce a protective effect against UV compared to deionized (DI) water, that RH was not a factor in stability of MS2 coli phage sprayed in AS or BE, and that infectious MS2 particles in DI water displayed a volume-based size distribution but in AS and in BE the size dependence was of a lower order. Whereas AS and BE enhanced stability, adding salts had the opposite effect.
AD1067205	A Simulation Optimization Approach to Epidemic Forecasting	Virginia Bioinformatics Institute, Virginia Tech Blacksburg United States	Nsoesie,Elaine O.,Beckman,Richard J.,Shashaani,Sara,Nagaraj,Kalyani S.,Marathe,Madhav V.	6/27/2013	10	IARPA/DC	Not available	U	A - 01	Approved for public release; distribution is unlimited.	Journal Article - Open Access	Reliable forecasts of influenza can aid in the control of both seasonal and pandemic outbreaks. We introduce a simulation optimization (SIMOP) approach for forecasting the influenza epidemic curve. This study represents the final step of a project aimed at using a combination of simulation, classification, statistical and optimization techniques to forecast the epidemic curve and infer underlying model parameters during an influenza outbreak. The SIMOP procedure combines an individual-based model and the Nelder-Mead simplex optimization method. The method is used to forecast epidemics simulated over synthetic social networks representing Montgomery County in Virginia, Miami, Seattle and surrounding metropolitan regions. The results are presented for the first four weeks. Depending on the synthetic network, the peak time could be predicted within a 95 CI as early as seven weeks before the actual peak. The peak infected and total infected were also accurately forecasted for Montgomery County in Virginia within the forecasting period. Forecasting of the epidemic curve for both seasonal and pandemic influenza outbreaks is a complex problem, however this is a preliminary step and the results suggest that more can be achieved in this area.

ADA457487	Caribbean Region: Issues in U.S. Relations	LIBRARY OF CONGRESS WASHINGTON DC CONGRESSIONAL RESEARCH SERVICE	Sullivan, Mark P.	5/25/2005	31	CRS-RL32160	CRS/DC	U	A - 01	Approved for public release; distribution is unlimited.	Congressional rept.	With some 34 million people and 16 independent nations sharing an African ethnic heritage, the Caribbean is a diverse region that includes some of the hemisphere's richest and poorest nations. The region consists of 13 island nations, from the Bahamas in the north to Trinidad and Tobago in the south; Belize, which is geographically located in Central America; and the two nations of Guyana and Suriname, located on the north central coast of South America. With the exception of Cuba and Haiti, Caribbean governments have generally respected the human rights of their citizens. Regular elections are the norm, and for the most part have been free and fair. Nevertheless, while many Caribbean nations have long democratic traditions, they are not immune to threats to their political stability, including terrorism. Many nations in the region experienced economic decline in 2001-2002 due to downturns in the tourism and agriculture sectors. The extensive damage resulting from several storms in 2004 caused an economic setback for several Caribbean nations. U.S. interests in the Caribbean are diverse, and include economic, political, and security concerns. The Bush Administration describes the Caribbean as America's third border, with events in the region having a direct impact on the homeland security of the United States. According to the Administration, the United States has an interest in bolstering political and economic stability in the region because instability would heighten the region's vulnerability to drug trafficking, financial crimes, and illegal immigration. The U.S.-Caribbean relationship is characterized by extensive economic linkages, cooperation on counter-narcotics efforts and security, and a sizeable U.S. foreign assistance program. U.S. aid supports a variety of projects to strengthen democracy, promote economic growth and development, alleviate poverty, and combat the AIDS epidemic in the region.
ADA260128	Molecular Characterization of Attenuated Junin Virus Variants.	LA PLATA UNIV (ARGENTINA) FACULTAD DE CIENCIAS EXACTAS	Romanowski, Victor,Ghiringhelli, Pablo D.,Albarino, Cesar G.,Piboul, Mariel	7/14/1992	51	Not available	USAMRDC	U	A - 01	Approved for public release; distribution is unlimited.	Final rept. 15 May 89-14 May 92,	Junin virus. one of the few human pathogenic arenaviruses, is the etiologic agent of Argentine hemorrhagic fever (AHF). The clinical symptoms of AHF include hematologic. neurologic. cardiovascular. renal and immunologic alterations. The mortality rate may be as high as 30%. but early treatment with immune plasma reduces the fatal cases to less than 2%. In order to control the endemo-epidemics in the richest farming land in Argentina a collaborative effort conducted by US and Argentine Governments led to the production of a live. attenuated Junin virus vaccine. After rigorous biological testing in rhesus monkeys. the highly attenuated Junin virus variant named Candid #1 (CDI) was used in human volunteers. followed by an extensive clinical trial in the AHF endemic area. In order to characterize the vaccine strain COI at the molecular level and initiate studies on the biochemical basis of attenuation of virulence. the structural protein genes of this attenuated virus were cloned and sequenced. In addition. cONA clones of the XJ144 strain -a very close predecessor of CDI- were also analyzed. Several changes in the amino acid sequence of N were observed that alter both the net charge and the predicted secondary structure of this polypeptide. When the attenuated strains XJ144 and CDI were compared to the wild type MC2 strain. major changes in the amino acid sequence were observed in the amino terminal region of glycoprotein precursor gene (GPC) as a result of several insertions and deletions in the nucleotide sequence. After proteolytic cleavage of GPC these alterations appear in the Gi polypeptide. that 5 thought to be located on the surface of the virion in association with the more internal G2 protein. The predicted secondary structures of CDI and XJ#44 Gi proteins are similar to each other On the contrary. the G2 protein of COI has a different hydrophobic motif from those of XJ#44 and MC2. which bare a close resemblance t

ADA532768	Controlling Interacting Systems in Noisy Environments	MICHIGAN STATE UNIV EAST LANSING CONTRACT AND GRANT ADMINISTRATION	Dykman, Mark,Billings, Lora	10/6/2010	22	ARO-49446-NS.1	49446-NS.1,ARO	U	A - 01	Approved for public release; distribution is unlimited.	Final rept. 1 Aug 2006-31 Jul 2008	The objective of this project is to develop concepts for the analysis of the dynamics of interacting systems in a noisy environment. New approaches should lead to a better understanding of system dynamics and generate novel efficient algorithms of stochastic optimal control for interacting systems. One of the central issues that we address is dynamics of noise-induced switching. The phenomenon underlies a large portion of all significant changes that occur in systems in noisy environment. Examples range from breakdown events in complex systems to swarming in systems of interacting vehicles to overcoming barriers by such vehicles. Therefore understanding the switching dynamics is instrumental for developing highly efficient ways of controlling noisy systems. Central to the theoretical approach is the notion that the dynamical trajectories followed in switching form narrow tubes. We demonstrate that the tubes can be directly observed in experiment. Quantitatively, the tubes are characterized by the distribution of trajectories. To find it theoretically we modify the instanton technique developed in a completely different area, the quantum field theory. This approach maps the problem of most probable switching trajectories in noisy dissipative systems onto a problem of Hamiltonian dynamics of an auxiliary system of a higher dimension.
AD0676374	AN OUTBREAK OF EPIDEMICAL ENCEPHALITIS OF AN UNKNOWN ETIOLOGY IN THE DROGOBYCH REGION	ARMY BIOLOGICAL LABS FREDERICK MD	Sokolov-Taezhnii, N. I.	9/1/1968	13	TRANS-71	ABL/MD	U	A - 01	Approved for public release; distribution is unlimited. Document partially illegible.	Not available	The cases of encephalitis in the Drogobych region require further accurate studies. According to immediate data it is possible to exclude it as a tick encephalitis. The clinical chart of the infection is close to the chart of a light form of mosquito (Japanese) encephalitis, but not identical with it.
AD0632279	ENVIRONMENTAL EFFECTS OF NUCLEAR WEAPONS. VOLUME ONE	HUDSON INST CROTON ON-HUDSON NY	Ayres, Robert U.	12/1/1965	285	HI-518-RR-VOL-1	OCD	U	A - 01	Approved for public release; distribution is unlimited. Document partially illegible.	Final rept. 30 Sep 1964-1 Dec 1965	Volume 1 summarizes current knowledge of the effects of nuclear weapons on area targets. Radiological effects are divided roughly into three categories: external gamma-radiation from fallout fields; external beta-burns and internal hazards due to cycling of Sr-90, Cs-137 and I-131. Vulnerabilities of different classes of targets or 'biomes' are considered, e.g. vertebrates, insects, conifer forests, deciduous forests, grasslands and crop lands. Thermal ignition and probabilities of fire spread under various conditions are discussed in Chapter 2. Chapter 3 is concerned with potential meteorological and climatic problems. Chapter 4 discusses a variety of 'second-order' problems such as epidemics, pest outbreaks, floods, erosion and ecological changes.
ADA348442	Caribbean Counter Narcotics Operations: Is there Unity Of Effort among the Federal Agencies?	NAVAL WAR COLL NEWPORT RI	Vanden Heuval, Richard E.	2/13/1998	20	Not available	NWC	U	A - 01	Approved for public release; distribution is unlimited.	Final rept.	The armed forces are only one of several weapons the nation is employing against the drug epidemic. The Federal counterdrug effort involves multiple agencies cooperating at all levels of command simultaneously on a variety of fronts. The Federal agencies involved in CD operations are all vying for recognition and view the challenge from different perceptions by the nature of their different experiences, roles, and responsibilities. Doctrinal guidance for the DoD's support to Counterdrug operations falls under Current Joint Doctrine for Military Operations Other Than War (MOOTW). MOOTW principles are an extension of warfighting doctrine. In the Caribbean, the Customs Service and Coast Guard are lead agencies for interdiction, the State Department for dealings with foreign governments and the DoD for Detection and Monitoring. The question arises are the Federal agencies working together effectively -- is there unity of effort in Caribbean Counternarcotics Operations?

ADA117105	Rapid Identification of Dengue Virus Serotypes Using Monoclonal Antibodies in an Indirect Immunofluorescence Test.	WALTER REED ARMY INST OF RESEARCH WASHINGTON DC	Henchal,Erik A.,McCown,J. M.,Gentry,M. K.,Brandt,W. E.	6/18/1982	14	Not available	Not available	U	A - 01	Approved for public release; distribution is unlimited.	Conference papers,	Dengue and dengue hemorrhagic fever occur in epidemic and endemic form throughout tropical areas of the world. Dengue virus types 1, 2, and 3 have been associated with epidemics of major impact in the Western Hemisphere since the 1960's and in 1981 dengue type 4 was identified in the Carribean for the first time. Extensive serological crossreactions occurring among dengue virus serotypes as well as with other flaviviruses in commonly employed serological tests (i.e., hemagglutination-inhibition, immunofluorescence, and complement fixation) frequently interfere with identification of the antigenic type of dengue virus present in epidemic or endemic areas. Presently, the only certain method of identification is through the use of rigidly standardized reference antiserum in a virus plaque-reduction neutralization assay. Few laboratories possess sufficient resources to perform this test with the slowly replicating dengue viruses. Monoclonal antibodies that were produced using the recently established hybridoma technology have been used successfully to characterize viral antigens. The present study had as its objective the development of highly specific monoclonal antibodies suitable for rapid serotype identification of low passaged or unpassaged dengue virus for humans or insects using an indirect immunofluorescence test.
ADA237464	Mouse Hepatitis Virus Infection Suppresses Modulation of Mouse Spleen T- Cell Activation	ILLINOIS UNIV CHAMPAIGN	Cook-Mills, Joan M.,Munshi, Hidayatulla G.,Perlman, Robert L.,Chambers, Donald A.	1/1/1988	27	Not available	ONR	U	A - 01	Approved for public release; distribution is unlimited.	Not available	Natural infection by mouse hepatitis virus (MHV) can affect interpretation of immunological studies in mice. MHV, a collective term describing a group of corona viruses, is found in natural infections in over 70 % of laboratory mouse populations in the United States and Canada. Natural outbreaks of mouse hepatitis virus (MHV) in our animal colony afforded us the opportunity to study MHV-induced immunosuppression as well as the effects of MHV infection on neurotransmitter-immunomodulation. Concanavalin A-stimulated DNA synthesis by spleen T-lymphocytes from MHV-infected mice was 20-50 % that of noninfected mice.
ADA538596	An Overview of Management Issues in Adult Patients with Type 2 Diabetes Mellitus	WALTER REED ARMY MEDICAL CENTER WASHINGTON DC	Vigersky, Robert A.	3/1/2011	7	Not available	WRAMC	U	A - 01	Approved for public release; distribution is unlimited.	Journal article	Despite some progress in reducing the rate of diabetic complications, the epidemic rise in incidence of diabetes mellitus ensures that there will be an increasing number of patients in the coming decades with complex health care management issues who will need efficient and effective care. The management of patients with diabetes is an ever-challenging endeavor attributable to several factors. These include, among others, (1) limited provider expertise, (2) decreasing time of a patient visit, (3) increasing complexity of drug management,(4) limited use of self-monitoring of blood glucose by patients and/or providers, (5) clinical inertia, and (6) nonadherence. Technology-driven innovative solutions, including those using virtual reality, are desperately needed to assist both patients and their providers in overcoming the exigencies of this protean disease.
ADA620254	Evaluation of In Vitro Cross-Reactivity to Avian H5N1 and Pandemic H1N1 2009 Influenza Following Prime Boost Regimens of Seasonal Influenza Vaccination in Healthy Human Subjects: A Randomised Trial	ARMED FORCES RESEARCH INST OF MEDICAL SCIENCES BANGKOK (THAILAND)	Bethell, Delia,Saunders, David,Jongkaewwattana, Anan,Kramyu, Jarin,Thitithayanont, Arunee,Wiboon-ut, Suwimon,Yongvanitchit, Kosol,Limsalakpetch, Amporn,Kum-Arb, Utaiwan,Uthaimongkol , Nichapat	3/26/2013	12	Not available	AFRIMS/TH	U	A - 01	Approved for public release; distribution is unlimited.	Journal article	Recent studies have demonstrated that inactivated seasonal influenza vaccines (IIV) may elicit production of heterosubtypic antibodies, which can neutralize avian H5N1 virus in a small proportion of subjects. We hypothesized that prime boost regimens of live and inactivated trivalent seasonal influenza vaccines (LAIV and IIV) would enhance production of heterosubtypic immunity and provide evidence of cross-protection against other influenza viruses.

ADP014624	A Critique of the Evidence Relating Diet and Coronary Heart Disease	,VANDERBILT UNIV NASHVILLE TN SCHOOL OFMEDICINE"	Mann, George V.	12/1/1963	18	Not available	XD	U	A - 01	Approved for public release; distribution is unlimited.	Conference paper	It may be useful for me to review the problem of coronary heart disease (CHD) from the special viewpoint of a nutritionist. While this view may have some prejudice it seems relevant because of the frequent association of diet with CHD and the widespread lay interest in the problem. Coronary heart disease may seem to have risen like an epidemic among us. It is a complicated task to determine whether this rise to prominence is real or only made apparent by changing techniques. It would be an interesting task for someone to relate the time course of the prevalence of CHD to the marketing of electrocardiographs. To my knowledge this has not been done. One might have expected a rise of CHD when the ECG became available for diagnosis. Dr. Lew of the Metropolitan Life Insurance Company has shown a remarkable explanation for the distribution by states of coronary heart disease in the United States (1)(2), (Fig. I and II). It must be clear that we see what we look for. A more subtle influence is that of competing causes" (3). Even when age specific rates are considered we may be baffled in understanding the entire effect of the removal of diseases which typically kill at an earlier age than does coronary heart disease
ADA372343	Update on Diagnosis, Management, and Prevention of Hepatitis B Virus Infection	NAVAL MEDICAL RESEARCH UNIT NO 3 FPO NEW YORK 09527	Mahoney, Francis J.	4/1/1999	18	Jun-99	NMRC	U	A - 01	Approved for public release; distribution is unlimited.	Journal article	Viral hepatitis is a disease with multiple causes that was first described in the fifth century BC. When Hippocrates described epidemic jaundice, he was undoubtedly referring to persons infected with acute hepatitis B virus (HBV) as well as other agents capable of infecting the liver. Epidemics of jaundice have been described throughout history and were particularly common during various wars in the 19th and 20th centuries. While many of these outbreaks were due to hepatitis A, it is likely that epidemic transmission of hepatitis B also occurred in settings where the use of blood-containing products was common.
ADA590691	Intergovernmental Unity of Effort in Support of Biological Threat Prevention	NAVAL POSTGRADUATE SCHOOL MONTEREY CA	Stevens, Wendy L.	9/1/2013	137	Not available	NPS	U	A - 01	Approved for public release; distribution is unlimited.	Master's thesis	The purpose of this thesis is to examine ways to prevent the terrorist use of a biological weapon of mass destruction. Intelligence sources from around the globe report that terrorist groups are developing the capability and the intention to deliver biological weapons of mass destruction. Four coalitions of governments were studied to examine stated health security policies and reported outcome of a large biological threat incident of H1N1 global pandemic influenza of 2009 2010. This thesis presented the results and proposed methods to enhance intergovernmental connectivity and information sharing to prevent a biological threat.
AD0804069	Z(EXPERIMENTAL)ZINFECTION OF COYOTE PUPS WITH VENEZUELAN EQUINE ENCEPHALITIS VIRUS.	DUGWAY PROVING GROUND UT BIOLOGICAL DIV	Lundgren, David L.,Terry, David R.,Smart, Keith L.	11/1/1966	14	DPG-T67-106	T67-106	U	A - 01	Approved for public release; distribution is unlimited.	Technical rept.,	An investigation was undertaken to determine the disposition of coyotes to infection by the virus of Venezuelan equine encephalomyelitis, and also to determine onset, height and duration of haemagglutination inhibiting, complement-fixing and virus-neutralizing antibody. In this initial report, it is shown that young coyotes were highly susceptible to the epidemic strain of VEE virus used, and that they developed a dose-independent viremia lasting for an average of 3.6 days in 1 to 2 months-old pups, and 2.8 days in 6 to 7 months-old pups. Less than one mouse intra cerebral medial dose (MICLD50) may initiate infection within 24 hours. Infection with strain of VEE virus led to a characteristic symptomatology, but was characterized by a low incidence of lethality even in very young animals. These results indicate that the coyote may serve as a short term source of VEE virus in the natural infection chain. Although the coyote does occur over a wide geographic range including endemic areas, its role as a link in the dissemination chain leading to human communities may nevertheless be minimal because of its low population density. (Author)
ADA504331	Homeland Defense and 'Posse Comitatus': A Domestic Security Analysis	MARINE CORPS COMMAND AND STAFF COLL QUANTICO VA	Thompson, Jeffrey R.	2/6/2006	15	Not available	USMC/CSC	U	A - 01	Approved for public release; distribution is unlimited.	Research paper	For the past 25 years, the Posse Comitatus Act has been gradually eroding, bringing us closer to overriding the law that precludes use of the military in domestic law enforcement. A recent surge in high-profile security events on U.S. soil, such as the attacks of 9/11, the Hurricane Katrina disaster, and the specter of a bird-flu pandemic, has hastened this legal erosion, encouraging some lawmakers to call for the revision or even elimination of Posse Comitatus. Unrestricted use of active duty forces in execution of the law threatens civil liberties, States' autonomy, and the military's readiness to defend the nation; consequently, Posse Comitatus must be strengthened and the National Guard must be empowered to halt this trend and ensure U.S. domestic security.

ADA479677	Fire Fighters' Ability and Willingness to Participate in a Pandemic	NAVAL POSTGRADUATE SCHOOL MONTEREY CA	Delaney, Jr, John	3/1/2008	117	Not available	NPS	U	A - 01	Approved for public release; distribution is unlimited.	Master's thesis	Current estimates predict that 30-40 percent of the population will be infected with the flu virus during a pandemic. Fire departments should anticipate a higher attack rate for their personnel because of increased exposure risk. Additionally, many variables will negatively influence fire fighter participation rates over and above these attack rates. This thesis analyzes fire fighters ability and willingness to participate in a pandemic through a comprehensive survey of fire fighters within the twelve National Capital Region fire departments. Issues that may influence fire fighters ability and willingness to work include childcare, concern of family, adequate personal protective equipment, worker's compensation coverage, and availability of vaccines and antivirals. Collectively, these variables determine a workforce participation percentage (WPP) the share of fire fighters who will be able and willing to participate in a response during a pandemic. Results indicate that between 30-70 percent of the fire fighters will not be able or willing to work during a pandemic. Although a fire fighter s participation is situationally dependent, fire departments should take urgent steps to address five core areas. These are included in a set of recommendations. Ultimately, the priority recommendation is for fire officials and regional public policymakers to rise to the challenge of the complexity of these issues. Leadership in the face of this recognized pandemic threat, however, remains an elusive solution.
AD0675713	EXPERIENCE IN THE SYSTEMATIZATION OF THE CATEGORIES AND LAWS OF EPIDEMIOLOGY. REPORT I. CATEGORIES OF EPIDEMIOLOGY,	ARMY BIOLOGICAL LABS FREDERICK MD	Chasovnikov,A. A.	10/1/1967	9	Trans-2240	Not available	U	A - 01	PORTIONS OF THIS DOCUMENT ARE ILLEGIBLE. SEE INTRODUCTION SECTION OF THIS ANNOUNCEMENT JOURNAL FOR CFSTI ORDERING INSTRUCTIONS.	Not available	Throughout the course of its history, epidemiology has accumulated numerous theoretical and practical data which are subject to regulation and systematization. One of the forms of theoretical generalization are the categories and laws of epidemiology. They are logical definitions, objectively reflecting existing features and properties, the content and relation of epidemiological phenomena, and revealing the substance of the epidemic process. These are structural elements, which are the supporting points in the process of perception. If they are united into a common logical system they become the foundation of epidemiological theory. (Author)
ADA477250	Modeling Influenza Pandemic Response Effectiveness in Canada	ARAD HEALTH OTTAWA (ONTARIO)	Jacobson, Zack,Houston, Ben	12/1/2006	22	Not available	X5	U	A - 01	Approved for public release; distribution is unlimited. NATO.	Not available	As the risk of a global influenza pandemic increases there is growing response preparedness efforts within Canada. One question that governmental decision makers have in this context is what is the most effective distribution of anti-virals, such as oral oseltamivir, within the population of first responders, health care workers, administrators and the general public in addition to what extent should the anti-virals be used as prophylactics. To provide an answer to this question, we have developed a Canada-wide influenza pandemic simulator and visualization system that allows for the modeling of various patterns of anti-viral distribution and use.
AD0889235	Study of an Outbreak of Venezuelan Encephalitis in 1968	FORT DETRICK FREDERICK MD	Escalona, Armando Soto,Ryder, Slavia,Finol, Luis T.	11/18/1971	13	TRANS-2747	DA	U	A - 01	Approved for public release; distribution unlimited., Availability: Microfiche copies only.	Not available	An epidemic of Venezuelan encephalitis, which occurred in October 1968 in the District of Paez, State of Zulia, Venezuela, is described and analyzed. A total of 1,077 cases of the disease were registered, 150 of which included evident attack on the nervous system. Two deaths were attributable to the encephalitis, both in children less than one year old. There was a larger number of cases among children less than 6 years old; these were born after the last encephalitis epidemic in the region, which points to the cyclic activity of the virus. It was concluded that the virus is inactive in the interepidemic periods. The immunity conferred by the virus is apparently of long duration, as indicated by the small number of older patients and ill children less than one year old, the latter protected by transmitted maternal antibodies. (Author)

ADA140238	World Reference Center for Arboviruses.	YALE UNIV NEW HAVEN CONN SCHOOL OF MEDICINE	Shope,R. E.	2/1/1981	100	Not available	Not available	U	A - 01	Approved for public release; distribution is unlimited.	Annual progress rept. no. 1, 1 Jan-31 Dec 80,	Viruses Identification. Soldado Rock virus was identified from ticks of the Seychelles; Pongola, a new Yogue group virus from bats and human febrile cases, and an apparently new bunyavirus were identified from Uganda; a strain of West Nile virus from an apparently rabid dog in South Africa was identified; from Australia, a new tick-borne flavivirus was characterized (isolated from ticks of birds; Ross River virsu was confirmed from serum of a case of epidemic polyarthritis and rash in Fiji; four strains of Sindbis were identified from Lake Nasser, Egypt, and six strains of dengue, type 4 as well as other as yet unidentified viruses from New Galedonia were studied. An isolate of Colorado tick fever was identified from human serum of the Netherlands in a traveller. The Sakhalin serogroup was shown to belong in the Nairo-virus genus. The IFA test reactions and cross-reactions of Rift Valley fever and other Phlebotomus fever group viruses indicated that the IFA test is relatively specific. Surveys of Ghana, Liberia, Cameroon and the Sudan showed widespread activity of arboviruses and indication of activity of Lassa virus and Ebola virus in several areas of Africa.
ADA155228	Korean Hemorrhagic Fever (Hemorrhagic Fever with Renal Syndrome (HFRS)).	KOREA UNIV SEOUL DEPT OF MICROBIOLOGY	Lee,H. W.	7/1/1984	40	Not available	Not available	U	A - 01	Approved for public release; distribution is unlimited.	Final rept. 1 Feb 83-31 Jan 84,	Hemorrhagic fever with renal syndrome (HFRS) was an important military problem since large epidemics of HFRS occurred among soldiers in the pst wars. Although predominantly associated with field mice in rural areas, it is now being recognized that urban rats and laboratory rats are also reservoirs of Hantaan virus, the etiologic agent of HFRS, in many parts of the world. This report presents the results of the isolation of Hantaan virus from blood of HFRS patients in tissue culture cells, the serosurvey of Hantaan virus among U.S. soldiers and wild rats caught at the U.S. Army Installations in Korea, and the serosurvey of domestic animals in Korea and neighbouring countries. From blood of HFRS patients, 3 strains of Hantaan virus were isolated in Vero E-6 cells and 19 strains in Apodemus mice. The prevalence rate of IF antibodies to Hantaan virus among 1,986 soldiers stationed in Korea was 1.2% which is a data very similar to that of Seoul residents. Of the 195 wild rats caught at the U.S. Army Installations, 10% had serum antibodies and viral antigen was found in lungs of 2 rats. In domestic animals, If antibodies to Hantaan virus were demonstrated in 3.5% of 792 commercial rabbits, 1 out of 123 chicken and 1 of 104 porcine sera. Originator supplied keywords include: Hantaan virus, Vero E-6 cells, Seroepidemiology, R. norvegicus, R. rattus, Apodemus agrarius, Domestic animals, Immunofluorescent antibodies, Neutralization.
ADA535580	Biosurveillance: Detecting, Tracking, and Mitigating the Effects of Natural Disease and Bioterrorism (Briefing charts)	NAVAL POSTGRADUATE SCHOOL MONTEREY CA	Fricker, Jr, Ronald D.,Hanni, Krista	2/10/2010	20	Not available	NPS	U	A - 01	Approved for public release; distribution is unlimited.	Briefing charts	Not available
ADA328789	The Regulations of Lead-Based Paint in Air Force Housing.	AIR FORCE INST OF TECH WRIGHT-PATTERSON AFB OH	Zimmerman, Thomas F.	8/28/1997	94	AFIT-97-114	AFIT	U	A - 01	Approved for public release; distribution is unlimited.	Master's thesis,	Childhood lead poisoning has been referred to as the 'silent epidemic' and characterized as 'the most common environmental disease of young children... eclipsing all other environmental health hazards found in the residential environment. Approximately 8.9 percent of all children in America under the age of six have blood lead levels in excess of toxic levels (10 micrograms/dL). Lead in the bloodstream at low levels has been associated with decreased intelligence, impaired neurobehavioral development, decreased growth, decreased hearing acuity, and reduced weight at birth. Part II of this paper discusses lead poisoning in more depth. The most common cause of elevated blood lead levels in children is lead-based paint. As with many other environmental hazards, lead-based paint falls within the regulatory scope of a number of environmental statutes, including, the Lead-Based Paint Poisoning Prevention Act, the Residential Lead-Based Paint Hazard Reduction Act of 1992, the Resource Conservation and Recovery Act (RCRA), the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), and state environmental statutes. This paper analyzes the regulation of lead-based paint in Air Force housing.

ADA407575	Intervention to Decrease Risk for Sexually Transmitted Diseases (STDs) and the Associated Negative Reproductive Health Outcomes in Women Aboard Ships: A Biopsychosocial Approach	CALIFORNIA UNIV SAN FRANCISCO	Boyer, Cherrie	9/1/2001	53	Not available	USAMRMC	U	A - 01	Approved for public release; distribution is unlimited.	Annual rept. 7 Aug 2000-6 Aug 2001	Unintended pregnancies (UIPs) and STDs with their segueloe of ectopic pregnancy continue to be epidemic among active duty enlisted women. Such reproductive health problems result in major morbidity among affected women as well as posing a potential threat to combat readiness. UIPs and STDs result from complex interactions between biological and behavioral factors in military women. The ultimate control in preventing such morbidities must rely on both behavioral and biologic strategies. The primary aim of the project is to develop, implement, and evaluate an intervention which emphasizes correct information, motivation and behavioral skills building (IMB Model) coupled with non-invasive screening using urine-based amplified DNA techniques to detect C. trachomatis and N. gonorrhoeae and urine based pregnancy testing. A pre-test, post-test experimental design was employed to evaluate the impact of the behavioral intervention on the experimental group using both self-report questionnaires (UIPs/STD psychosocial and behavioral risk factors) and results from the STD and pregnancy screening tests as measures. The control intervention will consist of a prevent ion program focusing on nutrition, breast cancer, fitness and injury prevention. Questionnaires and urine testing will be done at pre-test, mid-study, and post-test 6-12 months later. Subjects will include junior enlisted Marine women with N=IOOO in the experimental group and N=IOOO in the control group.
ADA192906	Isolation of a Hantavirus from a Severely Ill Patient with Hemorrhagic Fever with Renal Syndrome in Greece	THESSALONIKI UNIV SALONIKA (GREECE)	Antoniades, A.,Grekas, D.,Rossi, C. A.,LeDuc, J. W.	12/1/1987	4	Not available	USAMRIID	U	A - 01	Approved for public release; distribution is unlimited.	Journal article	Attention has recently been drawn to a severe form of hemorrhagic fever with renal syndrome (HFRS) found in the Balkan region of Europe. This disease is characterized by fever, abdominal or back pain, conjunctival injection, renal insufficiency, and a significant mortality rate (currently estimated to be approx. 14% in Greece. The disease resembles Korean hemorrhagic fever (KHF) of Korea and epidemic hemorrhagic fever (EHF) of China, rather than the milder nephropathia epidemica (NE) of Scandinavia and Western Europe. Patients who have recovered from this disease possess antibodies that react to highest titers with Hantaan virus, the cause of KHF and EHF, rather than with Puumala or Seoul viruses, the other known causes of HFRS. We have previously suggested, based on serological and epidemiological studies, that the disease found in Greece may be caused by a virus closely related or identical to the prototype Hantaan virus. In this communication, we report the isolation of a hantavirus from the urine of a severely ill patient with HFRS who was infected in northern Greece and the preliminary serological evidence to suggest that this virus represents a unique strain of hantavirus that is closely related to the prototype Hantaan virus.
ADA430995	Planetary Defense: Eliminating the Giggle Factor	NATIONAL DEFENSE UNIV WASHINGTON DC	France, Martin E.	1/1/2000	26	Not available	NDU	U	A - 01	Availability: This document is not available from DTIC in microfiche.	Not available	The Giggle Factor (GF). Mention Planetary Defense and you'll soon understand. Even without invoking the sinister vision of alien beings arriving to enslave or destroy humanity, the eyebrows of serious and senior members of the national defense and scientific communities go askew when the subject is broached, whether at cocktail parties or congressional budget hearings. Even the most ardent supporters of defending the Earth from cataclysmic cometary or asteroidal impacts share occasional public or private chuckles with colleagues and skeptics behavior considered unthinkable when discussing means to avert or mitigate the catastrophic epidemics, wars of aggression and genocide, and terrestrial natural disasters that have peppered man's history on Earth. But the GF doesn't diminish the evidence that the threat exists; measurable and historic, but largely unpredictable. It does, however, continue to cloud a serious issue by generating a unique mosh pit of government branches and agencies, international groups, and private and public research organizations and corporations that would love credit for the resulting system (if it were ever successfully employed), gleefully accept a slice of the multi-billion dollar pie that would accompany a full-fledged planetary defense system, or justify continued funding and development of systems that could be tied to a planetary defense mission. Saddling each of these players, though, are the negative connotations of being involved in a publicly perceived high GF program that may never be used during a human lifetime, raises the suspicions of potential military adversaries, and may not work anyway.



ADA468008	Testing the Effectiveness of the North Shore - LIJ Health System's Bioterrorism Response Program to Identified Surveillance Data	NORTH SHORE LONG ISLAND JEWISH HEALTH SYSTEM GREAT NECK NEW YORK	Rowe, Thomas W.	3/1/2007	34	Not available	USAMRMC	U	A - 01	Approved for public release; distribution is unlimited.	Final rept.	The research was of the project was to measure the importance of timely notifications of potential infectious disease outbreaks, provided by electronic syndromic surveillance system, compared to the manual case-review system.
ADA504044	Pandemic Flu Planning in Africa: Thoughts from a Nigerian Case Study	NATIONAL DEFENSE UNIV WASHINGTON DC CENTER FOR TECHNOLOGY AND NATIONAL SECURITY POLICY	Loeb, Cheryl, McGrath, Jr., Lynn, Devalia, Sudhir	7/1/2009	24	Not available	NDU/CTNSP	U	A - 01	Approved for public release; distribution is unlimited.	Monograph	Over the past 35 years, dozens of new and frightening diseases have been identified. The emergence of H5N1 avian flu in 1996, coupled with the recent declaration of an H1N1 influenza pandemic, demonstrate the urgent need for countries to have pandemic preparedness plans in place. For nations that are unprepared, a pandemic could result in devastating social, economic, and health consequences, including a high number of fatalities. Nowhere is this more so the case than in countries with underdeveloped health care systems. The potential impact of a severe pandemic requires that nations throughout the world develop pandemic response plans before the onset of disease. Rapid spread of disease, as is often associated with a pandemic, will not allow countries the time to implement adequate proper health care and disease mitigation procedures. In recognition of the looming threat of an influenza pandemic, the Center for Technology and National Security Policy (CTNSP) developed and administered a program to help build pandemic influenza crisis-response capacities. The first Avian Influenza/Pandemic Influenza Policy Planning workshop occurred in Nigeria in June 2007 with the objective of assisting selected Nigerian officials in evaluating their nation's pandemic response plan. After assessing the viability of the Nigerian National Integrated Avian and Pandemic Influenza Plan, CTNSP suggested a number of actions for various Nigerian ministries that would strengthen interagency communication and cooperation and the pandemic response in the country. U.S. Africa Command, in partnership with the U.S. Agency for International Development, Pacific Command, and other partners, has developed a Pandemic Response Program aimed at strengthening partner nations' military capacities to plan for, and respond to, pandemics. The development of both military and civilian pandemic response plans in Africa is vital in preparing for a severe pandemic and mitigating its consequences.
ADP013430	Globalization, the Infectious Diseases and Croatian Civil Defense	MINISTRY OF THE INTERIOR ZAGREB (CROATIA)	Sugnetic, Tomo, Sugnetic, Nevenka	9/1/2001	4	Not available	X5	U	A - 01	Approved for public release; distribution is unlimited.	Not available	Man's natural progress, including development of global science and technology increase. Republic of Croatia, like other countries in central, southern and eastern Europe undergoing a war period, and a period of political, economic, social and the other transition. Change, however, has not been confined only to these various areas, but has affected all sectors economic, social, civil and military defense and specially, the health sector where a various infectious diseases play one of major role. One of areas where the effect of change is certainly being felt is in the global and health sector. The main feature of infectious diseases comes from their global occurrence. Infective diseases are permanent danger for population, environment and determinant of health status. In the past, infective diseases and great epidemics of infective diseases resulted in high incidence, morbidity and mortality and dominant irreversible effect. Therefore, the world community has to study these infections and try to develop efficient approaches to their diagnosis, prophylaxis and treatment. Civil defense, Health policy, the structure and organization of defense and health services and most importantly, health status have all been affected by the transition, which started in 1990 and still continuing.
AD0833603	EFFECT OF MALEIC HYDRAZINE IN CULTURE MEDIA ON THE MYCELIAL GROWTH, SPORULATION, AND SPORE GERMINATION OF VARIOUS PHYTOPATHOGENIC FUNGI,	ARMY BIOLOGICAL LABS FREDERICK MD	Aoki, Yoshio, Tanaka, Kunio	10/28/1966	6	Trans-1924	Not available	U	A - 01	Approved for public release; distribution is unlimited.	Not available	Maleic hydrazide (MH), which is an inhibition reagent for plant growth, is used for growing tobacco and tomato bud and preventing the budding and putrefaction of onions and potatoes during the preservation, but its effects on mycelia are not clear. Nishida and Okano have recently reported on tobacco anthrax germs, hip-disease germs, white silk disease germ and epidemic disease germs that MH inhibited the germ growth in culture media or affected the nutritional intake and MH treated tobacco sapling increased the resistance against anthrax disease and hip disease. In this paper, the effects of MH on growth of various plant disease germs are reported. (Author)

AD0837860	THE GERM CONTENT OF THE AIR AND ITS MEASUREMENT,	ARMY BIOLOGICAL LABS FREDERICK MD	Grundmann, W.	7/1/1968	6	Trans-487	Not available	U	A - 01	Approved for public release; distribution is unlimited.	Not available	The described germ counter makes it possible for the first time to determine the contamination of the air exactly and to keep it under constant surveillance. In particular, a possibility has been given to correlate a defined germ count with the concept of epidemiological crises as applied to the degree of resistance possessed by the effected living beings and the effectiveness of anti-epidemic measures. The germ counter may furnish valuable service not only with respect to hygienic and climatic studies in enclosed spaces but also in the open atmosphere, e.g. in the study of the filtering effect of wind breaks against plant parasites and for the determination of the dependence of bacterial dissemination on aerial and horizontal air movement. (Author)
AD0757729	A New Technique for Evaluating Antigenic Relatedness Among Viruses	MARYLAND UNIV COLLEGE PARK COLLEGE PARK United States	Hetrick, Frank M., Benton, Charles V., Novotny, James F., Vic, David	3/1/1973	30	Rept. no. 2	Not available	U	A - 01	Approved for public release; distribution is unlimited.	Technical Report, 01 Mar 1972, 28 Feb 1973	The ability of the macrophage migration inhibition (MMI) test for differentiating both bacterial viruses and two cross-reacting strains of the avian coronavirus, infectious bronchitis virus. During the past year, the authors have demonstrated that Adenovirus types 1, 4, 5 and 7 are all clearly separable by MMI test procedures. It was also determined that the optimal sensitizing dose for Adenovirus type 1 was 100 micrograms per pig and that doses above or below this level gave poorer responses. In addition, two nuclear polyhedrosis viruses (NPV) which infect the alfalfa looper and cabbage looper (two important insect pests) respectively were clearly differentiated by MMI test procedures. The polyhedral sizes, shapes and virion occlusion patterns of the two species of NPV were indistinguishable. Attempts to passively transfer the delayed response to normal peritoneal exudate cells by using RNA extracts of tissues from sensitized animals have thus far been unsuccessful.
AD1085858	Priority Challenges for Social and Behavioral Research and Its Modeling	RAND Corporation Santa Monica United States	Davis, Paul K., O'Mahony, Angela, G ulden, Timothy R., Osoba, Osonde A., Sieck, Katharine	1/1/2018	187	Not available	Not available	U	A - 01	Approved for public release; distribution is unlimited.	Technical Report	In the years ahead, social-behavioral (SB) modeling (i.e., modeling that reflects behavior of individuals and social entities) should help us (1) understand certain classes of SB phenomena with national significance; (2) anticipate how those phenomena may plausibly unfold; (3) estimate potential desirable and undesirable effects of additional events in the world or of possible U.S. or adversary interventions; and (4) inform decision making. The phenomena of interest span a broad gamut that includes radicalization for terrorism, the weakening of democracy and national cohesion by foreign information operations campaigns, improving prospects for stability after international interventions, managing behaviors of populations after natural disasters, and dealing with opioid or obesity epidemics. Each such topic would be a good national challenge, as discussed later. Each has complex multi-dimensional social phenomena that are difficult to analyze without the unique power of modeling. In other domains, such modeling helps planners to strategize, plan, design, and adapt. It helps to avoid blunders and bad side effects of policy interventions. Today's SB modeling and related analysis is contributing far less to the study of such national issues than it could. Major advances are needed. But in what? In this report we summarize the primary current shortcomings and obstacles inherent and some due to current methods and practices. We identified these obstacles through a review of recent trends and previous research in social-behavioral modeling and simulation, and through discussions and one-on-one conversations with leading experts in this area at RAND workshops and other conferences. In this report we then identify and discuss steps that deserve priority attention. Some of our suggestions build on earlier studies; some are newer and more radical.

ADA218296	Alphaviruses	ARMY MEDICAL RESEARCH INST OF INFECTIOUS DISEASES FORT DETRICK MD	Peters, Clarence J., Dalrymple, Joel M.	1/1/1990	49	Not available	USAMRIID	U	A - 01	Approved for public release; distribution is unlimited.	Not available	The alphaviruses constitute an important genus of the Togaviridae family. They are transmitted by mosquitoes, and their major ecological maintenance strategy is passage from mosquito to vertebrate to mosquito. Thus, an understanding of their epidemiology requires an appreciation of the factors that regulate populations of arthropods, vectors, and their interactions, as well as knowledge of the viral genome and its phenotypic expression. In many cases, humans are not the major vertebrate amplifier, but rather an accidental target of virus infection with no significance in the further propagation of virus. When humans are infected, the consequences can range from asymptomatic seroconversion to devastating illness. In this chapter we attempt to summarize basic concepts of the classification of these viruses, their ecological strategies and epidemic potential, clinical disease manifestations, and prospects for their control. Their replication strategy is discussed in detail in Chapter 25, but this chapter presents molecular data that bear on these biological issues. We concentrate on the viruses of greatest biomedical significance; but even in the case of very important viruses, many uncertainties exist in our knowledge base. Keywords: Reprints; Morphology.
ADA429085	Some Topics in Computer Assisted Modeling, Simulation, and Data Analysis	RICE UNIV HOUSTON TX DEPT OF STATISTICS	Thompson, James R.	11/30/2001	6	ARO-40014.3-MA	40014.3-MA, ARO	U	A - 01	Availability: This document is not available from DTIC in microfiche.	Final rept. 1 Aug 1999-31 Jul 2002	The supported graduate student, John Dobelman has begun extensive work on his dissertation to find stochastic models to explain the mechanisms whereby electricity prices spike. Three books and six papers were authored or co-authored by Thompson during this grant period. The common thread is the development of models supported by intensive computer simulation to help explain and understand real world processes. Among these investigations are included models for statistical process control in situations new to SPC. Almost all SPC treatises deal with situations in which the paradigm is of mature usage. Thompson shows how difficult such implementations are to achieve in practice and gives means for jumpstarting SPC in such systems as the International Space Station. The first world AIDS epidemic has received substantial attention by Thompson. Most recently he has given a model based argument that there is no standalone AIDS epidemic in Europe: it only exists by contacts with American infectives. In stochastic process based economic modeling, Thompson and his co-authors have shown how effective simulation models of relative simplicity and parametric parsimony may be achieved by aggregation from the micro to the macro. The simugram is Thompson's discovery that we can forecast the future multivariate stochastic process of even a large portfolio by the use of simulation. The risk neutral formula of Black-Scholes-Merton is shown to be seriously deficient as a practical tool. Similarly, the artificiality of the portfolio paradigm of Markowitz is replaced by other, conceptually simple, but requiring extensive computer simulation, techniques. Work is done which shows how data analysis in high dimensions needs to be carried out with techniques very different from those used in low dimensions.
ADA534199	Medical Aspects of Disaster Preparedness and Response: A System Overview of Civil and Military Resources and New Potential	MARYLAND DEFENSE FORCE PIKESVILLE MD	Nelson, H. W., Arday, David	1/1/2007	28	Not available	SDF	U	A - 01	Approved for public release; distribution is unlimited.	Monograph	America's surge capacity medical infrastructure was in many respects launched in 1984, when the National Disaster Medical System, in a partnership between and among many public and private sector organizations and four federal agencies, emerged. Although this system has provided a critical service to those with medical needs, 9/11 and recent reassessments of the current medical threat environment pointed to emerging threats that have lead to the development of other surge responders, including the Surgeon General's MRC, reemphasis upon DoD and NG health related missions, and an incipient revival and expansion of SDF medical missions. The recent passage of the Pandemic and All-hazards Preparedness Act presents a renewed call for organized health volunteerism generally, and is a mandate for strengthening of all emergency health preparedness initiatives, as well as a strengthening of the uniformed Public Health Service and Veterans Administration to help meet emerging medical, mental health, mortuary and veterinary disaster response needs. Although the nation's medical system has struggled with the jurisdictional changes since 9/11 - it remains evident that America's emergency health volunteers will continue as never before to come to the aid of those with medical needs after a disaster befalls them.

ADA449557	An Evaluation of Pharmacy Data for Surveillance of Gastrointestinal and Respiratory Outbreaks	WALTER REED ARMY INST OF RESEARCH SILVER SPRING MD	Elbert, Yevgeniy,Hakre, Shilpa,Burkom, Howard,Pavlin, Julie	11/15/2004	41	Not available	WRAIR/MD	U	A - 01	Approved for public release; distribution is unlimited.	Briefing charts	ESSENCE (Electronic Surveillance System for the Early Notification of Community-Based Epidemics): (1) A U.S. Department of Defense (DoD) system; (2) Designed to detect infectious disease outbreaks; (3) Serves military active duty members, their beneficiaries, and retirees; (4) Uses mainly ICD-9-CM codes from outpatient visits; (5) Delay of 1-4 days from patient visit date to data capture date by ESSENCE.
AD1068835	MERS-CoV and H7N9 Influenza Assay Development on NGDX	Center for Advanced Molecular Detection JBSA-Lackland United States	CABALLERO,MANUEL, ARMSTRONG-SPENRATH,LAQUITA	7/1/2018	35	Not available	Not available	U	A - 01	Approved for public release; distribution is unlimited.	Technical Report	Deadly infectious diseases pose a prevalent danger to war fighters and warrior medics in remote, hostile areas. Infectious agents inevitably hinder the war fighters duty performance, even potentially cause mission failures. Therefore a crucial military need is to acquire the capabilities to rapidly detect the threat agents, and to expeditiously devise strategies to counter the threats. The Biomeme two3 (Biomeme, Inc., Philadelphia, PA) is a light (1.2 lb.), hand-held, field-deployable real-time polymerase chain reaction (PCR) device that could meet these needs. The device is coupled to an iPhone with unique software for data analysis and transmission to intended recipients. This work reports a comparative research testing and evaluation of this system, focusing on detection of the Middle East Respiratory Syndrome Coronavirus (MERS-CoV) and Influenza A virus H7N9 for this assessment. Three Biomeme two3 instruments were purchased for this work. The reagents specifically designed and set in the appropriate format for Biomeme two3 and the target templates were also purchased from the manufacturer of the instrument. For MERS-CoV, the detection targets were an orf1a segment and a segment upstream of gene E (termed upE). For H7N9, the target amplicons were in the H7 and N9 genes. The instrument performance was evaluated for template copy numbers that varied from 50 to 500,000 per reaction.
ADA223527	An Epidemic of Oroya Fever in the Peruvian Andes	NAVAL MEDICAL RESEARCH INST BETHESDA MD	Gray, Gregory C.,Johnson, Alberto A.,Thornton, Scott A.,Smith, William A.,Knobloch, Jurgen	1/1/1990	8	NMRI-90-43	Not available	U	A - 01	Approved for public release; distribution is unlimited.	Journal article	Between February and October 1987, a febrile illness killed 14 persons and seriously affected at least 14 others in Shumpillan, a remote Peruvian mountain village of 353 people. The illness was characterized by fever, headache, chills, and pallor. The fatality rate of untreated cases was 88%. The patients, 71% of whom were male, were 1-75 years of age. Fatal illnesses progressed from lethargy to coma to death in 3-60 days. Patients treated empirically with chloramphenicol survived. Bartonella bacilliformis was isolated from the whole blood of 3 patients. A serologic study revealed a high prevalence of antibodies to B.bacilliformis in the villagers. It is concluded that the villagers suffered from an epidemic of Oroya fever.
AD1011150	Identification of Aminopeptidase N as a Cellular Receptor for Human Coronavirus-229E	Uniformed Services University Of The Health Sciences Bethesda United States	Yeager,Curtis	5/12/1992	219	Not available	Not available	U	A - 01	Approved for public release; distribution is unlimited.	Technical Report	Human coronaviruses (HeV) are the cause of 25 percent of common colds. Difficulty in isolation of clinical pathogens has limited the characterization of these viruses and their interaction with host cells. The purpose of this research project was to characterize and identify the cellular receptor(s) for HCV-229E.
ADA433727	Real-Time Polymerase Chain Reaction Assays for Rickettsial Diseases	NAVAL MEDICAL RESEARCH CENTER SILVER SPRING MD	Richards, Allen L.	6/1/2004	13	Not available	NATO	U	A - 01	Approved for public release; distribution is unlimited., NATO	Conference paper	Arthropod-borne rickettsial diseases are found worldwide and have been the cause of significant amounts of suffering, disability and fatalities among both military and civilian populations throughout history. Because of the similarity to many infectious diseases in signs and symptoms, rickettsial diseases are difficult to diagnose clinically. Moreover, due to the time it takes for antibodies to develop and the low concentration of rickettsial agents in the blood stream the diseases are also difficult to diagnose by laboratory methods. For that reason we have developed real-time PCR assays to detect rickettsial disease agents both at the genus and the species level. Real-time PCR assays were developed to identify: 1) pathogenic Rickettsia; 2) Rickettsia prowazekii and R. rickettsii, the etiological agents for epidemic typhus and Rocky Mountain spotted fever (RMSF) and potential BW agents; R. typhi and R. felis, the flea-borne typhus disease agents, and Orientia (formerly Rickettsia) tsutsugamushi, the scrub typhus agent. The assays utilize molecular beacon probes, which fluoresce when they encounter the target DNA sequence. By manipulating the annealing temperature, and magnesium, probe and primer concentrations of the assays, the optimal conditions were determined. A panel of 22 strains of rickettsiae, 20 strains of orientiae and 19 species of non-rickettsial agents were used to determine the specificity of the assays. Plasmids encoding the target sequences were used to calculate the sensitivity of the assays. These real-time PCR assays were found to be capable of detecting rickettsial disease agents quickly and with great sensitivity and specificity.

ADA517677	Assessing Fitness and Nutrition Programs in the Marine Corps: A Qualitative Analysis of Perceptions of Effectiveness	NAVAL POSTGRADUATE SCHOOL MONTEREY CA	Taibi, Paula D.,Wallace, Leigh E.	12/1/2009	146	Not available	NPS	U	A - 01	Approved for public release; distribution is unlimited.	Master's thesis	America is facing an overweight epidemic, and the Marine Corps is not immune to this problem. The percentage of overweight Marines doubled between January 2003 and December 2008. The objective of this research was to assess the current Marine Corps physical fitness and nutrition programs and their effectiveness as perceived by Marines. The authors conducted surveys and interviews to gain insight on how Marines felt the Marine Corps remedial programs (Body Composition Program (BCP), Remedial Conditioning Program (RCP), and Military Appearance Program (MAP)) and the Semper Fit Program supported them in maintaining a healthy lifestyle.
ADA598479	Global Emerging Infection Surveillance and Response (GEIS)- Avian Influenza Pandemic Influenza (AI/PI) Program	KENYA MEDICAL RESEARCH INST NAIROBI	Mpoke, Solomon,Coldren, Rodney L.	10/1/2010	14	Not available	USAMRMC	U	A - 01	Approved for public release; distribution is unlimited.	Annual rept. 13 Sep 2009 12 Sep 2010	The purpose of this contract is to carry out emerging infectious disease surveillance in Kenya. Specific areas in which work is performed include respiratory illness surveillance (particularly influenza), acute febrile illness surveillance, malaria resistance surveillance, diarrhea etiology and antimicrobial resistance surveillance, sexually transmitted illness surveillance, and capacity building. KEMRI maintained surveillance sites in both Ministry of Health and now Kenyan Defense Forces clinics and hospitals throughout Kenya. KEMRI operated reference laboratories for this work in Nairobi, Kericho, and Kisumu, including the National Influenza Center (NIC), the arbovirus reference laboratory, the antimalarial resistance laboratory, entomology facilities, the Center of Excellence in Microscopy, the microbiology reference laboratory. Capacity development projects include continuation of a laboratory and medical maintenance student attachment program and a safety training program. The program was able to characterize respiratory viruses causing influenza-like illness in Kenya, determine etiologies of diarrheal illnesses and the antimicrobial resistance patterns of bacterial causes, determine the etiologies of sexually transmitted infections and acute febrile illnesses in military and civilian populations, and establish the pattern of antimalarial resistance across Kenya. Outbreak investigation and response continues. AFI expanded into regions around Somalia.
ADA509032	The First Four Years: A Synopsis of the Global Effort. Department of Defense HIV/AIDS Prevention Program (DHAPP)	NAVAL HEALTH RESEARCH CENTER SILVER SPRING MD	Not available	6/1/2005	81	Not available	NHRC/MD	U	A - 01	Approved for public release; distribution is unlimited.	Not available	In response to the increasing devastation and instability in developing countries caused by the HIV/AIDS pandemic, the United States Government augmented its existing HIV/AIDS programs by pioneering the Leadership and Investment in Fighting an Epidemic (LIFE) Initiative, commencing in 1999. At the urging of the White House, the Department of Defense (DoD) committed to participate but limited its scope of activities to prevention programs in sub-Saharan Africa. The uniformed militaries in sub-Saharan Africa face serious health threats, which have an effect on operational readiness and national security due to high rates of HIV infection among their personnel. The Deputy Assistant Secretary of Defense (DASD) for African Affairs and the DASD for Clinical and Program Policy subsequently provided policy direction, technical support, and a comprehensive strategy for the DoD portion of the LIFE Initiative. Under the leadership of the Office of the DASD for African Affairs, a plan was conceived to cover 42 African militaries at 5 priority levels. Under this plan, program staff approached Ministers of Defense and their military chiefs with an offer of technical assistance and fiscal support. The US Congress provided \$10 million as part of the Defense Health Program budget to support the DoD Life Initiative for fiscal years 2001 to 2002. In November 2000, the US Navy was designated as Executive Agent for the DoD LIFE Initiative, with responsibility for program management assigned to the Naval Health Research Center, San Diego, California. During the early stages of the LIFE Initiative, the DoD joined ongoing efforts of the US Agency for International Development (USAID), the Centers for Disease Control and Prevention (CDC), and those managed by allies and the United Nations, to provide uniformed personnel with access to existing HIV/AIDS prevention, care, and treatment programs.

ADA498672	Military Medical Research in Support of National Instruments of Power	ARMY WAR COLL CARLISLE BARRACKS PA	Jimenez, Daniel H.	3/26/2009	32	Not available	USAWC	U	A - 01	Approved for public release; distribution is unlimited.	Strategy Research Project	At the dawn of this new millennium, there are few threats more menacing to mankind than the global Human ImmunoDeficiency Virus/Acquired Immune Deficiency Syndrome (HIV/AIDS) pandemic. The current national security strategy and national military strategy acknowledge the threat posed by infectious diseases like HIV/AIDS and the potential adverse effects pandemic diseases have to vital U.S. interests. This strategy research project examines how military medical research serves as a soft power asset and reveals how military medical research strengthens the nation's diplomatic, informational, military, and economic instruments of national power. Improving the health of people in other countries makes both strategic and moral sense and could become an integral part of future U.S. foreign policy. Beyond enhancing security, prosperity, and democracy, a vigorous international health policy, actively supported by a robust program of military medical research, will enhance U.S. global leadership. Giving higher priority to global health in foreign policy is good for the United States and good for the world.
ADA556998	Toward an Ideal Security State for Northeast Asia 2025	MAUREEN AND MIKE MANSFIELD FOUNDATION WASHINGTON DC	Flake, L. G.	4/1/2010	214	DTRA/ASCO-2010-020	2010-020,DTRA/ASCO	U	A - 01	Approved for public release; distribution is unlimited.	Not available	North America or even Southeast Asia Northeast Asia is home to the world's second and third largest economies Japan and China and home to two of the United States most important allies in Asia Japan and South Korea. It also is home to two of the most potentially dangerous unresolved conflicts across the demilitarized zone in Korea and across the Taiwan Straits.
ADA434642	Interferon Alfacon1 is an Inhibitor of SARS-Corona Virus in Cell-Based Models, Antiviral Research	ARMY MEDICAL RESEARCH INST OF INFECTIOUS DISEASES FORT DETRICK MD	Paragas, Jason,Blatt, Lawrence M.,Hartmann, Chris,Huggins, John W.,Endy, Tim P.	1/4/2005	5	RPP-05-260	USAMRIID	U	A - 01	Approved for public release; distribution is unlimited., Availability: This document is not available from DTIC in microfiche.	Conference paper	Preliminary data examining interferon alfacon1 treatment of SARS-CoV (severe acute respiratory syndrome - corona virus)-infected patients suggests this therapy is well tolerated and of therapeutic benefit. We report herein that interferon alfacon1, has potent in vitro antiviral activity against SARS-CoV. In a cytopathic effect (CPE) assay, interferon alfacon1 inhibited the generation of CPE in a dose-dependent manner with an IC50 of 0,001 g/ml, a clinically achievable level. Furthermore, interferon alfacon1 also demonstrated significant antiviral activity in yield reduction and plaque reduction assays. The in vitro activity of interferon alfacon1 against SARS CoV suggests continued evaluation of interferon alfacon1 as a therapeutic treatment for patients infected with SARS-CoV.
ADA071142	Vectors and natural Reservoirs of Oropouche Virus in the Amazon Region.	PAN AMERICAN HEALTH ORGANIZATION WASHINGTON D C	LeDuc,James W.,Hoch,A. Lynn,Pinheiro,Francisco De P.,Peterson,Norman E.,Western,Karl A.	12/1/1978	165	Not available	Not available	U	A - 01	Approved for public release; distribution is unlimited.	Final rept. 1 Nov 77-30 Oct 78,	Current efforts attempt to elucidate the endemic and epidemic cycles of Oropouche (ORO) virus. This virus cause disease in man generally of about 7 days duration, with some patients severely ill, occasionally to the point of prostration. This disease has been reported to cause large scale epidemics in urban areas of northern Brazil. Accomplishments included in this report with regard to ORO virus have been divided into two major categories; studies on the epidemic cycle, and studies on the endemic cycle. Under the category studies on the epidemic cycle, conclusive data are presented which establish the midge, Culicoides paraensis, as the primary epidemic vector of ORO virus. Subsequent sections present results of investigations of the basic biology of this midge. A second section of studies on the epidemic cycle of ORO virus deals with man as the principal vertebrate host in the epidemic cycle. Here evidence is presented which indicates that, when infected, man circulates ORO virus in sufficient titer to infect feeding C. paraensis. Finally, results of an epidemic of ORO virus disease which occurred in and around Tome, Acu, Para, Brazil are reported.
AD0438774	EPIDEMIC COXSACKIE VIRUS INFECTION WITH MIXED CLINICAL MANIFESTATIONS	WALTER REED ARMY MEDICAL CENTER WASHINGTON DC	Artenstein, Malcolm S.,Buescher, Edward L.	7/12/1963	10	Not available	WRAIR	U	A - 01	Approved for public release; distribution is unlimited.	Not available	Not available
ADA257258	Ad Hoc Subgroup on Threat of Aids on Operational Deployment of Army Forces to a Theater	ARMY SCIENCE BOARD WASHINGTON DC	Schmitt, Harrison H.,Alexander, Martin,Barth, Delbert S.	8/1/1990	88	Not available	ASB	U	A - 01	Approved for public release; distribution is unlimited.	Final rept.	This report is an evaluation of current Army policy with regard to the significant choices and challenges presented by the HIV pandemic. The report discusses specific finding and recommendations in the areas of Combat Readiness, Medical Care and Disease Intervention and Research. Human Immunodeficiency virus (HIV), Acquired Immune Deficiency Syndrome (AIDS), Deployability, Blood Supply, Medical Treatment and Prevention, Research Resources.

ADA257437	Changes in Soldier Nutritional Status and Immune Function During the Ranger Training Course	ARMY RESEARCH INST OF ENVIRONMENTAL MEDICINE NATICK MA	Moore, Robert J.,Friedl, Karl E.,Kramer, Tim R.,Martinez-Lopez, Lester E.,Hoyt, Reed W.	9/10/1992	175	T13-92	USAMRDC	U	A - 01	Approved for public release; distribution is unlimited.. Availability: Document partially illegible.	Final rept. Jun 1991-Jan 1992	Prompted by several infectious disease epidemics and the perception that weight loss was excessive, the US Army -anger Training Brigade requested an assessment of the effect of restricted rations on nutritional status, physical performance, and immune function during summer Ranger training. A comprehensive physiological evaluation of 55 volunteers who completed all 4 phases of the 8-1/2 wk course was made at the beginning and end of the course, with abbreviated measurements made at the end of each 2 wk phase. The study revealed that Ranger students have a decreased protection against infection, with decreased T- lymphocyte function. There was no evidence of a vitamin, mineral, or protein deficiency despite reduced rations, and extensive clinical chemistry profiles were remarkably normal, indicating that this is an uncomplicated energy deficiency (average energy expenditure and intake: 4010 and 2800 kcal/day, respectively). Weight loss was high (15.6% of weight) but recovery to original fitness levels occurred by 6 months after the end of training. It is concluded that as little as 300-400 kcal/day increase in intakes may attenuate decrements in physical performance and immune function. A follow-on study of the effects of an intervention using the LLRP ratio is proposed. Nutrition, energy expenditure, energy intake, weight loss, immune function, physical performance, medical problems, cellulitis, body composition, vitamins clinical chemistry.
AD1012562	Pathosphere.org: Pathogen Detection and Characterization Through a Web-based, Open-source Informatics Platform	USAMRIID Frederick United States	Kilianski,Andy,Carcel,P atrick,Yao,Shijie,Roth,P ierce,Schulte,Josh,Don arum,Greg B.,Fochler,Ed T.,Hill,Jessica M.,Liem,Alvin T.,Wiley,Michael R.,Ladner,Jason T.,Pfeffer,Bradley P.,Elliot,Oliver,Petroso v,Alexandra,Jima,Derej e D.,Vallard,Tyghe G.,Melendrez,Melanie C.,Skowronski,Evan,Qu an,Phenix-Lan,Lipkin,W. I.,Gibbons,Henry S.,Hirschberg,David L.,Palacios,Gustavo F.,Rosenzweig,C. N.	12/29/2015	35	TR-16-171	Not available	U	A - 01	Approved for public release; distribution is unlimited.	Journal Article	The detection of pathogens in complex sample backgrounds has been revolutionized by wide access to next-generation sequencing (NGS) platforms. However, analytical methods to support NGS platforms are not as uniformly available. Pathosphere (found at Pathosphere.org) is a cloud based open sourced community tool that allows communication, collaboration and sharing of NGS analytical tools and data amongst scientists working in academia, industry and government. The architecture allows for users to upload data and run available analytical pipelines without the need for onsite processing hardware or technical support.
ADA426745	Interferon-Beta 1a and SARS Coronavirus Replication	CHILDREN'S HOSPITAL CINCINNATI OH	Hensley, Lisa E .,Fritz, Elizabeth A.,Jahrling, Peter B.,Karp, Christopher L.,Huggins, John W.	2/1/2004	4	Not available	USAMRIID	U	A - 01	Approved for public release; distribution is unlimited.	Journal article	A global outbreak of severe acute respiratory syndrome (SARS) caused by a novel coronavirus began in March 2003. The rapid emergence of SARS and the substantial illness and death it caused have made it a critical public health issue. Because no effective treatments are available, an intensive effort is under way to identify and test promising antiviral drugs. Here, we report that recombinant human interferon-beta 1a potentially inhibits SARS coronavirus replication in vitro.

AD0671821	VECTORBORNE DISEASE AND CONTROL	RESEARCH TRIANGLE INST RESEARCH TRIANGLE PARK NC OPERATIONS RESEARCH AND ECONOMICS DIV	Johnson, T.,Johnston, D. R.	6/1/1968	143	RTI-R-OU-303,USNRDL-TRC-67-43	TRC-67-43,OCD	U	A - 01	Approved for public release; distribution is unlimited. Availability: Document partially illegible.	Final rept. Oct 1966-Sep 1967	The study develops quantitative estimates of the potential postattack threat from vectorborne diseases. The diseases chosen for analysis on the basis of previous estimates of importance are plague, epidemic typhus, murine typhus, mosquitoborne encephalitis, and rabies. The analysis is based on a set of explicit assumptions about postattack medical services and command-and-control in the absence of specific plans to combat vectorborne diseases. The regional distribution of risk is considered. It is concluded that in the absence of specific pre attack preparations, the best estimate is that 2 percent of the survivors may contract one of these diseases and 0.75 percent of the survivors may die from one of these diseases. Plague in the western states might be expected to account for one-half of the cases and two-thirds of the deaths from vectorborne diseases. Thus vectorborne diseases are a potential postattack problem, but are less of a potential hazard than the enteric or the man-to-man disease groups. Methods of control of rodents, rodent ectoparasites, lice, and mosquitoes are reviewed. Normal inventories of pesticides are estimated to be adequate in quantity and distribution to support postattack vector control operations. Dissemination of information in the postattack period is judged to be of prime importance in controlling the vectorborne disease threat. The relative magnitude of the postattack vectorborne disease threat indicates that only low cost pre attack preparations such as recognition of the threat in plans and the maintenance of records of commercial inventories are needed and are feasible.
ADA053168	Vectors and Natural Reservoirs of Oropouche Virus in the Amazon Region	PAN AMERICAN HEALTH ORGANIZATION WASHINGTON DC	Roberts, Donald R.,Pinheiro, Francisco de P.,Hoch, Alfred L.,LeDuc, James W.,Peterson, Norman E.	11/1/1977	25	Not available	USAMRDC	U	A - 01	Approved for public release; distribution is unlimited.	Rept. no. 1 (Final) Feb-Oct 1977	In 1977 a program of field and laboratory studies was initiated to study Oropouche virus in the Amazon region of Brazil. This virus is a frequent cause of urban epidemics of a febrile disease in this region and Culicoides paraensis has been incriminated as the vector. This research program includes (1) surveillance of forest vertebrates and invertebrates near Santarem, Brazil to detect the natural reservoirs and vector(s); (2) studies on the biology and population dynamics of C. paraensis in the urban environments of Belem, Brazil, (3) laboratory studies at the Evandro Chagas Institute to evaluate vector potential of various hematophagous insects in transmission tests, and (4) efforts to colonize the various potential vector species with emphasis on C. paraensis. The C. paraensis have efficiently transmitted virus in the laboratory. The other candidate vector Culex quinquefasciatus were not efficient vectors under laboratory conditions. Observations have been made on the biology of the midges in the field and laboratory. The field surveillance program was established and antibodies to the virus have been found in one monkey.
AD0807019	RICKETTSIAL DISEASES: A. TRENCH FEVER. B. EPIDEMIC TYPHUS,	HARVARD SCHOOL OF PUBLIC HEALTH BOSTON MA	Murray, Edward S.,Vinson, J. William	2/1/1967	22	Not available	Not available	U	A - 01	Approved for public release; distribution is unlimited.	Annual progress rept. 1 Feb 66-31 Jan 67,	A. Trench Fever. Synthetic Juvenile Hormone was lethal for body lice. CF antigens from R. quintana propagated on blood agar were used to establish etiology of cases of trench fever and to begin to determine the geographic distribution of the disease. An antigenic relationship may exist between R. quintana and Canadian Vole Agent. Two rickettsia-like agents were isolated from guinea pigs. Tests suggested that positive reactions of Mexican donkey sera to soluble typhus antigen were probably non-specific. The etiology of a small typhus epidemic in Mexico was serologically confirmed. B. Epidemic Typhus. Over the past 15 years studies have been carried out to determine the immune status of communities subjected over many years to epidemics of typhus. By means of a vaccine response test applied to sample groups of Bosnians in 1951, 1958 and 1966, it has been demonstrated that over 90% of the inhabitants born before 1941 were infected with typhus. Only an occasional infection has occurred in people born after the war. Residual typhus antibodies have been shown to be steadily declining. Positive Weil-Felix responses in the recrudescent Brill Zinsser disease cases were demonstrated to be more frequent as the interval between the primary and recrudescent attack widened. (Author)



ADA510981	The 2009 Influenza Pandemic: An Overview	LIBRARY OF CONGRESS WASHINGTON DC CONGRESSIONAL RESEARCH SERVICE	Lister, Sarah A.,Redhead, C. S.	11/16/2009	46	CRS-R40554	CRS/DC	U	A - 01	Approved for public release; distribution is unlimited.	Congressional rept.	The World Health Organization (WHO) declared the outbreak to be an influenza pandemic the first since 1968. The novel "H1N1 swine flu" was first identified in California in late April. Since then U.S. officials adopted a response posture under the overall coordination of the Secretary of Homeland Security. Among other things officials established a government-wide informational website ( <a href="http://www.flu.gov">http://www.flu.gov</a> ) released antiviral drugs from the national stockpile developed new and published guidance for the clinical management of patients and the management of community and school outbreaks. This report provides a synopsis of key events in the H1N1 pandemic response diagnostic tests for the H1N1 virus.
ADA469029	Prevalences, Genotypes, and Risk Factors for HIV Transmission in South America	NAVAL MEDICAL RESEARCH INST DETACHMENT LIMA (PERU)	Montano, Silvia M.,Sanchez, Jose L.,Laguna-Torres, Alberto,Cuchi, Paloma,Avila, Maria M.,Weissenbacher, Mercedes,Serra, Margarita,Russi, Jose Vinoles ;Jose C.,Aguayo, Nicolas	2/7/2005	8	Not available	WRAIR/MD	U	A - 01	Approved for public release; distribution is unlimited.	Journal article	HIV cross-sectional studies were conducted among high-risk populations in 9 countries of South America. Enzyme-linked immunosorbent assay screening and Western blot confirmatory testing were performed, and env heteroduplex mobility assay genotyping and DNA sequencing were performed on a subset of HIV-positive subjects. HIV prevalences were highest among men who have sex with men (MSM; 2.0%-27.8%) and were found to be associated with multiple partners, noninjection drug use (non-IDU), and sexually transmitted infections (STIs). By comparison, much lower prevalences were noted among female commercial sex workers (FCSWs; 0%-6.3%) and were associated mainly with a prior IDU and STI history. Env subtype B predominated among MSM throughout the region (more than 90% of strains), whereas env subtype F predominated among FCSWs in Argentina and male commercial sex workers in Uruguay (more than 50% of strains). A renewed effort in controlling STIs, especially among MSM groups, could significantly lessen the impact of the HIV epidemic in South America.
ADA261546	Molecular Studies of Alphavirus Immunogenicity	CALIFORNIA INST OF TECH PASADENA	Strauss, James H.	12/3/1992	46	Not available	USAMRDC	U	A - 01	Approved for public release; distribution is unlimited.	Final rept. 30 Mar 1990- 30 Sep 1992	The alphaviruses consist of a group of 26 closely related viruses. Many of these viruses can cause disease in man, characterized by encephalitis, polyarthritis, fever or rash, depending upon the virus. In the 2.5 years of research supported under this contract we have mapped antigenic epitopes in the structural glycoproteins of alphaviruses that lead to neutralization of virus infectivity upon reaction with and antibody, and have determined the sequence relationships of a number of Sindbis-like alphaviruses to one another and to other alphaviruses. We found that a domain of glycoprotein. E2 of alphaviruses, between residues 170 and 220, was an important region for binding of monoclonal antibodies that neutralize virus infectivity, making it critical importance for the immune response required for protection from infection by the virus. In the determination of the relationships of alphaviruses to one another, we have determined complete or partial sequences of 8 different alphavirus RNAs. These include Ockelbo virus, a virus causing epidemic polyarthritis in northern Europe, strains of Sindbis virus from Africa, India, Australia and New Zealand arid Aura virus from South America.

ADA589392	State Collapse, Insurgency, and Counterinsurgency: Lessons from Somalia	ARMY WAR COLLEGE CARLISLE BARRACKS PA STRATEGIC STUDIES INSTITUTE	Pham, J. P.	11/1/2013	85	Not available	AWC/SSI	U	A - 01	Approved for public release; distribution is unlimited.	Not available	For almost a generation, Somalia has been a byword for state failure, defying the combined efforts of diplomats and soldiers to restore some semblance of order, to say nothing of a functional national government. In the absence of an effective sovereign, the country is a backdrop for multiple humanitarian crises, as well as the emergence of an epidemic of maritime piracy that threatened vital sea lanes in the Gulf of Aden and the western Indian Ocean. Even worse, notwithstanding a military intervention by the army of neighboring Ethiopia and the subsequent deployment of an African Union force operating with a mandate from the United Nations Security Council, an al-Qaeda-linked militant group, al-Shabaab, managed to seize control of most of central and southern Somalia and confined the internationally-recognized government and the peacekeepers protecting it to little more than a few besieged districts in the capital of Mogadishu. Consequently, in the space of months, the tide was turned against the insurgents, and a new Somali authority, appointed in late 2012, presents what appears to be the most promising chance for a permanent government in recent memory. It is not surprising that many policymakers have sought to tease out lessons from the apparent success of the Somali model that might be applicable to similar situations, both in Africa and beyond, where weak governments face Islamist insurgents, including the Sahel, in particular where al- Qaeda-affiliated fighters and their allies have posed severe challenges to embattled governments. In this monograph, however, Dr. J. Peter Pham adopts a different approach. Beginning with a keen appreciation for the intricacies of Somali culture and history, he argues that the key is to understand political legitimacy among the Somali and then examines how both al-Shabaab and the different local polities that have emerged in Somalia have, to varying degrees, acquired it as well as how successive Somali regimes have not.
AD0835181	USE OF FLUORESCENT ANTIBODY METHOD FOR THE RAPID DIAGNOSIS OF INFLUENZA DURING AN EPIDEMIC	ARMY BIOLOGICAL LABS FREDERICK MD	Blaskovic, D.,Albrecht, P.	9/12/1966	4	TRANS-1835	SMUFD	U	A - 01	Approved for public release; distribution is unlimited.	Not available	Rabbit specific immune gamma-globulins were combined against influenza virus A2, A1, B, B1, and C with fluorescein isothiocyanate (FITC). Such fluorescent antibodies were used for a rapid diagnostic test of nasal smears (concha inferior) from people suffering from A2 influenza or living together with patients at the same place during the influenza epidemic caused by the A2 type. In five out of eleven persons examined daily, specific immuno-fluorescence of the cylinder epithella was demonstrated in the first three days. Influenza was serologically corroborated in nine persons. Further two did not produce specific antibodies although the cytological analysis of nasal mucosal cells as well as mild clinical signs showed a definite infection. As a contribution to quick influenza diagnosis, the demonstration of influenza antigen can be also used with the aid of fluorescent antibodies in amnion and amniotic fluid cells, if the chicken embryo was inoculated in the first passage with influenza-virus containing material. In influenza patients the cytological analysis of smears from the inferior concha shows changes on the cells (degeneration, cytopathic effect, inclusion formation, occurrence of leukocytes). The use of fluorescent antibody method in the rapid diagnosis of influenza on smears of the nasal mucosa, prepared during the first three days of sickness, can be recommended as a suitable method.

ADA229139	Manual of Hemorrhagic Fever with Renal Syndrome	KOREA UNIV SEOUL INST FOR VIRAL DISEASES	Lee, Ho W.,Dalrymple, Joel M.	4/1/1989	134	Not available	Not available	U	A - 01	Approved for public release; distribution is unlimited.	Not available	Studies have confirmed that the epidemic hemorrhagic fever in the people's Republic of China and the Far Eastern hemorrhagic nephroso-nephritis in the Soviet Union are caused by the same virus and the HFRS in European Russian and the Balkan countries and nephropathia epidemica in Scandinavia are caused by Puumala virus, an antigenically related Bunyavirus that is distinguishable serologically from Hantaan virus. The nephropathia epidemica antigen has been detected and the virus has been isolated from the lungs of the reservoir bank voles (Clethrionomys glareolus). In addition, serologic surveys of patients in Sweden, Finland, Hungary, Yugoslavia, and European Russia have shown that both the Hantaan and Puumala serotypes are circulating in these areas. The availability of Hantaan virus antigen has further permitted the diagnosis of urban cases throughout Korea, China, and Japan of a disease, transmitted to man from urban commensal rats (Ratus norvegicus and Rattus rattus), which is characterized by mild nephropathy with minimal shock or hemorrhagic diathesis or by only flu-like symptoms with albuminuria. Thus, Hantaan and related viruses cause an acute viral nephropathy across much of the Eurasian landmass in the form of a hemorrhagic disease of great clinical severity. Mortality rates range from 5% to more than 20% in East Asia. Lower mortality rates are found in nephropathia epidemica, a much milder form of non-hemorrhagic nephropathy in Scandinavia.
ADA547298	Public-Private Partnerships: Critical to Combatting the Next Pandemic Influenza in the State of Kansas	ARMY COMMAND AND GENERAL STAFF COLL FORT LEAVENWORTH KS	Gilbert, Jr, George O.	6/10/2011	112	ATZL-SWV-GDP	USACGSC	U	A - 01	Approved for public release; distribution is unlimited.	Master's thesis	The Pandemic Influenza outbreak that occurred in 1918 killed over 50 million people world-wide and was responsible for more deaths than our first two world wars combined. Unlike most threats to our national security, Pandemic Influenza does not have a political or ideological motive, does not distinguish between social or economic class, nor does it require special environmental conditions to attack. According to experts across the country and throughout the world, it is only a matter of time before the next Pandemic strikes. Over 85 percent of our nation's entire critical infrastructure belongs to the private sector. As equal stakeholders in the fight against the next Pandemic, it seems obvious that our Federal, State and local governments should solicit more support from the private sector to plan, mitigate, and respond to Pandemic Influenza. This study addresses how the Federal, State (Kansas) and local governments can better solicit the support of private sector industries in support of Pandemic Influenza. This thesis will delve into the Federal, State and local plans and policies to expose capability gaps that could be filled by private sector industries. This study will address what types of industries could be enlisted to provide desperately needed resources in the event of an outbreak. Finally, this research will look at the types of incentives or instruments of power the Federal, State and local governments could utilize to better facilitate public-private partnerships.
AD0419964	SHIGELLOSIS - A PREVENTIVE MEDICINE PROBLEM IN TURKEY.	UNITED STATES AIR FORCES IN EUROPE (TURKEY)	Not available	7/1/1963	11	USAFE-T-63-7	Not available	U	A - 01	Approved for public release; distribution is unlimited.	Not available	The presence of acute gastroenteritis in U. S. Personnel in Turkey as both an endemic and epidemic problem ha prompted thi publication to alert Medical Personnel of the actual hazard existing in Turkey. It i the intent of this paper to advise Medical Personnel that Shigella does exist in Turkey; to give a general idea of the frequency of the disease, andto outline certain procedures that may be useful in its diagnosis and control. Because of the difficulty in obtaining specimens from Turkish Nationals other than Indigenous food handlers, the works of local Medical Authorities are cited as evidence of endemic and epidemic Shigellosis in Turkey. (Author)

ADA190195	Repair, Evaluation, Maintenance, and Rehabilitation Research Program. A Review of Bird Pests and Their Management.	CONSTRUCTION ENGINEERING RESEARCH LAB (ARMY) CHAMPAIGN IL	Krzsik, Anthony J.	9/1/1987	147	CERL-REMR-EM-1	Not available	U	A - 01	Approved for public release; distribution is unlimited.	Final rept.,	This report provides a descriptive survey of conflicts and problems that birds have caused man, identifies the state of the art methodologies in bird management and control, and examines potential disease risks to humans. Bird problems are related to one or more of the following categories: damages and economic losses, human health and safety, aesthetics, inconveniences, and competition with native species and brood parasitism. Pigeons, starlings, and house sparrows, all introduced from Europe, and several species fo native blackbirds--usually in excessive numbers--are responsible for most problems in the United States. Most of the research on bird management has been directed to agricultural and feedlot depredations, winter blackbird-starling roosts, and safety hazards to aircraft; urban bird management strategies have not been adequately researched. Large-scale control measures include habitat modifications, repellents, frightening devices, and wetting agents. Exclusion, toxic baits, toxic perches, live-trapping, repellents, and frightening devices are all used for controlling small-scale or local bird damage problems. Birds represent a potential, although low, health or disease risk for humans. Most avian pathogens or parasites only affect other birds and host specificity is often high. Pets, poultry, game species, and aviary specimens have been affected in epidemics. The most important human diseases associated with birds in the United States are histoplasmosis, encephalitis, chlamydiaosis, and cryptococcosis. All four of these diseases are potential health hazards at Civil Works Projects because of the bird species present and site/habitat characteristics.
ADA472657	Pandemic Influenza: An Analysis of State Preparedness and Response Plans	LIBRARY OF CONGRESS WASHINGTON DC CONGRESSIONAL RESEARCH SERVICE	Lister, Sarah A.,Stockdale, Holly	9/24/2007	32	CRS-RL34190	CRS/DC	U	A - 01	Approved for public release; distribution is unlimited.	Congressional rept.	States are the seat of most authority for public health emergency response. Much of the actual work of response falls to local officials. However, the federal government can impose requirements upon states as a condition of federal funding. Since 2002, Congress has provided funding to all U.S. states, territories, and the District of Columbia, to enhance federal, state and local preparedness for public health threats in general, and an influenza ( flu ) pandemic in particular. States were required to develop pandemic plans as a condition of this funding. This report, which will not be updated, describes an approach to the analysis of state pandemic plans, and presents the findings of that analysis. State plans that were available in July 2006 were analyzed in eight topical areas: (1) leadership and coordination; (2) surveillance and laboratory activities; (3) vaccine management; (4) antiviral drug management; (5) other disease control activities; (6) communications; (7) health care services; and (8) other essential services. A history of federal funding and requirements for state pandemic planning is provided in an Appendix. This analysis is not intended to grade or rank individual state pandemic plans or capabilities. Rather, its findings indicate that a number of challenges remain in assuring pandemic preparedness, and suggest areas that may merit added emphasis in future planning efforts. Generally, the plans analyzed here reflect their authorship by public health officials. They emphasize core public health functions such as disease detection and control. Other planning challenges, such as assuring surge capacity in the health care sector, the continuity of essential services, or the integrity of critical supply chains, may fall outside the authority of public health officials, and may require stronger engagement by emergency management officials and others in planning.

ADA528202	Arboviral Etiologies of Acute Febrile Illnesses in Western South America, 2000-2007	NAVAL MEDICAL RESEARCH INST DETACHMENT LIMA (PERU)	Forshey, Brett M.,Guevara, Carolina,Laguna-Torres, V. A.,Cespedes, Manuel,Vargas, Jorge,Gianella, Alberto,Vallejo, Efrain,Madrid, Cesar,Aguayo, Nicolas	8/1/2010	16	Not available	X5	U	A - 01	Approved for public release; distribution is unlimited.	Journal article	Background: Arthropod-borne viruses (arboviruses) are among the most common agents of human febrile illness worldwide and the most important emerging pathogens, causing multiple notable epidemics of human disease over recent decades. Despite the public health relevance, little is know about the geographic distribution, relative impact, and risk factors for arbovirus infection in many regions of the world. Our objectives were to describe the arboviruses associated with acute undifferentiated febrile illness in participating clinics in four countries in South America and to provide detailed epidemiological analysis of arbovirus infection in Iquitos, Peru, where more extensive monitoring was conducted. Methodology/Findings: A clinic-based syndromic surveillance system was implemented in 13 locations in Ecuador, Peru Bolivia, and Paraguay. Serum samples and demographic information were collected from febrile participants reporting to local health clinics or hospitals. Acute-phase sera were tested for viral infection by immunofluorescence assay or RT-PCR while acute- and convalescent-phase sera were tested for pathogen-specific IgM by ELISA. Between May 2000 and December 2007, 20,880 participants were included in the study, with evidence for recent arbovirus infection detected for 6,793 (32.5%). Dengue viruses (Flavivirus) were the most common arbovirus infections, totaling 26.0% of febrile episodes with DENV-3 as the most common serotype. Alphavirus (Venezuelan equine encephalitis virus [VEEV] and Mayaro virus [MAYV]) and Orthobunyavirus (Oropouche virus [OROV], Group C viruses, and Guaroa virus) infections were both observed in approximately 3% of febrile episodes. In Iquitos, risk factors for VEEV and MAYV infection included being male and reporting to a rural (vs urban) clinic. In contrast, OROV infection was similar between sexes and type of clinic. Conclusio
ADA222730	Dengue Fever in American Military Personnel in the Philippines: Clinical Observations on Hospitalized Patients during a 1984 Epidemic	NAVAL MEDICAL RESEARCH UNIT NO 2 DETACHMENT JAKARTA (INDONESIA)	Hayes, C. G.,O'Rourke, T. F.,Fogelman, V.,Leavengood, D. D.,Crow, G.	3/1/1989	11	NAMRU-2-TR-1075	Not available	U	A - 01	Approved for public release; distribution is unlimited.	Technical rept. Jun-Aug 1984	From June-Aug 1984, 24 American military personnel were hospitalized with dengue (DEN) at Clark Air Base in the Philippines. Their infections were confirmed by serology using the hemagglutination-inhibition test and/or by virus isolation in Aedes pseudoscutellaris cell cultures. Most of the patients had a secondary type of antibody response probably reflecting prior vaccination against yellow fever. Three serotypes of DEN virus were isolated; 7 isolates of DEN 1, 4 isolates of DEN 3 and 3 isolates of DEN 2. All of the patients were Caucasian males between the ages of 20-43 years. All of the cases were clinically diagnosed as classical dengue fever. A platelet count 100,000/ul was a common finding (83.3%); however, hemoconcentration was not documented. Other major findings were the occurrence of mild hypotension (62.5%) and petechiae (37.5%). One patient presented with shock and upper gastrointestinal bleeding, but his diagnosis was complicated by a history of epigastric pain and use of aspirin. Although all of the patients fully recovered, the severity of illness was clearly documented by the average-length of hospitalization (5.9 days) and average time absent from work (8.7 days). Keywords: Dengue fever, Clark air base, 1984 dengue epidemic, Philippines.

ADA466801	Weathering the Storm. Leading Your Organization Through a Pandemic	NATIONAL DEFENSE UNIV WASHINGTON DC CENTER FOR TECHNOLOGY AND NATIONAL SECURITY POLICY	Prior, Stephen,Armstrong, Robert,Rowan, Ford,Hill-Harmon, Mary B.	11/1/2006	78	Not available	NDU/CTNSP	U	A - 01	Approved for public release; distribution is unlimited.	Not available	A storm is coming. None of us have ever experienced a storm like this. It could arrive very soon. But, as anyone who makes a living as a forecaster will quickly say, On the other hand . . . The storm is, of course, an influenza pandemic. Much has been written in the past few years about the virus known as H5N1 and its potential to develop into a pandemic. Some in the scientific community are questioning whether that will ever happen.1 If H5N1 does become pandemic, we have no basis for predicting whether it will be this year or 10 years from now. After all, H5N1 was first identified in birds in 1961; the first human cases did not appear until 1997. There is little doubt, though, that eventually something most likely a virus will mutate into a pandemic form. The SARS outbreak in February 2003 is a good example of how a lethal virus can emerge suddenly. We were fortunate that SARS, while contagious, did not become pandemic. The SARS outbreak and the emergence of H5N1 avian influenza provide us with a forewarning of the problems a larger outbreak will pose. It is prudent to use this time before the storm to plan for the societal disruption a pandemic will cause. A pandemic poses problems that most disasters even ordinary public health disasters do not present. First, the time period of the disaster is extended; the 1918 pandemic lasted about 18 months, with three distinct peaks of infection and illness. Another issue with a pandemic is its geographic spread; modern air travel can deliver any pathogen worldwide in a very short time frame. Thus, our planning has to take into account the necessity to change our social behaviors and possibly restrict our movements to limit the pathogen's spread.
AD0834337	SPECIFIC ANTIGEN PROPERTIES OF KERATOCONJUNCTIVITIS EPIDEMICA INCLUSIONS (TESTS USING THE IMMUNOFLUORESCENT METHOD)	ARMY BIOLOGICAL LABS FREDERICK MD	Geck, Peter,Imre, Gyorgy,Korchmaros, Imre,Nasz, Istvan,Dan, Pal	9/30/1966	10	TRANS-1861	ABL/MD	U	A - 01	Approved for public release; distribution is unlimited. Document partially illegible.	Not available	A keratoconjunctivitis epidemic occurred in Hungary in 1961-1962. Characteristic inclusion bodies were found in the epithelial cytoplasm of 88 percent of the scrapings taken during the acute phase of the disease. Through immunofluorescent tests it was established that these inclusion bodies have specific antigen properties which conform to the antigenic nature of type 8 adenovirus, which may be considered as the main pathogenic agent in this epidemic. According to this the inclusions of keratoconjunctivitis epidemic partly or entirely contain the pathogenic virus particles.
ADB026116	Prevention of Influenza and Other Respiratory Diseases	COLORADO UNIV MEDICAL CENTER DENVER	Meiklejohn, Gordon,Eickhoff, Theodore C.	2/1/1978	34	Not available	USAMRDC	U	A - 01	Approved for public release; distribution is unlimited.	Annual progress rept. 1 Jul 1977-31 Jan 1978	Antibody studies on 23 unvaccinated and 30 vaccinated persons with A/ Texas/77 influenza showed that almost all had been infected previously with H3N2 strains. HI titers were highest against the earliest strain and diminished progressively with more recent strains. They were lowest with A/Denver/77, the epidemic strain. Neuraminidase inhibiting (NI) antibody titers were low in the acute sera of unvaccinated persons, but 15 of 33 vaccinated persons had titers of > or = 16. The NI titer levels were of less value in predicting protection against influenza illness that HI antibody levels against the epidemic strain. The most useful tests for serodiagnosis were HI tests using the epidemic strain and complement-fixation tests. NI tests and HI tests with earlier H3N2 strains were less sensitive, particularly in vaccinated persons. The Lowry Air Force Base population, which had received A/Victoria/75 vaccine in November, 1977 had only a scattering of cases of influenza even though influenza A, mainly A/ victoria/75, was widespread in the Denver area in December, 1977 and January, 1978. HI tests for antibody for H1N1 strains showed that persons under 23 years of age lacked antibody for A/FM1/47, A/AA/57 or the new epidemic strain A/USSR/ 90/77. A large proportion of persons between 23 and 32 and a smaller proportion of older persons had antibody. Titers were considerably higher for A/FM1/47 than for A/AA/57 or A/USSR/90/77.

ADA539508	Entry of Yersinia Pestis into the Viable but Nonculturable State in a Low-Temperature Tap Water Microcosm	ARMY MEDICAL RESEARCH INST OF INFECTIOUS DISEASES FORT DETRICK MD	Pawlowski, David R., Metzger, Daniel J., Raslawsky, Amy, Howlett, Amy, Siebert, Gretchen, Karalus, Richard J., Garrett, Stephanie, Whitehouse, Chris A.	3/16/2011	11	Not available	USAMRIID	U	A - 01	Approved for public release; distribution is unlimited.	Journal article	Yersinia pestis, the causative agent of plague, has caused several pandemics throughout history and remains endemic in the rodent populations of the western United States. More recently, Y. pestis is one of several bacterial pathogens considered to be a potential agent of bioterrorism. Thus, elucidating potential mechanisms of survival and persistence in the environment would be important in the event of an intentional release of the organism. One such mechanism is entry into the viable but non-culturable (VBNC) state, as has been demonstrated for several other bacterial pathogens. In this study, we showed that Y. pestis became nonculturable by normal laboratory methods after 21 days in a low-temperature tap water microcosm. We further show evidence that, after the loss of culturability, the cells remained viable by using a variety of criteria, including cellular membrane integrity, uptake and incorporation of radio-labeled amino acids, and protection of genomic DNA from DNase I digestion. Additionally, we identified morphological and ultrastructural characteristics of Y. pestis VBNC cells, such as cell rounding and large periplasmic spaces, by electron microscopy, which are consistent with entry into the VBNC state in other bacteria. Finally, we demonstrated resuscitation of a small number of the non-culturable cells. This study provides compelling evidence that Y. pestis persists in a low-temperature tap water microcosm in a viable state yet is unable to be cultured under normal laboratory conditions, which may prove useful in risk assessment and remediation efforts, particularly in the event of an intentional release of this organism.
ADA359292	Studies into Militarily Relevant Infectious Diseases of Interest to Both United States and Royal Thai Governments	ARMED FORCES RESEARCH INST OF MEDICAL SCIENCES/ROYAL THAI ARMY MEDICAL COMPONENT BANGKOK	Puavilai, Gobchoke	11/1/1998	45	Not available	USAMRMC	U	A - 01	Approved for public release; distribution is unlimited.	Annual rept. 15 Oct 97-14 Oct 98	Cooperative Agreement # DAMD17-95-2-5001 was implemented 15 October 1994 to provide funding support for Royal Thai Army investigators at Armed Forces Research Institute of Medical Sciences (AFRIMS) engaged in research activities in collaboration with U.S. Army investigators. The principal focus of research under the agreement is directed to activities to prepare for development and testing of vaccine(s) for prevention of HIV infection and/or disease. During the report period, research activities were directed in 4 primary areas: (1) continuing and expanding studies of natural history of HIV infection/disease in Thais to define and establish endpoints for projected vaccine efficacy testing; (2) cohort development studies attempting to define an appropriate population(s) for vaccine testing; (3) conduction of phase 1/11 vaccine studies to determine safety and immunogenicity of potential HIV vaccines in Thais; and (4) Active surveillance of RTA conscripts to determine the dynamics of HIV epidemic in Thailand. Other efforts under the Cooperative Agreement during the reporting period included: (1) animal care and handling, including multiple small animal species and primate colony, in support of other ongoing research activities at AFRIMS, exclusive of HIV research; and (2) site maintenance activities in support of research activities including glassware and utilities support.
ADA277701	A Rapid and Sensitive PCR Strategy Employed for Amplification and Sequencing of por A from a Single Colony-Forming Unit of Neisseria meningitidis	WALTER REED ARMY INST OF RESEARCH WASHINGTON DC	Saunders, Nancy B., Zollinger, Wendell D., Rao, Venigalla B.	1/1/1993	12	WR-157-93	USAMRDC	U	A - 01	Approved for public release; distribution is unlimited. Document partially illegible.	Not available	The predicted amino acid sequence was determined for the class-1 outer membrane protein, PorA, from a B:15:P1.7,3 strain of Neisseria meningitidis that is currently causing an epidemic of meningitis in Northern Chile. The P1.7,3 PorA showed a unique sequence in the exposed loop 4 of the putative porin structure that is different from all the reported PorA sequences. Based on the nucleotide (nt) sequence of the P1.7,3 pora, we designed two sets of PCR (polymerase chain reaction) primers that specifically amplified pora from any N. meningitidis strain, and a third set of primers that amplified pora only from the P1.7,3 strain. Using these primers, we developed a sensitive double hot-start nested PCR (HNPCR) strategy that could amplify pora and generate nt sequence from as low as a single colony-forming unit. This strategy consisted of three phases of PCR. The first two phases were designed to generate amplified target DNA that could be directly visualized by ethidium bromide staining starting from one to two molecules of Neisseria genome. The third phase was designed to generate a sequence of several hundred nt directly from the amplified DNA. A number of culture-negative cerebrospinal fluid samples from individuals suspected of meningitis during a vaccine trial were analyzed by this strategy to obtain more accurate information on the actual number of cases that occurred in the study and the non-study populations. The basic HNPCR strategy described here could be applied to amplify and sequence target DNAs from any low-copy-number biological sample.

ADA449559	Improving Medical Surveillance through Fusing Disparate Evidence	JOHNS HOPKINS UNIV LAUREL MD APPLIED PHYSICS LAB	Lin, Jeffrey,Burkom, Howard,Feldman, Andrew B.,Murphy, Sean,Elbert, Yevgeniy,Hakre, Shilpa,Babin, Steven	11/15/2004	25	Not available	WRAIR/MD	U	A - 01	Approved for public release; distribution is unlimited.	Briefing charts	ESSENCE: An Electronic Surveillance System for the Early Notification of Community-based Epidemics. MONITORING HEALTH CARE DATA: (1) ~800 military treatment facilities since Sept 2001; (2) 12 major metropolitan civilian areas. EVALUATING DATA SOURCES: (1) Civilian physician visits; (2) OTC pharmacy sales; (3) Prescription sales; (4) Nurse hotline/EMS data; (5) Absentee rate data. Developing & implementing alerting algorithms.
ADA617598	Safety of the Pandemic H1N1 Influenza Vaccine among Pregnant U.S. Military Women and Their Newborns	NAVAL HEALTH RESEARCH CENTER SAN DIEGO CA	Conlin, Ava Marie S.,Bukowski, Anna T.,Sevick, Charter J.,DeScisciolo, Connie,Crum-Cianflone, Nancy F.	3/1/2013	10	NHRC-12-34	NMRC/MD	U	A - 01	Approved for public release; distribution is unlimited.	Journal article	A pandemic influenza A virus (pH1N1) emerged in April 2009, preferentially affecting pregnant women and their fetuses. Data regarding the safety of pH1N1 vaccination on both maternal and fetal outcomes are important. Pregnancies and pH1N1 vaccination status were identified among active-duty US military women (October 2009-June 2010). Maternal and infant outcomes were assessed and compared with pregnant women vaccinated with seasonal influenza vaccine (October 2008-June 2009). There were 10,896 pregnancies exposed to pH1N1 vaccine. Rates of pregnancy loss, preeclampsia/eclampsia, and preterm labor were similar to rates seen among seasonal influenza vaccine-exposed pregnancies from the previous year. Analyses of the 9435 infants born as a result of these pregnancies revealed no differences in the rates of preterm birth, birth defects, fetal growth problems, or the male:female sex ratio compared with infants exposed to seasonal influenza vaccine during gestation. Rates of all outcomes were lower or similar to overall rates within the general population. There were no identified adverse pregnancy or infant health outcomes associated with pH1N1 vaccination during pregnancy noted among our cohort. These findings are important for determining the safety of pH1N1 vaccination and should be used to encourage increased vaccine coverage among pregnant women.
AD0614744	GENERALIZATION OF EPIDEMIC THEORY. AN APPLICATION TO THE TRANSMISSION OF IDEAS,	WESTERN RESERVE UNIV CLEVELAND OHIO	Goffman,William,newil I,Vaun A.	1/1/1964	10	AFOSR-65-0588	65-0588	U	A - 01	Approved for public release; distribution is unlimited.	Not available	One of the most fundamental problems in the field of information retrieval is that of determining the circumstances under which it might be necessary to introduce an information retrieval system as an aid to a given population of scientists. It is proposed that this problem be examined in terms of the transmission and development of ideas within a population. Specifically, the transmission of ideas within a population will be treated as if it were the transmission of an infectious disease, that is, in terms of an epidemic process. An attempt is made to indicate the role of information retrieval in the development of such a process. (Author)
ADA484448	National Defense Strategy	DEPARTMENT OF DEFENSE WASHINGTON DC	Not available	6/1/2008	30	Not available	DOD	U	A - 01	Approved for public release; distribution is unlimited.	Not available	A core responsibility of the U.S. Government is to protect the American people in the words of the framers of our Constitution, to provide for the common defense. For more than 230 years, the U.S. Armed Forces have served as a bulwark of liberty, opportunity, and prosperity at home. Beyond our shores, America shoulders additional responsibilities on behalf of the world. For those struggling for a better life, there is and must be no stronger advocate than the United States. We remain a beacon of light for those in dark places, and for this reason we should remember that our actions and words signal the depth of our strength and resolve. For our friends and allies, as well as for our enemies and potential adversaries, our commitment to democratic values must be matched by our deeds. The spread of liberty both manifests our ideals and protects our interests. The United States, our allies, and our partners face a spectrum of challenges, including violent transnational extremist networks, hostile states armed with weapons of mass destruction, rising regional powers, emerging space and cyber threats, natural and pandemic disasters, and a growing competition for resources. The Department of Defense must respond to these challenges while anticipating and preparing for those of tomorrow. We must balance strategic risk across our responses, making the best use of the tools at hand within the U.S. Government and among our international partners. To succeed, we must harness and integrate all aspects of national power and work closely with a wide range of allies, friends and partners. We cannot prevail if we act alone.



ADA008169	A Stochastic Process under the Influence of Another Arising in the Theory of Epidemics.	PURDUE UNIV LAFAYETTE IND	Puri,Prem S.	10/1/1974	19	Mimeograph	Not available	U	A - 01	Approved for public release; distribution is unlimited.	Technical rept.,	After a brief survey of some of the recent work on carrier-borne epidemics, a generalization of a carrier-borne epidemic model due to Dietz and Downton (see (4)) is considered, where the realistic possibility of an infective becoming a susceptible is allowed. The special case where the epidemic is initiated by a single carrier with no further immigration of carriers, while still allowing the immigration of susceptibles, is considered in some detail. Among others the author is concerned with the distribution problem related to the total number of visits of susceptibles to 'infective' state, total man-units of time spent in the 'infective' state during the time interval (0,t), etc. The methods used for studying these distribution problems are similar to those used by the author elsewhere.
AD0846737	Laboratory Infections in Relation to the Question of Etiology and Epidemiology of Epidemic Typhus Fever and Trench Fever,	ARMY BIOLOGICAL LABS FREDERICK MD	Weyer, F.	9/1/1968	44	Trans-149	Not available	U	A - 01	Approved for public release; distribution is unlimited.	Not available	More than four kinds of 'laboratory rickettsioses' are reported, in which rickettsia can be detected in the blood by louse-test. The hypothesis of an up-take of rickettsia was afforded by the maintenance of numerous strains of rickettsia in diverse laboratory animals, the pre-conditions for detection were afforded by the permanent maintenance of a colony of normal lice. The diseases afflicted persons who at one time or another had had typhus. It was a question either of recurrence or of re-infection with rickettsia. The clinical symptoms can be explained as a modified form of trench fever. Extracellular rickettsia were isolated by louse-test in all the victims over a time-period of several months, and moreover in one case rickettsia were isolated which grew intracellularly in the louse. As the source of the infection and the determination of the isolated rickettsia, which the hypothesis forms for the correct diagnosis, we have grounds for explanation of the diseases as recurrences or reinfections with typhus fever or as so-called trench fever, or as 'mixed infections.' (Author)
ADA550245	Advanced Technologies Addressing Asia-Pacific Infectious Diseases	HAWAII UNIV HONOLULU	Gubler, Duane	1/1/2011	125	Not available	USAMRMC	U	A - 01	Approved for public release; distribution is unlimited.	Final rept. 16 Jul 2007-15 Dec 2010	The purpose of this program is to develop early warning disease detection systems for emerging zoonotic diseases in the Asia-Pacific, using the latest technology available, including full length sequencing, deep sequencing, and genomic and proteomic microarrays, and to understand how the evolution of dengue viruses influence epidemic potential. Each day, thousands of people throughout Asia present with illnesses that go undiagnosed. Some of these illnesses will be newly recognized diseases that have epidemic potential such as SARS, Nipah encephalitis, dengue and avian influenza. The tasks described in this proposal will help identify these pathogens before they begin to spread and cause major epidemics. By building on existing relationships and collaborations in Viet Nam, the APITMID will be an important ally to health care and security agencies in preventing the spread of infectious diseases outside of Asia. This has profound and far-reaching implications for global public health and economic security as well as for US homeland defense and military readiness concerns.
AD1002201	Targeting the Adipocyte Tumor Cell Interaction in Prostate Cancer Treatment	Sanford-Burnham Medical Research Institute La Jolla United States	Moscat,Jorge	10/1/2015	45	Not available	Not available	U	A - 01	Approved for public release; distribution is unlimited.	Technical Report,30 Sep 2014,29 Sep 2015	Prostate cancer (PCa) is one of the leading causes of death among men in the United States. Obesity is another growing epidemic health problem in Western societies and in developing nations, and represents one of the greatest threats to global human health. Several epidemiological studies during the last decade have pointed to an association between obesity and increased risk factor for PCa progression and aggressiveness. However, despite the relatively high amount of epidemiological data available, little is known about the molecular basis underlying the association between PCa progression, obesity and inflammation, and the role of the adipocyte-cancer cell interaction in this process. The goal of this project is to test the hypothesis that p62 is a molecular link in the cross-talk between obesity, inflammation and prostate cancer progression. Here, we have generated a new mouse model to address this question. Unveiling the molecular mechanisms governing obesity induced prostate cancer progression will have a great impact in our understanding of this process, and its relevance for potential more targeted and efficacious therapies in PCa.
AD0211585	RECURRENCE OF ASIAN VARIANT INFLUENZA IN THE FAR EAST. REPORT OF A 1958 EPIDEMIC IN UNITED STATES MARINES ON OKINAWA	CHICAGO UNIV IL	GRAYSON, J. THOMAS,WANG, SANPIN,PIERCE, WILLARD E.	10/16/1958	1	Not available	Not available	U	A - 01	Approved for public release; distribution is unlimited.	Not available	Not available

ADA565060	The Impact of Gender Based Violence on Stability and Security	JOINT CENTER FOR POLITICAL AND ECONOMIC STUDIES INC WASHINGTON DC	Coulson, Emma K.	5/23/2011		Not available	Not available	U	A - 01	Approved for public release; distribution is unlimited.	Research paper	Our globally interconnected world has brought with it globally interconnected problems. One of these problems is gender-based violence (GBV). The links between GBV and a nation's security and stability are undeniable. High rates of such violence drain the state of both earnings and resources, and threaten stability and governance at all levels. GBV discourages investment, destroys social cohesion, and limits employment and educational opportunities. GBV is an important barometer of state fragility as it points to the state's inability to provide basic security, services, or capacity to impose social controls on GBV behavior. This is particularly harmful to development efforts in low-income and war-torn countries. We can ill afford to continue ignoring GBV in its various forms throughout the world. It is a public health issue and human rights issue affecting poverty, development, and economic growth, which are all critical to stable nations and a stable world. GBV includes such acts as rape and sexual assault, child marriage, prostitution, female genital mutilation, dowry-related violence, trafficking, sexual gender-based violence during armed conflict (SGBV), gendercide, honor" killings, forced sterlization, and acid throwing. Any long-term solution to GBV is best addressed using cross-cutting strategies at multiple levels.
ADA538744	A Growing Global Network's Role in Outbreak Response: AFHSC-GEIS 2008-2009	ARMED FORCES HEALTH SURVEILLANCE CENTER SILVER SPRING MD	Johns, Matthew C.,Burke, Ronald L.,Vest, Kelly G.,Fukuda, Mark,Pavlin, Julie A.,Shrestha, Sanjaya K.,Schnabel, David C.,Tobias, Steven,Tjaden, Jeffrey A.,Montgomery, Joel M.	1/1/2011	10	Not available	AFHSC	U	A - 01	Approved for public release; distribution is unlimited.	Journal article	A cornerstone of effective disease surveillance programs comprises the early identification of infectious threats and the subsequent rapid response to prevent further spread. Effectively identifying, tracking and responding to these threats is often difficult and requires international cooperation due to the rapidity with which diseases cross national borders and spread throughout the global community as a result of travel and migration by humans and animals. From Oct. 1, 2008 to Sept. 30, 2009, the United States Department of Defense's (DoD) Armed Forces Health Surveillance Center Global Emerging Infections Surveillance and Response System (AFHSC-GEIS) identified 76 outbreaks in 53 countries. Emerging infectious disease outbreaks were identified by the global network and included a wide spectrum of support activities in collaboration with host country partners, several of which were in direct support of the World Health Organization's (WHO) International Health Regulations (IHR) (2005). The network also supported military forces around the world affected by the novel influenza A/H1N1 pandemic of 2009. With IHR (2005) as the guiding framework for action, the AFHSC-GEIS network of international partners and overseas research laboratories continues to develop into a far-reaching system for identifying, analyzing and responding to emerging disease threats.
AD1045954	Political Economy of Drugs and Insurgency: The Case of Punjab	Naval Postgraduate School Monterey United States	Pal,Rajan	3/1/2017	115	Not available	Not available	U	A - 01	Approved for public release; distribution is unlimited.	Technical Report	Punjab is a strategically and economically important state for India. It shares a border with both Pakistan, a historical rival, and with the state of Kashmir, which is at the center of Indias conflict with Pakistan. Punjab is also the breadbasket of India and provides a number of recruits for the military, both of which are essential for food and physical security for an economically rising country. In the 1980s, Punjab experienced a decade-long violent insurgency caused by grievances arising from the unequal distribution of benefits from the Green Revolution. The states economy has been in decline for the past decade, which, along with a rise in drug use and trade, represents grounds for a crisis that threatens its post-insurgency stability. The unaddressed drug epidemic allows the emerging drug-crime-terror nexus to thrive. However, national and state-level elites and politicians continue to use identity as a mobilization tool for engaging with the population, mirroring the setting that led to the previous insurgency. Specifically, this research provides an insight into the growing possibility of instability in Punjab. This research derives implications for stability in a border state with porous borders experiencing increased drug use.

ADA263586	The Drug War: A Military Cure?	ARMY WAR COLL CARLISLE BARRACKS PA	Steimer, Gary R.	2/3/1993	38	Not available	USAWC	U	A - 01	Approved for public release; distribution is unlimited.	Study project	The drug problem in the United States has reached almost epidemic proportions. Americans have become frustrated at the lack of progress that the government and civilian law enforcement agencies have made in combatting the drug problem. This lack of progress has caused many to believe that the military may provide the solution. Counter-narcotics efforts, to include production and trafficking, are a high priority mission of the Department of Defense. However, the ability of the DoD to fight in a drug war is severely limited by the Posse Comitatus Act. Although this Act has been amended to allow the military to take a more active role in counter-narcotics missions, the military is still severely constrained from using all of its resources. Civilian and military planners must answer three basic questions before they fully commit the armed forces of the United States to fight the war on drugs: (1) Should the military be involved in the drug war?, (2) What are the possibilities and limitations of military involvement?, and (3) What is the military objective? In examining these very pertinent questions, it is also necessary to consider the role of the military as policemen , and the impact that such a mission would have on the ability of our nation's warriors to conduct standard warfighting missions.
ADA494847	Interrogation of Detainees: Requirements of the Detainee Treatment Act	LIBRARY OF CONGRESS WASHINGTON DC CONGRESSIONAL RESEARCH SERVICE	Garcia, Michael J.	1/23/2009		CRS-RL33655	CRS/DC	U	A - 01	Approved for public release; distribution is unlimited.	Congressional rept.	U.S. treatment of enemy combatants and terrorist suspects captured in Afghanistan, Iraq, and other locations has been a subject of long-standing debate, including whether such treatment complies with U.S. statutes and treaties such as the 1949 Geneva Conventions and the Convention Against Torture (CAT). In response to this controversy, Congress approved additional guidelines concerning the treatment of detainees via the Detainee Treatment Act (DTA), which was enacted pursuant to both the Department of Defense, Emergency Supplemental Appropriations to Address Hurricanes in the Gulf of Mexico, and Pandemic Influenza Act, 2006 (P.L. 109-148, Title X), and the National Defense Authorization Act for FY2006 (P.L. 109-163, Title XIV). Among other things, the DTA contains provisions that (1) require Department of Defense (DoD) personnel to employ United States Army Field Manual guidelines while interrogating detainees, and (2) prohibit the cruel inhuman and degrading treatment or punishment of persons under the detention custody which were first introduced by Senator John McCain
ADA054977	A Simple Batch Epidemic Process.	FLORIDA STATE UNIV TALLAHASSEE DEPT OF STATISTICS	Billard,L.,Lacayo,H.,Lan gberg,N. A.	4/1/1978	11	FSU-STATISTICS- M460,TR-80- AFOSR,AFOSR-TR- 78-0942	TR-78-0942	U	A - 01	Approved for public release; distribution is unlimited.	Interim rept.,	A simplifying assumption for an epidemic process is that at most one person may become infected at any one time. However, it is quite conceivable that when an infected person makes simultaneous contact with two people, both could become infected. In this note we introduce the concept of a batch epidemic process in which infection can occur in batches of one or two. The distribution of the number of infectives present at any time is derived. The concept can be extended to include batches of any size. (Author)
ADA487113	Scheduling Policies for an Antiterrorist Surveillance System	NAVAL POSTGRADUATE SCHOOL MONTEREY CA DEPT OF OPERATIONS RESEARCH	Lin, Kyle Y.,Kress, Moshe,Szechtman, Roberto	6/27/2008	32	Not available	NPS-OR	U	A - 01	Approved for public release; distribution is unlimited.	Not available	This paper concerns scheduling policies in a surveillance system aimed at detecting a terrorist attack in time. Terrorist suspects arriving at a public area are subject to continuous monitoring, while a surveillance team takes their biometric signatures and compare them with records stored in a terrorist database. Because the surveillance team can screen only one terrorist suspect at a time, the team faces a dynamic scheduling problem among the suspects. We build a M/G/1 queue with two types of customers-red and white-to study this problem. Both types of customers are impatient, but the renegeing time distributions are different. The server only receives reward by serving a red customer, and can use the time a customer has spent in the queue to deduce its likely type. In a few special cases, a simple service rule-such as the first-come-first-serve rule-is optimal. We explain why the problem is in general difficult, and develop a heuristic policy motivated by the fact that terrorist attacks are rare events.the epidemic. Some policy recommendations are discussed.

ADA517679	President Nixon's Decision to Renounce the U.S. Offensive Biological Weapons Program	NATIONAL DEFENSE UNIV WASHINGTON DC CENTER FOR THE STUDY OF WEAPONS OF MASS DESTRUCTION	Tucker, Jonathan B., Mahan, Erin R.	10/1/2009	32	Not available	NDU/CSWMD	U	A - 01	Approved for public release; distribution is unlimited.	Monograph	A lesser known but equally dangerous element of the superpower competition involved biological weapons (BW). By the late 1960s, the United States and the Soviet Union had both acquired advanced BW capabilities. The U.S. BW arsenal comprised two types of lethal antipersonnel agents; three types of incapacitating agents; and two types of anticrop weapons. The Army also developed two toxins, highly poisonous chemicals produced by bacteria and other living organisms. According to U.S. military doctrine at the time, the stockpile of lethal biological weapons served as an in-kind deterrent against enemy biological attack and, if deterrence were to fail, provided a retaliatory capability when authorized by the President. Soon after President Richard M. Nixon took office in January 1969, Members of Congress pressured the administration to clarify U.S. policies on the use of chemical and biological weapons (CBW), as there had been no comprehensive review of this issue area in more than 15 years. Nixon announced his new policy on biological warfare at a press conference at the White House on November 25, 1969.
ADA416173	The Implications of a Biological Weapons Convention Verification Protocol on U.S. Biological Warfare Nonproliferation Strategy	ARMY COMMAND AND GENERAL STAFF COLL FORT LEAVENWORTH KS	Carlson, Dylan M.	6/6/2003	89	Not available	USACGSC	U	A - 01	Availability: This document is not available from DTIC in microfiche.	Master's thesis	The threat of biological attack is one of the gravest that faces the U.S. Throughout history epidemics have killed millions and caused massive social upheaval. Science has made great strides in combating disease, however, these advances have allowed proliferating states to develop arsenals of genetically engineered pathogens. For over a quarter-century, the U.S. has been a world leader in combating the proliferation of deadly biological agents. The U.S. was one of the original signatory states of the 1972 Biological and Toxin Weapons Convention. The current nonproliferation strategy calls for strengthening the treaty yet the U.S. unilaterally opposed a verification protocol that promised to increase accountability of treaty compliance in 2001. The U.S. became the target of considerable international criticism for this action. However, while the verification protocol promised to strengthen the treaty, it did not offer any guarantees. The unique characteristics of biological warfare research and production pose considerable challenges to any verification protocol. The potential economic, security, and intellectual costs to the U.S. of this program would likely offset any advantages. The U.S. must find a compromise in order to avoid international isolation and prevent diplomatic nonproliferation efforts from being completely eclipsed by more aggressive programs.
AD0835896	WORLD TOBACCO SCIENTIFIC CONGRESS EUROPEAN COUNTRIES' CONTRIBUTION TO THE STUDY OF TOBACCO MILDEW (NO. 3) (PERONOSPORA TABACINA ADAM),	ARMY BIOLOGICAL LABS FREDERICK MD	Marcelli, E.	8/1/1963	28	Trans-871	Not available	U	A - 01	Approved for public release; distribution is unlimited.	Not available	The report contains a study of the state of the present knowledge of tobacco mildew in Europe and the results achieved up to date in the struggle against the parasite, and dwells on those problems and aspects which have not yet been clarified and which still require further study. Tobacco Mildew has a great economic importance for North America and Australia, and that, since three years ago, it has implanted itself in the Old Continent with such intensity as to render necessary a common organization devoted to tracking it and to issuing directives for the purpose of preventing it and for fighting it. Last year the epidemic followed two typical courses, one of them in the Mediterranean region and the other in the Continental Zone. In the Mediterranean region the first manifestations of this malady were observed in January in Tunisia and Southern Greece, and in February-March in Algeria, Greece and South Italy. (Author)
ADA623278	Turning the ECOWAS Standby Force in a More Proactive Force: An Analysis of Past Interventions to Assess Key Deployment Hindrances	ARMY COMMAND AND GENERAL STAFF COLLEGE FORT LEAVENWORTH KS	Fall, Abdoul A.	6/12/2015	110	Not available	USACGSC	U	A - 01	Approved for public release; distribution is unlimited.	Master's thesis	The security situation in western Africa has been preoccupying in the last years with threats ranging from large scale radical Islamist groups to a pandemic Ebola outbreak, which have stressed the regional security mechanisms. This study, using a qualitative methodology, analyzes the regional crisis response in the attempts to solve the Ivory Coast crisis of 2002 and the recent Mali one of 2012, in which ECOWAS provided, through its standby force ESF, a military intervention to restore security and stability. However, in both of those interventions, forces were deployed on reactionary basis to humanitarian crisis, rather than in a proactive strategy that could have prevented the crisis from escalating to a point where an external intervention, that questioned the regional mechanisms, took place. The study finds that the weaknesses of the existing collective security institutions, the delay in implementing the stand by force, and the poor funding were the reasons of the inability to provide an early response. In order to be proactive in crisis management, ECOWAS needs to empower its security institutions, finalize the operationalization of an effective and capable standby force, and conceive, in coordination with other actors, a reliable funding mechanism.

ADA538457	Burden of Musculoskeletal Disease and Nonbattle Nontraumatic Injury in Both War and Disaster Zones	WILLIAM BEAUMONT ARMY MEDICAL CENTER EL PASO TX DEPT OF ORTHOPAEDIC SURGERY AND REHABILITATION	Not available	1/1/2011	8	WBAMC/OSR	Not available	U	A - 01	Approved for public release; distribution is unlimited.	Not available	Disasters, both man-made and natural, are a known cause of morbidity and mortality among vulnerable populations. The initial phase of public health response typically addresses immediate traumatic injury or death in the wake of a disaster. However, little is known about the magnitude and cost of subsequent nontraumatic injury and illness in disaster zones. Known as the hidden epidemic the incidence and epidemiology of disease and nonbattle injuries among military service members in deployed settings has been more extensively investigated and may serve as a proxy for the evaluation of civilian populations following natural disaster. Further, prior reports from the military setting may serve to inform the broader population on the ultimate burden of nontraumatic injury and illness in recent disasters, particularly as they relate to musculoskeletal health.
AD0678240	ON THE HISTORY OF VACCINATION AGAINST TULAREMIA	ARMY BIOLOGICAL LABS FREDERICK MD	Silchenko, V. S.	9/1/1968	8	SMUFD-TRANS-137	ABL/MD	U	A - 01,23	Approved for public release; distribution is unlimited. Document partially illegible.	Not available	Work in anti-plague research in the USSR in 1931 led to the preparation of an anti-tularemia vaccine(live), appreciatively high in anti-epidemic properties content.
ADA506444	The 2009 Influenza Pandemic: An Overview	LIBRARY OF CONGRESS WASHINGTON DC CONGRESSIONAL RESEARCH SERVICE	Lister, Sarah A.,Redhead, C. S.	9/10/2009	37	CRS-R40554	CRS/DC	U	A - 01	Approved for public release; distribution is unlimited.	Not available	
AD0676987	EXPERIMENTAL MATERIAL ON THE ETIOLOGY OF THE AUTUMNAL FORM OF ENCEPHALITIS, REPORT 2	ARMY BIOLOGICAL LABS FREDERICK MD	Shubladze, A. K.	9/1/1968	10	TRANS-115	ABL/MD	U	A - 01	Approved for public release; distribution is unlimited. Document partially illegible.	Not available	The report states that 48 strains of virus have been isolated from patients and people who died from the disease. These strains and all strains tested in all experiments are identical (biologically and serologically) to Japanese encephalitis. Vectors were ascertained to be the Culex pipiens and Culex tritaeniorhynchus. This coincides with reports from Japan on the vectors of encephalitis. Humans and animals were also named as vectors of the virus, ailing or healthy. Reports of the epidemic in Tokyo in 1938 stated (according to this author) that humans and horses had a high titer of antibodies of encephalitis, and figures are 86% in humans, 98% in horses, 86% in cows and 87% in pigs. Tests on humans and birds, not infected or having been infected, were made to determine their virus capacity at the time of this epidemic; blood from humans was blended (three blood samples) and injected into mice (white). An experimental encephalitis developed. The strain was identical to that of infected humans. Only one strain survived a 3 month storage in 50% glycerine. Strains were easy to handle and filtered nicely.
ADA433697	Enhancing Influenza Surveillance Using Electronic Surveillance System for the Early Notification of Community-Based Epidemics (ESSENCE)	WALTER REED ARMY INST OF RESEARCH SILVER SPRING MD	MacIntosh, Victor H.	6/1/2004	17	Not available	WRAIR/MD	U	A - 01	Approved for public release; distribution is unlimited., NATO	Conference paper	Influenza is a cause of preventable morbidity and mortality; timely analysis of surveillance data may allow earlier recognition of outbreaks, potentially including those caused by new influenza strains. Influenza-like illness (ILI) is of particular interest in surveillance because many bio-warfare and bio-terrorism agents cause flu-like syndromes. The Department of Defense Global Emerging Infections Surveillance and Response System (DoD-GEIS) sponsors two programs, ESSENCE (The Electronic Surveillance System for the Early Notification of Community-based Epidemics) and the DoD Influenza Surveillance Program, that could assist in influenza outbreak detection and response. ESSENCE utilizes military beneficiary population outpatient visits data to detect aberrations in daily counts of ICD-9 based syndrome groups. Begun in 1999 in the Washington, DC area and expanded in 2001 following the events of September 11, this system analyzes outpatient visit data across DoD military treatment facilities (MTFs), in the US and abroad. A prior study assessed the value of ESSENCE data in detecting yearly influenza activity by comparing it to a traditional influenza surveillance system used by the Centers for Disease Control and Prevention (CDC). Results of that study showed similarity between the rates of ILI visits to sentinel physicians in the South-Atlantic region and military facilities in the National Capital Area. Soon after September 11, 2002, ESSENCE began receiving outpatient data from all US MTFs in the world and making syndromic surveillance data easily available throughout DoD installations.

ADB159073	Effective Evaluation of Intravenous Ribavirin Therapy of Epidemic Hemorrhagic Fever by a Prospective, Double-Blind, Concurrent, Randomized and Placebo-Controlled Design.	HUBEI MEDICAL COLL (CHINA) VIRUS RESEARCH INST	Hsiang, Chin-Min	12/1/1990	36	Not available	USAMRDC	U	A - 01	Approved for public release;Distribution unlimited.	Final rept. 1 Nov 85-31 Oct 90,	A prospective, randomized, double-blind, concurrent, placebo controlled, clinical trial of intravenous ribavirin was conducted in patients with epidemic hemorrhagic fever in Wuchang, Hubei, the People's Republic of China. Comparability of treatment groups at baseline was demonstrated. Mortality was significantly reduced (a seven fold decrease in risk of death) among ribavirin treated patients when comparisons were adjusted for baseline risk estimators of mortality ( $p=0.01$ , 2 tailed). Hemorrhagic fever with renal syndrome typically consists of five consecutive, but frequently overlapping, clinical phases. Occurrence of the oliguric and hemorrhage phases was associated with severity of clinical disease in the placebo group. Ribavirin therapy resulted in a significant reduction in (1) the risk of entering the oliguric phase, (2) serum creatinine levels, (3) duration of hypertension, (4) the risk of experiencing hemorrhage, and (5) death. The only ribavirin related side effect was anemia. Which was fully recovered following completion of therapy.
ADA046224	Comparative Characteristics of Productiveness of Various Methods of Plague Immunization,	FOREIGN TECHNOLOGY DIV WRIGHT-PATTERSON AFB OHIO	Agafonov,V. I.,Babkin,Ye. I.,Vdovin,D. G.,Vorobeichikov,V. M.,Vorobiyer,A. A.	5/23/1977	18	FTD-ID(RS)I-0732-77	Not available	U	A - 01	Not available	Not available	The peroral, aerosol, and needleless methods which were tested with mass vaccination against plague showed much higher (by 10-15 times) productiveness in comparison with the classic subcutaneous and skin methods. Considering the absence of any advantages (reactivity, immunogenicity) of the subcutaneous and skin methods in comparison with mass methods of inoculations, we can recommend the latter (peroral, aerosol, needleless) for introduction into the anti-epidemic practice of the struggle against plague infections.
ADA501495	Hospital Viability during a Pandemic Influenza Outbreak	ARMY COMMAND AND GENERAL STAFF COLL FORT LEAVENWORTH KS	Blackwell, Jeffrey K.	6/1/2009	127	Not available	USACGSC	U	A-01	Approved for public release; distribution is unlimited.	Master's thesis	
AD0843864	Rice Blast Epidemic of 1960 (In France)	ARMY BIOLOGICAL LABS FREDERICK MD	Bernaux, P.	12/8/1967	7	TRANS-2081	SMUFD	U	A - 01	Approved for public release; distribution is unlimited.	Not available	In 1960, the climatic conditions were entirely different from those that prevailed in 1959. Rice infection by <i>Piricularia oryzae</i> Cav., a mold that is extremely sensitive to climatic conditions. Many observations on the response of rice varieties to the disease (piriculariosis or rice blast) were made.
AD0409603	A REVIEW OF SELECTED PROBLEMS OF TULAREMIA IN THE SOVIET UNION. PART 1. HISTORY AND RECENT INCIDENCE OF THE DISEASE	FORDHAM UNIV BRONX NY	Pollitzer, Robert	1/1/1963	122	Not available	DA	U	A - 01	Approved for public release; distribution is unlimited.	Not available	Though definite proof for the existence of tularemia in the Soviet Union has been obtained only in 1926, there can be no doubt that the disease existed there since time immemorial, acting then as now as one of the most important factors regulating the population dynamics of the rodent hosts of the infection. In fact, retrospective studies undertaken since 1926 have furnished more or less definite evidence for the early occurrence of tularemia manifestations. Thus it is most probable that, though misdiagnosed as benign anthrax, the disease was frequent since the 18th century at least in Western Siberia, an area identified afterwards as a hotbed of the infection. In another notorious focus, the As trakhan Raion, the occurrence of an epidemic corresponding in all its features to a tularemia outbreak has been recorded in 1877 and similar manifestations have been observed from 1877-1879 in other parts of Russia including the Kazan Raion. Moreover, as has been pointed out with great reason, the wide distribution of tularemia in the Soviet Union noted during the years immediately following its discovery in 1926 forms a convincing argument against a recent appearance of this disease.
AD1020174	Triple Threat: HIV/AIDS, Tuberculosis, Malaria, and the Impact on Military Forces in Sub-Saharan Africa	AIR COMMAND AND STAFF COLLEGE, AIR UNIVERSITY MAXWELL AIR FORCE BASE United States	Collier,Ada M.	3/1/2010	29	Not available	Not available	U	A - 01	Approved For Public Release;	Technical Report	Military forces in Sub-Saharan Africa, including peacekeepers, rank among the highest population groups most affected by sexually transmitted infections (STIs), including HIV.1 These individuals are called upon to protect national security from threats such as terrorism, crime, internal and external conflict; serving at home and across national borders. For armed forces personnel, several key factors make them vulnerable to STIs: the work environment, mobility, and age. These risk factors expose all the population to HIV/AIDS infection, military and civilians. According to the Joint UN Program on AIDS (UNAIDS), soldiers are two to five times more likely to contract STIs than the civilian population. In fact, during conflict, the rate of STI infection can increase significantly.2 In some African countries, the rates of HIV infection among the military are estimated to be as high as 50 to 60 percent.

AD1066803	Pandemic, 1918	National Museum of Health and Medicine, J-9 DHA Silver Spring United States	Clarke,Tim Jr	8/1/2016	2	Not available	Not available	U	A - 01	Approved for public release; distribution is unlimited.	Journal Article - Open Access	
ADA349106	JPRS Report, Epidemiology.	JOINT PUBLICATIONS RESEARCH SERVICE ARLINGTON VA	Not available	7/10/1989	35	JPRS-TEP-89-012	XD	U	A - 01	Approved for public release; distribution is unlimited.	Not available	Partial Contents: Drugs, AIDS< Measles, Cholera, Guinea Worm Diseases, Drug Abuser, Strains, Virus, Epidemic Diseases, Death, Hepatitis, Hospitals, Vaccines, Health Care Facilities, Diagnostic, Malaria, Preventive Medicine, Human Immunodeficiency Virus, Breast Feeding, Lung, Medicine,Nuclear Plants.
ADA450401	Pandemic Influenza: Domestic Preparedness Efforts	LIBRARY OF CONGRESS WASHINGTON DC CONGRESSIONAL RESEARCH SERVICE	Lister, Sarah A.	11/10/2005	37	CRS-RL33145	CRS/DC	U	A - 01	Approved for public release; distribution is unlimited.	Congressional rept.	In 1997, a new avian influenza virus (H5N1 avian flu) emerged in Hong Kong, killing 6 people. This was the first time that an avian influenza virus was shown to be transmitted directly from birds to humans. The virus persisted in the region, and has since spread to a number of Asian and European countries where it has infected more than 120 people, killing more than 60. The severity of this strain is similar to that of the deadly 1918 Spanish flu, which caused a global pandemic. Though influenza pandemics occur with some regularity, and the United States has been involved in specific planning efforts since the early 1990s, the H5N1 situation has created a sense of urgency among the world's public health officials. Global pandemic preparedness and response efforts are coordinated by the World Health Organization (WHO). The U.S. Department of Health and Human Services (HHS) released a draft pandemic flu preparedness and response plan in August 2004, and a final plan in November 2005. President Bush announced a national strategy to coordinate pandemic preparedness and response activities across federal agencies. Domestic response activities will be carried out under the broad, all-hazards blueprint for a coordinated federal, state, and local response laid out in the National Response Plan, released by the Department of Homeland Security (DHS) in 2004. If a flu pandemic were to occur in the next several years, the U.S. response would be affected by the limited availability of a vaccine (the best preventive measure for flu), as well as by limited availability of certain drugs used to treat severe flu infections, and by the general lack of surge capacity within the healthcare system. The U.S. healthcare system is largely private, while the public health system is largely based in state, rather than federal, authority. This structure creates numerous challenges in assuring the needed response capacity, and coordinating the various response elements.
ADA419514	Infectious Disease Rates in the U.S. Navy, 1980 to 1995	NAVAL HEALTH RESEARCH CENTER SAN DIEGO CA	Gunderson, E. K.,Garland, Cedric,Hourani, Laura L.	6/1/2001	7	NHRC-00-10	ONR	U	A - 01	Approved for public release; distribution is unlimited.	Final rept. 1980-1989	The significant increase in the number of women serving in the Navy has raised questions concerning the impact of infectious disease risks on women's health during recent years, particularly among those aboard Navy ships. This study examines gender and other demographic differences among all US Navy enlisted personnel with first hospitalizations for infectious and parasitic diseases during 1980 through 1989 (N = 33,334), and it identifies trends in incidence rates across this 10-year time period. All information used in the study was from official personnel and medical records. Varicella and other viruses and chlamydiae accounted for more than 20,000 hospitalizations among Navy enlisted personnel in the 1980s. In 7 of the 12 categories of common infectious diseases, women 5 rates were more frequently higher than those for men, particularly in meningitis, herpes simplex, syphilis, gonococcal disease, and candidiasis. In general, the 1980s were marked by downward trends in many infectious diseases, by relatively stable rates of sexually transmitted diseases, and by brief epidemic periods of measles, mumps, and varicella.
AD1016279	Defending Against Biological and Chemical Attacks	Defense Acquisition University Fort Belvoir United States	Scarbrough,Jess A.	8/1/2010	10	Not available	Not available	U	A - 01	Approved for public release; distribution is unlimited.	Journal Article	The Joint Program Executive Office for Chemical and Biological Defense, formed just seven years ago, is on the forefront of developing cutting-edge defenses and protection for military service members against potential chemical and biological attacks. In the past year alone, the organization has fielded more than 1.3 million items of equipment to the military services, including protection masks, biological detectors, and chemical detectors. The organization is also involved in preparing our country to respond to potentially crippling pandemics, as demonstrated by its involvement in H1N1 research. Army Brig. Gen. Jess A. Scarbrough, the joint program executive officer for chemical and biological defense (JPEO-CBD), spoke with Defense AT and L about the latest initiatives in the program office. Mike Kotzian, the DAU Mid Atlantic Region acquisition/program management department chair, oversaw the development of this interview.

ADA426034	Physiologic and Endocrine Correlates of Overweight and Obesity in African Americans and Caucasians	HENRY M JACKSON FOUNDATION FOR THE ADVANCEMENT OF MILITARY MEDICINE ROCKVILLEMD	Deuster, Patricia A.,Poth, Merrily,Sbrocco, Tracey,Faraday, Martha	3/1/2004	6	Not available	USAMRMC	U	A - 01	Approved for public release; distribution is unlimited.	Annual rept. 1 Mar 2003- 29 Feb 2004	Obesity has reached epidemic levels and yet the incidence continues to rise. The current study is seeking to examine the hypothesis that obesity may reflect dysfunctioning of the hypothalamic-pituitary-adrenal (HPA) axis in response to stressors. African American persons are at greatest risk, but reasons for this difference are unknown. We will study 120 men and women of Caucasian and African American ethnicity and examine their responses to physiologic stressors: exercise and ingestion of a meal. Methods: The HPA axis will be studied in some detail by using two stressor paradigms and two steroid regimens. We expect to be able to detect subtle differences in HPA axis reactivity in obese individuals and that might contribute to morbidity and perhaps even make individuals resistant to therapeutic interventions. Results: We have enrolled 21 participants, with 7 completed without seeming difficulty, and data collection is proceeding on schedule. Participants are also completing the exercise stress test, in spite of not being used to exercise, in general. Conclusions: We anticipate being able to complete this study as planned without difficulty and look forward to being able to answer the important questions regarding the potential role of the HPA axis in obesity.
AD1094710	Urban Outbreak 2019 Pandemic Response: Select Research and Game Findings	NAVAL WAR COLLEGE NEWPORT RI NEWPORT United States	Davies,Benjamin,Lovet t,Kaitlin R.,Card,Brittany,Polatt y ,David	4/1/2020	14	Not available	Not available	U	A - 01	Approved for public release; distribution is unlimited.	Technical Report	This document is a summary of 16 key research and game findings focused specifically on the characteristics of civil-military response to a pandemic scenario. The numbered bullets below correspond to more detailed explanations of findings presented later in the document. While these findings are in no way definitive or complete, they are a sampling of relevant guidance based on research, gaming and expert opinion. It is our hope that these 16 findings will contribute to improving civilian and military effectiveness in humanitarian assistance and disaster response operations.
ADA634659	Disease Vector Ecology Profile: Somalia. Fourth Edition	ARMED FORCES PEST MANAGEMENT BOARD WASHINGTON DC	Not available	9/15/1993	28	Not available	AFPMB	U	A - 01	Approved for public release; distribution is unlimited.	Not available	
ADA400060	School Violence: Prevalence, Fears, and Prevention	RAND CORP SANTA MONICA CA	Juvonen, Jaana	1/1/2001	6	Not available	XD	U	A - 01	Approved for public release; distribution is unlimited.	Not available	School shootings such as the one at Columbine High School in 1999 have left deep scars in our nation. The apparently random nature of these highly publicized shootings has raised public fears to epidemic proportions. According to 2001 polls, more than 50 percent of parents with children in grades K-12(1) and 75 percent of secondary school students(2) now think that a school shooting could occur in their community. Schools are taking a variety of measures to improve school safety. These include the use of metal detectors, the presence of security guards on campus, rules and regulations regarding student conduct and dress, profiling of potentially violent students, anti-bullying instructional programs, and counseling and mediation. Which of these approaches work? Which will reduce the incidence of violence in our schools and alleviate the fears of parents and children? How can school and district administrators choose among the myriad possibilities, and how can they know where to allocate precious resources? RAND examined the literature regarding these programs and found that only a handful have been evaluated, and even fewer have been deemed effective or even promising. The goal of this paper is to describe the options that are currently available for schools. An analysis of the key components of various approaches in terms of their potential positive and negative effects can assist in the selection of policies, programs, and procedures while we wait for evaluations to be conducted.



ADA569956	Understanding and Managing Propagation on Large Networks - Theory, Algorithms, and Models	CARNEGIE-MELLON UNIV PITTSBURGH PA DEPT OF COMPUTER SCIENCE	Prakash, B. A.	9/1/2012	233	CMU-CS-12-138	DOE	U	A - 01	Approved for public release; distribution is unlimited.	Doctoral thesis	How do contagions spread in population networks? What happens if the networks change with time? Which hospitals should we give vaccines to, for maximum effect? How to detect sources of rumors on Twitter/Facebook? These questions and many others such as which group should we market to, for maximizing product penetration, how quickly news travels in online media and how the relative frequencies of competing tasks evolve are all related to propagation/cascade-like phenomena on networks. In this thesis, we present novel theory, algorithms and models for propagation processes on large static and dynamic networks, focusing on 1. Theory: We tackle several fundamental questions like determining if there will be an epidemic, given the underlying networks and virus propagation models and predicting who-wins when viruses (or memes or products etc.) compete. We give a unifying answer for the threshold based on eigenvalues, and prove the surprising winner-takes-all? result and other subtle phase-transitions for competition among viruses. 2. Algorithms: Based on our analysis, we give dramatically better algorithms for important tasks like effective immunization and reliably detecting culprits of epidemics. Thanks to our carefully designed algorithms we achieve 6x fewer infections on real hospital patient-transfer graphs while also being significantly faster than other competitors (upto 30,000x). 3. Models: Finally using our insights, we study numerous datasets to develop powerful general models for information diffusion and competing species in a variety of situations. Our models unify earlier patterns and results, yet being succinct and enable challenging tasks like trend forecasting, spotting outliers and answering ?what-if? questions. Our inter-disciplinary approach has led to many discoveries in this thesis with broad applications spanning areas like public health, social media product marketing and networking. We are arguably the first to present a systematic study of propag
AD1069432	The Power Behind Transnational Criminal Organizations: An Inside Look At Mexican Drug Cartel Networks	Naval Postgraduate School Monterey United States	Aguirre,Anibal Jr,Mullany,John T.,Ratner,Brandon R.	12/1/2018	115	Not available	Not available	U	A - 01	Approved for public release; distribution is unlimited.	Technical Report	The ongoing drug epidemic fueled by Mexican Transnational Criminal Organizations (TCO) is a matter of national interest that the current presidential administration has addressed in its 2017 National Security Strategy. Mexican TCOs continue to expand their cross-border operations through robust distribution networks and shared relationships with gangs located within the United States. Efforts to prevent expansion and influence have been largely unsuccessful due to the application of inappropriate strategies and lack of intelligence-sharing products. This thesis examines the factors that make up powerful Mexican TCO networks through the application of visual analytics. Exploration of power factors such as territory, violence, and relationships will lead to determining how TCOs become powerful and how they maintain their power. Our findings highlight factors and vulnerabilities that U.S. interagency organizations can use to develop their own strategies for disrupting nefarious organizations involved in cross-border illegal activities and to add to our overall understanding of TCO networks.
ADA491691	A Call to Revitalize the Engines of Government	RAND NATIONAL DEFENSE RESEARCH INST SANTA MONICA CA	Rostker, Bernard D.	1/1/2008	29	Not available	OSD	U	A - 01	Approved for public release; distribution is unlimited.	Occasional paper	
ADA469361	Department of Defense Implementation Plan for Pandemic Influenza	FORCE HEALTH PROTECTION AND READINESS POLICY AND PROGRAMS FALLS CHURCH VA	Not available	8/1/2006	88	Not available	OASDHD/DC	U	A - 01	Approved for public release; distribution is unlimited.	Not available	The Secretary of Defense's principal responsibility in responding to a pandemic will be to protect U.S. interests at home and abroad. This implementation plan sets forth Department of Defense (DoD) guidance and addresses key policy issues for pandemic influenza planning. This guidance will enable the Combatant Commanders, Military Departments, and DoD agencies to develop plans to prepare for, detect, respond to, and contain the effects of a pandemic on military forces, DoD civilians, DoD contractors, dependents, and beneficiaries. Additionally, plans will address the provision of DoD assistance to civil authorities both foreign and domestic. Finally, attention to the key security concerns, such as humanitarian relief and stabilization operations that may arise as a result of a pandemic, will be addressed.

ADA558972	Infectious Disease Border Issues Conference: Meeting Synopsis	ARMED FORCES HEALTH SURVEILLANCE CENTER SILVER SPRING MD	Baliga, Priya,Von Thun, Annette	4/3/2012	27	Not available	AFHSC	U	A - 01	Approved for public release; distribution is unlimited.	Not available	In June 2011, the United States Central Command (USCENTCOM), with support from the Armed Forces Health Surveillance Center (AFHSC) and the Center for Disaster and Humanitarian Assistance Medicine (CDHAM) sponsored a conference addressing Infectious Disease Border Issues. The conference was hosted by the Royal Medical Service (RMS) in Amman, Jordan. The workshop was designed for mid- to senior level professionals who were actively involved in Jordan s public health and pandemic preparedness efforts in ensuring the integrity of national borders. The primary objective was to strengthen inter-ministerial level relationships between essential policy makers and share priorities, successes, and challenges in preparedness and mitigation capabilities directed at pandemic influenza, emerging infectious diseases and other public health emergencies. The Infectious Disease Border Issues Conference aimed to: a) Conduct information exchange with Jordan on medical response to infectious diseases; b) Build capacity to defend, operate, or maintain essential health and government functions in a pandemic/infectious disease environment; and c) Enhance inter-ministerial emergency response coordination mechanisms. The three-day workshop was organized into three main themes: Infectious Disease Containment and Surveillance, Border Issues and Quarantine, and Medical Reporting and Information Sharing.
ADA344841	Shaping the Future Security Environment in Sub-Saharan Africa.	ARMY WAR COLL CARLISLE BARRACKS PA	Russell, Theodore S., Jr	3/1/1998	52	Not available	USAWC	U	A - 01	Approved for public release; distribution is unlimited.	Strategy research project,	The nearly 40 year process of decolonization and the end of the Cold War have helped create major transformations in Sub-Saharan Africa. The challenges of extreme poverty, civil war, crime, cross-border interventionism, terrorism, outflows of refugees, environmental degradation and the spread of pandemic disease threaten the region's security environment and could threaten global stability. A contradiction exists between the United States government's stated foreign policy of engagement and its involvement in Africa. While stability is arguably its most important national interest, America does little to shape the security environment of this troubled region. If the United States is going to shape Africa's security environment, political leaders must become the visionaries of, and the advocates for, a more sophisticated foreign policy for the region. They must gain consensus on national interests in the region, and formulate a coherent set of policy objectives which will focus future engagement strategies. Through selective engagement the United States can help Africans solve African problems while shaping a security environment favorable to United States interests.
AD1028074	Competition Processes	UNIVERSITY OF DURHAM Durham, North East England United Kingdom	Reuter,G. E.	1/1/1961	11	Not available	Not available	U	A - 01	Approved for public release; distribution is unlimited.	Conference Paper	Some of the simpler theoretical models which have been proposed for phenomena (for example, the competition between species or the occurrence of epidemics) which involve stochastic interactions between several populations have the common feature that they are Markov processes, homogeneous in time, with a countable set of states (m, n) where m and n represent the sizes of two populations. These processes are specified by prescribing the rates at which transitions occur, only transitions to neighboring" states being allowed: a formal definition of such "competition processes" will be given in section 2."
ADA534995	Worldwide Emerging Environmental Issues Affecting the U.S. Military	FEDERATION OF UN ASSOCIATIONS WASHINGTON DC MILLENNIUM PROJECT	Not available	11/1/2010	20	Not available	AEPI/VA	U	A - 01	Approved for public release; distribution is unlimited.	Not available	Key environmental and resource constraints, including health risks, climate change, water scarcity and increasing energy needs will further shape the future security environment in areas of concern to NATO and have the potential to significantly affect NATO planning and operations, reads NATO's new Strategic Concept for the next decade, adopted at the alliance's Summit meeting in Lisbon, November 2010. The new roadmap was updated considering modern threats such as energy security, cyber attacks, and the security impacts of emerging technologies, along with and in the context of the spread of terrorism and extremist groups. It stipulates that,--A number of significant technology-related trends--including the development of laser weapons, electronic warfare and technologies that impede access to space--appear poised to have major global effects that will impact on NATO military planning and operations. In the spirit of enhancing EU-NATO cooperation, an EU-US Working Group on Cyber-security and Cybercrime was established to address specific priority areas, and an agreement on the Terrorist Finance Tracking Program was negotiated.

ADA513182	State Defense Force Manpower Remedy Ignored by National Leaders	STATE DEFENSE FORCE GERMANTOWN MD	Brinkerhoff, John R.	1/1/2007	13	Not available	SDF	U	A - 01	Approved for public release; distribution is unlimited.	Conference paper	Five years ago, I addressed the State Guard Association of the United States (SGAUS) Annual Conference. At that time I spoke to the urgent need for tens of thousands of organized, disciplined, trained, and armed militia members to augment the National Guards of their respective states. I said that there would be emergencies that would require large numbers of armed personnel to provide for crowd control, evacuation, and maintenance of law and order. I urged the White House, Department of Defense (DoD), Department of Homeland Security (DHS), and Governors of the several states to take advantage of low-cost State Defense Forces (SDFs) to provide additional troops when needed. I charged the SGAUS with the mission of reviving the SDFs for Homeland Security. But I have the unpleasant duty to tell you that we all have failed to accomplish the mission. In 2002, there were 11,000 active SDF personnel in 16 states and Puerto Rico. In 2007, there are 20,000 active SDF personnel in 24 states and Puerto Rico. This is some progress, but it is not enough. There are still 26 states without SDFs. Many of the existing SDFs still consist mostly of senior officers and senior NCOs. Most states do not permit their SDF members to bear arms. Some states keep their SDF units in cadre status. Not a single state has a SDF that can provide an adequate number of organized, trained, and armed troops to deal with a catastrophic emergency. Strangely, the most fervent opposition to a robust SDF came from the four groups that have most to gain from it: the National Guard Bureau, DoD, the National Guard Association of the United States, and the Adjutant Generals Association. This paper discusses five potential catastrophic emergencies (i.e., nuclear attack, an influenza pandemic, the New Madrid Earthquake, a prolonged power outage in a metropolitan area, and prolonged disruption of electronic communications), the response level they will require, and the role of SDF units in that response.
AD0677077	ON THE RESIDUAL PHENOMENA IN CHILDREN HAVING HAD EPIDEMIC HEPATITIS	ARMY BIOLOGICAL LABS FREDERICK MD	Mazurin, A. V.	9/1/1968	5	SMUFD-TRANS- 168	ABL/MD	U	A - 01	Approved for public release; distribution is unlimited. Document partially illegible.	Not available	In 6-19 months after the infection with epidemic hepatitis, 19 of 36 children had some residual phenomenon. A lower protrombin indicator was noted in 13 children; of them 5 had the hypoprotrombin as the only symptom. This seems to indicate the stable and lengthy disruption of the protrombin producing function of the liver, after infection by epidemic hepatitis. In view of all the above, it is recommended that the children recovering from epidemic hepatitis be under outpatient observation for a regulated period.
AD0676345	ALLERGY REACTIONS IN PERSONS INOCULATED CUTANEOUSLY WITH LIVE EGG-YOLK TULAREMIA VACCINE	ARMY BIOLOGICAL LABS FREDERICK MD	Dyachenko, S. S.,Khyzhynska, O. P.,Buyalo, S. H.	9/1/1968	15	SMUFD-TRANS- 73	ABL/MD	U	A - 01	Approved for public release; distribution is unlimited. Document partially illegible.	Not available	Live egg-yolk tularemia vaccine used cutaneously causes in the human organism the same special intradermal allergy reaction to tularemia as does transferred tularemia itself. The intradermal allergy reaction as a response to live tularemia vaccine is a specific reaction, since it was positive only in persons who had recovered from tularemia, who were revaccinated, and who had received cutaneous vaccinations. The intradermal allergy reaction to tularemia was distinguished by sharpness during the entire period of observations, in the following proportions: during the first month after vaccination up to 95 percent, and at the end of the 24th month up to 44.5 percent. Revaccination may be used within two years, depending on epidemic requirements.
ADA365082	Further Development of the Campaign Against Tuberculosis.	JOINT PUBLICATIONS RESEARCH SERVICE ARLINGTON VA	Mosolygo, Denes	4/28/1961	5	JPRS-4574	FBIS	U	A - 01	Approved for public release; distribution is unlimited.	Not available	Not available
ADA526847	Worldwide Emerging Environmental Issues Affecting the U.S. Military. April 2009	Not available	Not available	4/1/2009	25	Not available	AEPI/VA	U	A - 01	Approved for public release; distribution is unlimited.	Not available	

ADP023976	President's Malaria Initiative	NAVY MEDICAL SERVICES CORPS WASHINGTON DC	Stoops, Craig	11/16/2008	3	Not available	NMSC/DC	U	A - 01	Approved for public release; distribution is unlimited.	Conference paper	Malaria was the single most serious health hazard to Allied troops in the South Pacific area during World War II. It caused up to five times as many casualties as combat. Some 100,000 Allied military personnel contracted malaria in the South Pacific, most more than once. On Guadalcanal, in the Solomon Islands, this disease threatened the success of the military campaign. Due to the presence of U.S. military personnel around the world and because of our experience with malaria, military entomologists are often expected to confront this and other vector-borne diseases. Although force health protection is our primary mission, many operations are humanitarian in nature and require working with host country ministries of health. These efforts are usually of short duration and range from small-scale control operations designed to prevent epidemics, to training of in-country public health staff.
AD0670413	CLINICAL OBSERVATIONS ON 101 CASES OF TICKBORNE ENCEPHALITIS,	NAVAL MEDICAL RESEARCH UNIT NO 3 CAIRO (EGYPT) DEPT OF MEDICAL ZOOLOGY	Tung,Hsiang-Chia,Liu,Ching-Cheng,Kang,Ying-Yuan,Feng,Lan-Pin	1/1/1968	21	NAMRU-3-Trans-271	Trans-271	U	A - 01	Approved for public release; distribution is unlimited.	Not available	A report is presented on the clinical observations of tickborne encephalitis occurring in a forest region in 1952-1954. The epidemic began from the first ten days of May and ended in the middle of September with the peak in June, in which 66.3 per cent of the cases occurred. This strict seasonal variation was closely related to the incidence and activities of ticks found in the forest. All the 101 patients were workers in the forest, 69.3 per cent being lumber workers. All had a history of tickbite. 79.2 per cent of them were in the age groups of 21-41 years. Most of the patients came from non-epidemic areas. The mortality rate was 21.7 per cent. Clinically the disease was characterized by a sudden onset (91.1 per cent) with high fever for five to ten days or an average of 8.8 days. The chief symptoms were neuropsychiatric disturbances: meningismus 56.4 per cent, semiconsciousness 53.5 per cent, and paralysis 83.2 per cent, with upper extremities paralysis 14.9 per cent, upper extremities plus shoulder girdle paralysis 19.8 per cent. Prognosis, criteria of diagnosis and treatment are discussed. Aureomycin was used in 7 cases with no definite effect. (Author)
ADA500873	Molecular Mechanisms and Treatment Strategies for Obesity-Associated Coronary Artery Disease, an Imminent Military Epidemic	COLUMBIA UNIV NEW YORK	Tabas, Ira,Woo, Wai H.	12/1/2008	90	Not available	USAMRMC	U	A - 01	Approved for public release; distribution is unlimited.	Annual rept. 1 Jan 2007-30 Nov 2008	There is an epidemic of obesity in the military. Obesity leads to type 2 diabetes, the most dangerous consequence of which is atherothrombotic vascular disease. We have made major progress on the key Tasks over the last year. We have gained more in-depth understanding on how the AngII targets CaMKII and NADPH oxidase trigger apoptosis in ER-stressed macrophages. Our knowledge of how PPARs and obesity affect advanced plaque progression was expanded into the areas of monocyte/macrophage subsets and efferocytosis. The mechanism of obesity-associated adipokines was advanced by showing that LPS, as a model of adiponectin-LPS complex, can suppress a pro-apoptotic branch of the UPR in vivo by the exact same mechanisms elucidated in vitro. Moreover, we found that another obesity-associated adipokine-eNamt-may promote macrophage-associated disease processes in obese subjects. Finally, we showed that a specific molecular event that could promote plaque necrosis and likely occurs in obesity-cleavage of the efferocytosis receptor Mertk-occurs in advanced human plaques. In summary, we have made substantial progress in understanding how obesity leads to accelerated heart disease at a molecular-cellular level. Further work in these areas during Year #4 is likely to suggest novel therapeutic targets to prevent obesity-associated vascular disease in military personnel and in the general public.
ADA428607	Towards a Vaccine Against Ebola Virus	ARMY MEDICAL RESEARCH INST OF INFECTIOUS DISEASES FORT DETRICK MD	Geisbert, Thomas W.,Jahrling, Peter B.	1/1/2003	14	Not available	USAMRIID	U	A - 01	Approved for public release; distribution is unlimited. Availability: This document is not available from DTIC in microfiche.	Not available	Ebola virus infection causes hemorrhagic fever with high mortality rates in humans and nonhuman primates. Currently, there are no vaccines or therapies approved for human use. Outbreaks of Ebola virus have been infrequent, largely confined to remote locations in Africa and quarantine of sick patients has been effective in controlling epidemics. In the past, this small global market has generated little commercial interest for developing an Ebola virus vaccine. However, heightened awareness of bioterrorism advanced by the events surrounding September 11, 2001, concomitant with knowledge that the former Soviet Union was evaluating Ebola virus as a weapon, has dramatically changed perspectives regarding the need for a vaccine against Ebola virus. This review takes a brief historic look at attempts to develop an efficacious vaccine, provides an overview of current vaccine candidates and highlights strategies that have the greatest potential for commercial development.

ADA155096	Bistability, Basins of Attraction, and Predictability in a Forced Mass-Reaction Model.	NAVAL RESEARCH LAB WASHINGTON DC	Schwartz,I. B.	5/13/1985	14	NRL-MR-5538	Not available	U	A - 01	Approved for public release; distribution is unlimited.	Memorandum rept. 15 Sep 83-15 Sep 84,	Bistable phenomena can occur in many physical, chemical, and biological models of natural phenomena. An important subset of problems exhibiting bistability consists of those models employing mass-reaction kinetics. Crucial to understanding any mass-reaction model is a knowledge of the parameter corresponding to the rate of contact between two or more species. In certain applications, the contact rate may be time dependent, and in fact, periodic. For example, the process of temporally increasing and decreasing the solar intensity respectively changes the probability of contact between two reacting species in the atmosphere. In addition to perturbing reactants in the atmosphere, periodic forcing of contact rates plays an important role in modelling recurrent epidemic outbreaks. It is important to note that both physical and biological phenomena exhibit oscillations which are longer than the forcing period, or not periodic at all. Furthermore, it is not uncommon for periodically forced differential equation models to exhibit two or more stable subharmonic solutions for a given set of parameters. The question we consider here is, how well can one predict the asymptotic final state given initial conditions having finite precision for a problem that exhibits two different stable periodic orbits. In particular, this document considers a simple mass-reaction model with a periodically forced contact rate. The following is shown numerically: 1) There exist parameter values for which the model exhibits at least two distinct stable subharmonic periodic orbits; 2) The basins of attraction of each orbit can be very complicated, thus affecting final state predictability as a function of precision in initial conditions.
ADA617603	Optimal Vaccination in a Stochastic Epidemic Model of Two Non-Interacting Populations	NAVAL POSTGRADUATE SCHOOL MONTEREY CA DEPT OF OPERATIONS RESEARCH	Yuan, Edwin C.,Alderson, David L.,Stromberg, Sean,Carlson, Jean M.	2/17/2015	26	Not available	ARO	U	A - 01	Approved for public release; distribution is unlimited.	Journal article	Developing robust, quantitative methods to optimize resource allocations in response to epidemics has the potential to save lives and minimize health care costs. In this paper, we develop and apply a computationally efficient algorithm that enables us to calculate the complete probability distribution for the final epidemic size in a stochastic Susceptible-Infected-Recovered (SIR) model. Based on these results, we determine the optimal allocations of a limited quantity of vaccine between two non-interacting populations. We compare the stochastic solution to results obtained for the traditional, deterministic SIR model. For intermediate quantities of vaccine, the deterministic model is a poor estimate of the optimal strategy for the more realistic, stochastic case.
ADA455245	A Model Based Examination of AIDS: Its Causes and Probable Course	RICE UNIV HOUSTON TX	Thompson, James R.	1/1/1986	16	TR-86-25	ARO	U	A - 01	Approved for public release; distribution is unlimited.	Technical rept.	A 1986 forecast of the AIDS epidemic and its consequences.
ADA162328	Chemotherapy of Leishmaniasis.	LIVERPOOL SCHOOL OF TROPICAL MEDICINE (ENGLAND)	Peters,Wallace	9/1/1979	44	Not available	Not available	U	A - 01	Approved for public release; distribution is unlimited.	Annual rept. 1 Jan-30 Sep 79,	Additional isolates now received numbering from LV678 through LV700 are listed. The isolates include important visceral strains from Honduras, Italy, France and India. The majority of other isolates were sent for identification from various laboratories where they are being used in current investigations. The most interesting findings this year include the identification by Dr. Chance of Leishmania isolated by Professor Bettini from dogs, Rattus rattus and a fox in Italy as L. donovani s.l., of the same enzyme type as visceral isolates from man in the Mediterranean region. This is the only recent clear incrimination of rodents as reservoirs of human visceral disease, although they are, of course, commonly associated with zoonotic L. major. Further isolates that have been brought from India should help to resolve the enigma of the origin and specific identity of the organisms responsible for the current epidemic of kala-azar in that country. (Author)
ADA620300	Seroepidemiologic Investigation of an Outbreak of Pandemic Influenza A H1N1 2009 Aboard a U.S. Navy Vessel - San Diego, 2009	NAVAL HEALTH RESEARCH CENTER SAN DIEGO CA	Khaokham, Christina B.,Selent, Monica,Loustalot, Fleetwood V.,Zarecki, Shauna M.,Harrington, Douglas,Hoke, Eileen,Faix, Dennis J.,Ortiguerra, Ryan,Alvarez, Bryan,Almond, Nathaniel	1/1/2013	10	NHRC-12-29	NMRC/MD	U	A - 01	Approved for public release; distribution is unlimited.	Journal article	Retrospective serologic analysis in paired sera demonstrated that more than half of pH1N1 infections were asymptomatic, and thus the attack rate was higher than estimated by clinical illness alone. Enhanced infection control measures including pre-embarkation illness screening, improved self reporting of illness, isolation of ill and quarantine of exposed contacts, prompt antiviral chemoprophylaxis and treatment may be useful to control shipboard influenza outbreaks.

AD1034864	Engineering Therapies that Evolve to Autonomously Control Epidemics	The J. David Gladstone Institutes San Francisco United States	Weinberger,Leor	6/1/2017	1	Not available	Not available	U	A - 01	Approved for public release; distribution is unlimited.	Technical Report	The overarching aim of our seedling effort was to de-risk the idea that viruses could be engineered into therapeutics, known as Therapeutic Interfering Particles (TIPs), using the virus HIV as a model system. By engineering TIP prototypes that were shown to reduce HIV levels >10X in cell-culturewhile having no effect on the viability of healthy, uninfected cellswe directly achieved this aim (Aim I of our proposal). The secondary aim (Aim II) of the proposal was to demonstrate, via mathematical modeling, that engineered TIPs could have indefinite, population-scale impact. To achieve this aim, we developed novel multi-scale models that connected the measured within-cell TIP dynamics achieved in Aim I with the predicted population-scale impact of these TIP prototypes on HIV prevalence levels. We further calculated cellular design constraints (e.g., genomic RNA expression levels) to guide the development of TIPs with predicted population-scale efficacy. Finally, we demonstrated the evolutionary robustness of TIPs against a key route of HIV mutational escape. Our modeling results de-risking the TIP approach were published in PLoS Computational Biology this past year.
ADA532173	Integrated Social and QoS Trust-Based Routing in Mobile Ad Hoc Delay Tolerant Networks	VIRGINIA POLYTECHNIC INST AND STATE UNIV BLACKSBURG OFFICE OF SPONSORED PROGRAMS	Chen, Ing-Ray,Bao, Fenye,Chang, Moonjeong,Cho, Jin-Hee	11/15/2010	20	Not available	ONR	U	A - 01	Approved for public release; distribution is unlimited.	Quarterly technical rept. 11 Aug-14 Nov 2010	We propose and analyze a class of integrated social and quality of service (QoS) trust-based routing protocols in mobile ad-hoc delay tolerant networks. The underlying idea is to incorporate trust evaluation in the routing protocol, considering not only QoS trust properties but also social trust properties to evaluate other nodes encountered. We prove that our protocol is resilient against bad-mouthing, good-mouthing and whitewashing attacks performed by malicious nodes. By utilizing a stochastic Petri net model describing a delay tolerant network consisting of heterogeneous mobile nodes with vastly different social and networking behaviors, we analyze the performance characteristics of trust-based routing protocols in terms of message delivery ratio, message delay, and message overhead against epidemic routing and connectivity-based routing protocols. The results indicate that our trust-based routing protocols can approach the ideal performance obtainable by epidemic routing in delivery ratio and message delay, without incurring high message overhead. Further, integrated social and QoS trust-based protocols can effectively trade off message delay and message overhead for a significant gain in message delivery ratio over traditional connectivity-based routing protocols.
ADA108992	A Mobile Surveillance System for Cerebrospinal Meningitis Control in Remote Rural Areas	NAVAL HEALTH RESEARCH CENTER SAN DIEGO CA	Sanborn, Warren R.,Schlumberger, Martin,Alzouma, Yada Adamou,Triau, Rene	1/1/1981	15	NAVHLTHRSCHC-81-4,NHRC-XB	XB	U	A - 01	Approved for public release; distribution is unlimited.	Interim rept.	Effective use of specific vaccines to control epidemic cerebrospinal meningitis requires early, precise etiologic diagnosis of cases. However, since the first cases often occur in areas remote from medical laboratories; etiologic diagnosis is seldom possible. A portable laboratory kit has been developed for rapid diagnosis of infectious diseases, including cerebrospinal meningitis, under field conditions, and the logistics of administering meningococcal vaccines have been simplified by using jet injectors, and stabilized meningococcal vaccines. A system employing these components for rapid diagnosis and vaccination was field-tested in Upper Volta with transport by a light plane. The 1979 cerebrospinal meningitis epidemic was found to be due mainly to Gr. C meningococci, but other etiologic agents were also identified. Thus. Gr. C vaccine was used, and therapy for other infections could be made consistent with rapid diagnostic test results. This rapid diagnosis and vaccination system may provide a suitable model for control of cerebrospinal meningitis epidemics in the rural areas of many countries. (Author)

ADA433452	Challenges of Electronic Medical Surveillance Systems	ARMY MEDICAL RESEARCH AND MATERIEL COMMAND FORT DETRICK MD TELEMEDICINE AND ADVANCED TECH RESEARCH CENTER	Reifman, Jaques, Gilbert, Gary, Parker, Mary, Lam, David	6/1/2004	19	Not available	USAMRMC/TATR	U	A - 01	Approved for public release; distribution is unlimited., Availability: This document is not available from DTIC in microfiche., NATO	Not available	In this paper, we discuss the technical challenges of electronic medical syndromic surveillance systems intended to provide early warning of bioterrorist attacks and naturally occurring epidemics. The discussion includes challenges associated with both civilian and military environments. In particular, we address the challenges in: (1) establishing an automated data collection infrastructure, (2) achieving timely access to quality data from disparate sources, (3) developing sensitive and specific outbreak detection algorithms, and (4) developing comprehensive and realistic simulation models for detection-algorithm development and validation. In addition, we identify unique attributes of military and North Atlantic Treaty Organization settings that may affect the development, deployment, and usage of medical surveillance systems. We conclude that considerable work and research are needed to overcome these challenges, that the information provided by these systems may lack the necessary specificity for follow-on mitigating actions, and that their cost-effectiveness and practical relevance, vis-a-vis the traditional reliance on health care providers to identify outbreaks, is still to be demonstrated.
AD0290785	BIBLIOGRAPHY ON PSITTACOSIS SUPPLEMENT, 1950-1962	ARMY BIOLOGICAL LABS FREDERICK MD	Not available	9/1/1962	1	Not available	Not available	U	A - 01	Approved for public release; distribution is unlimited.	Not available	Not available
AD0763922	Investigations of Attenuated Strains of Group a Arboviruses.	VIRGINIA COMMONWEALTH UNIV RICHMOND	Coleman, Philip H., Formica, Joseph V.	3/30/1973	15	Not available	Not available	U	A - 01	Approved for public release; distribution is unlimited.	Annual summary rept. no. 1, 1 Jul 72-30 Jun 73,	The purpose of the study is two-fold: First, to isolate a strain of eastern equine encephalitis (EEE) virus which has lost its virulent characteristics for animals and man but retains its immunogenic properties; and second, to characterize the clone 15 strain of attenuated western equine encephalitis (WEE) virus to determine its suitability as a vaccine for man and animals. EEE and WEE vaccines are necessary in order to immunize researcher and diagnosticians working with these viruses, veterinarians and others working with infected animals and special groups such as military personnel who might be exposed to natural infections because of their assignments in endemic or epidemic areas of viral activity.
ADA594130	Cleaning of Filtering Facepiece Respirators Contaminated with Mucin and Staphylococcus aureus	AIR FORCE RESEARCH LAB TYNDALL AFB FL	Heimbuch, Brian K., Kinney, Kimberly, Lumley, April E., Harnish, Delbert A., Bergman, Michael, Wander, Joseph D.	11/1/2012	8	AFRL-RX-TY-TP-2012-0078	TP-2012-0078, AFRL-RX-TY	U	A - 01	Approved for public release; distribution is unlimited.	Journal article	Decontamination and reuse of filtering facepiece respirators (FFRs) has been proposed to mitigate an anticipated shortage of FFRs caused by pandemic influenza. A wealth of research has been reported on this topic, but a data gap exists in the area of cleaning FFRs. This study evaluates the cleaning of three surgical N95 FFRs by three commercial wipe products as an initial exploration of this area. FFRs were contaminated with either Staphylococcus aureus or mucin using aerosol methods, then cleaned with one of three wipe products --two of which contain antimicrobial agents (hypochlorite and benzalkonium chloride (BAC)). Prior to extraction and quantification of the contaminants, the FFRs were deconstructed and separated into the principal components (nose pad, fabrics, and perforated edge strip, if present), allowing the cleaning efficiency for each piece to be evaluated separately. The antimicrobial-free wipe achieved ~1-log reduction in viable S. aureus on the FFR fabrics from all three FFR models. Removal was less effective on FFR nose pads and perforated edges. The antimicrobial wipes achieved 3~5-log reduction in viable S. aureus on most samples, presumably aided by disinfectant properties. Lower reductions were observed on nose pads; higher reductions were observed on materials with rough textures, presumably due to accumulation of the antimicrobial agent in these areas. Mucin removal efficiency was < 1 log on all FFRs. Evaluation of particle penetration following cleaning yielded mean values < 5%. However, the wipe containing BAC enabled significantly higher penetration than the other wipe products. The significance of these data to the concept of decontamination and reuse of FFRs will remain open to consideration until actual contamination of these devices during use has been measured. This study will both lead to and inform future research aimed at developing better FFRs.

AD0783069	Tick-Borne Pathogens with Special Reference to a Possible Extra-Human Cycle of Epidemic Typhus Infection.	MARYLAND UNIV BALTIMORE DEPT OF MICROBIOLOGY	Wisseman,Charles L. , Jr.,McDade,Joseph E.	9/30/1974	33	Not available	Not available	U	A - 01	Approved for public release; distribution is unlimited.	Final rept.,	The studies undertaken in the contract are fully counter to the recent and much-quoted contention that ticks and domestic animals play a significant role in the ecology of epidemic typhus and, instead, strongly suggest that the serological data that had been presented in support of such a hypothesis are based upon artifacts. Thus, out of 861 Ethiopian livestock sera and 2,849 sera from Egyptian domestic animals tested by complement fixation (CF) in our program, none of the samples contained antibodies specific for rickettsiae of either epidemic typhus or murine typhus. Moreover, 821 of 822 sera from Egyptian donkeys were anticomplementary and therefore nonspecifically 'positive' in CF tests. It is our opinion that the identical or a similar anticomplementary substance, identified by us as IgM, accounted for the results reported as 'positive' by earlier workers. (Modified author abstract)
ADA470342	Influenza Pandemic: DOD Combatant Commands' Preparedness Efforts Could Benefit from More Clearly Defined Roles, Resources, and Risk Mitigation	GOVERNMENT ACCOUNTABILITY OFFICE WASHINGTON DC	D'Agostino, Davi M.,Pross, Mark A.,Ditto, Susan,Gore, Nicole,Hirschfeld, Simon,Johnson, Aaron,Murrish, Hilary	6/1/2007	61	GAO-07-696	GAO	U	A - 01	Approved for public release; distribution is unlimited.	Not available	COCOMs have taken numerous management and operational actions to prepare for an influenza pandemic, and the COCOMs' efforts are evolving. Each of DOD's nine COCOMs has established or intends to establish a working group to prepare for an influenza pandemic. Additionally, eight of the nine COCOMs have developed or are developing a pandemic influenza plan. Half of the COCOMs have conducted exercises to test their pandemic influenza plans and several are taking steps to address lessons learned. Five of the nine COCOMs have started to use various media, training programs, and outreach events to inform their personnel about pandemic influenza. Each of the geographic COCOMs has worked or plans to work with nations in its area of responsibility to raise awareness about and assess capabilities or responding to avian and pandemic influenza.
ADA584053	Extension of the Genetic Algorithm Based Malware Strategy Evolution Forecasting Model for Botnet Strategy Evolution Modeling	VILNIUS GEDIMINAS TECHNICAL UNIV (LITHUANIA)	Goranin, Nikolaj,Cenys, Antanas,Juknius, Jonas	11/1/2010	22	Not available	X5	U	A - 01	Approved for public release; distribution is unlimited. NATO.	Conference paper	Botnets are considered to be among the biggest current threats to global IT infrastructure. Botnets are rapidly evolving and forecasting their survivability and propagation strategies is important for development of countermeasure techniques. Existing malware propagation models mainly concentrate on malware epidemic consequences modeling, i.e. forecasting the number of infected computers, simulating malware behavior or economic propagation aspects and are based only on current malware propagation strategies or oriented to other malware types. In this article we propose the botnet-oriented extension to our genetic algorithm based model, which aims at forecasting botnet propagation strategy evolution and may be used as a framework for other characteristics evolution forecasting. The efficiency of strategies is evaluated by applying the proposed fitness function. Genetic algorithm is selected as a modeling tool taking into consideration the efficiency of this method while solving optimization and modeling problems with large solution space. The main application of the proposed model framework is a countermeasures planning in advance and computer network design optimization.
ADA322223	Injuries in the Military: A Hidden Epidemic. A Report for the Armed Forces Epidemiological Board.	ARMY CENTER FOR HEALTH PROMOTION AND PREVENTIVE MEDICINE (PROVISIONAL) ABERDEEN PROVING GROUND MD	Jones, Bruce H.,Hansen, Barbara C.	11/1/1996	131	USACHPPM-29- HA-4844-97	XD	U	A - 01	Approved for public release; distribution is unlimited.	Final rept. Mar 94-Nov 96,	Executive Summary. Although the Military Services have recognized that injuries affect the health and readiness of military personnel, the extent of the problem has not been fully appreciated. Over the last several years, the Armed Forces Epidemiological Board (AFEB) became increasingly aware of the magnitude of the problem with injuries for the services -- in particular, the Army and Marine Corps. In March, 1994 in response to a request from the Office of the Surgeon General of the Army, the AFEB formed the Injury Prevention and Control Work Group. The Work Group's primary objectives were to answer three questions: (a) How big is the problem with injuries for the Military Services? (b) What information systems exist to support a comprehensive, integrated injury prevention and control effort? (c) What needs to be done to more effectively prevent injuries?
ADA512377	Earth, Wind, Flu, Flood and Fire: Early Evolution of U.S. National Policy for Natural Disaster Response	ARMY COMMAND AND GENERAL STAFF COLL FORT LEAVENWORTH KS	Alvarez, Terrence J.	12/11/2009	161	Not available	USACGSC	U	A - 01	Approved for public release; distribution is unlimited.	Master's thesis	



AD0648122	HYGIENIC EDUCATION OF THE POPULATION IN THE PROPHYLAXIS OF INFECTIOUS DISEASES	ARMY BIOLOGICAL LABS FREDERICK MD	Sokolov, I. S.	1/1/1966	6	SMUFD-TRANS-1737,SMUFD-TT-67-61217	TT-67-61217,ABL/MD	U	A - 01	Approved for public release; distribution is unlimited.	Not available	The hygienic education of the population on the prevention of intestinal infections includes explanatory work during the process of investigating an epidemic focus and the carrying out of measures which prevent the subsequent diseases; hygienic education of reconvalescents during their stay in the hospital; propaganda in small sectors and in epidemic foci during the process of the dispensary treatment of chronic patients and bacteria carriers; epidemiological training of active sanitation workers and those workers by whose work and by whose standard of sanitation education there is a direct reflection on the status of intestinal infections in the population; the wide attraction of the population to active participation in the work on the good sanitary organization of populated places and the sanitary protection of the soil and sources of water supply. These considerations will ensure an increase in the effectiveness of hygienic education of the population for the purpose of combatting infectious diseases, particularly intestinal infections.
ADA183862	AIDS (Acquired Immunodeficiency Syndrome) Prevention: Views on the Administration's Budget Proposals.	GENERAL ACCOUNTING OFFICE WASHINGTON DC HUMAN RESOURCES DIV	Not available	8/12/1987	35	GAO/HRD-87-126BR	Not available	U	A - 01	Approved for public release; distribution is unlimited.	Not available	This briefing report responds to a request concerning the level of fiscal year 1988 funding needed to limit the further spread of acquired immunodeficiency syndrome (AIDS). We explored both the adequacy of the funding levels and the appropriateness of priorities reflected in the administration's proposed budget for AIDS prevention. We focused on education, testing, and counseling services. Since a vaccine is at least 5 years into the future and probably longer experts in the research community agree that education and prevention activities are the most powerful tools available to reduce the potential impact of the AIDS epidemic. Investing in prevention now can help contain the future, direct medical costs of treating AIDS. Those areas targeted for immediate action should be: containing the spread of the AIDS virus among intravenous drug users as well as from this risk group to their sexual partners; educating targeted high-risk groups and the general population; and expanding voluntary testing with pretest and posttest counseling services.
AD1014033	Syndromic Surveillance and Outbreak Detection Using Automated Microbiologic Laboratory Test Order Data	Uniformed Services University Of The Health Sciences Bethesda United States	Olsen,Cara H.	6/15/2007	170	Not available	Not available	U	A - 01	Approved for public release; distribution is unlimited.	Technical Report	Background: Syndromic surveillance systems monitor one or more electronic data sources in real time to assist in early detection of unusual health events. To detect such events at military treatment facilities (MTFs), the Department of Defense Electronic Surveillance System for the Early Notification of Community-based Epidemics (DoDESSSENCE) conducts daily surveillance on outpatient visit diagnosis and pharmacy data. Combining data from multiple sources may improve the ability of syndromic surveillance systems to detect disease outbreaks. Objective: To evaluate whether data on microbiologic laboratory tests ordered forpatients during outpatient visits to MTFs can improve the performance of DoDESSSENCE in detecting disease outbreaks.
ADA441738	Weight Maintenance: Determinants of Success	AIR FORCE INST OF TECH WRIGHT-PATTERSON AFB OH	Mitchell, Cynthia L.	12/15/2005	45	Not available	AFIT	U	A - 01	Approved for public release; distribution is unlimited.	Not available	This literature review was a selective examination of current obesity and physical activity research and opinions. Its purpose was more to evoke thought and discussion regarding the United States' obesity epidemic, rather than serve as an exhaustive account of prospective causes and solutions. Obesity and physical inactivity are major preventable health problems in the United States, but despite overwhelming evidence regarding the benefits of a healthy weight and regular physical activity, adult, childhood and adolescent obesity rates continue to escalate, creating significant health, medical and economic consequences. While obesity rates soar, a small population percentage has proven successful in long-term weight maintenance, even in the presence of significantly influential environmental and interpersonal factors. Reviewing strategies employed by National Weight Control Registry members, this literature review discusses the two behavioral components missing from standard or traditional, action-oriented intervention programs. Although the Stages-of-Change Model explains an individual's readiness to change and the process involved, self-efficacy and self-regulating behaviors were shown to have a more positive effect on long-term maintenance. Thus, recommendations for practical application include incorporating these behavioral components for a more effective and client-centered intervention program.

ADA042621	Morphological Studies of Experimental Epidemic Encephalitis (Summer-Encephalitis). II. Regarding Modifications of Intracranially, Nasally, Intravenously and Subcutaneously Injected Mice, with Special Consideration of the Relation between the Infection-Mode and Its Distribution,	ARMY MEDICAL RESEARCH INST OF INFECTIOUS DISEASES FREDERICK MD	Takaki,Fumikazu	8/3/1977	9	USAMRIID-MUL-0533	Not available	U	A - 01	Approved for public release; distribution is unlimited.	Not available	The following study was intended to examine the expansion-mode and the development of encephalitic changes of epidemic encephalitis (the Japanese summer-encephalitis) of mice; caused by experimenting on various modes of injection, such as intracerebral, intranasal, intravenous and subcutaneous injections. At the same time reactions of the intestines, especially of the fibrous tissue of the vascular system were considered.
ADA523615	Project BioShield: Authorities, Appropriations, Acquisitions, and Issues for Congress	LIBRARY OF CONGRESS WASHINGTON DC CONGRESSIONAL RESEARCH SERVICE	Gottron, Frank	6/23/2010	18	CRS-R41033	CRS/DC	U	A - 01	Approved for public release; distribution is unlimited.	Congressional rept.	Following the terrorist attacks of 2001, the federal government determined that it would need new medical countermeasures (such as diagnostic tests, drugs, vaccines, and other treatments) to respond to an attack using chemical, biological, radiological, or nuclear (CBRN) agents. Representatives of the pharmaceutical industry attributed the paucity of CBRN agent countermeasures to the lack of a significant commercial market. They argued that because these diseases and conditions occur infrequently, the private sector perceived little economic incentive to invest the millions of dollars required to bring treatments to market. In 2004, Congress passed the Project BioShield Act (P.L. 108-276) to encourage the development of CBRN medical countermeasures. The 108th Congress also appropriated \$5.6 billion to acquire countermeasures through Project BioShield for FY2004 through FY2013. Subsequent congresses have evaluated implementation of Project BioShield. In response to perceived problems with Project BioShield countermeasure procurement, the 109th Congress created the Biodefense Advanced Research and Development Authority (BARDA) and the position of Assistant Secretary for Preparedness and Response in the Department of Health and Human Services (HHS) through the Pandemic and All-Hazards Preparedness Act (P.L. 109-417). The 111th Congress continues to address several Project BioShield-related policy issues. These include whether to continue diverting Project BioShield acquisition funding to other purposes; whether to change the countermeasure development and acquisition process; how to replace stockpiled countermeasures as they expire; and whether to alter federal efforts to encourage the development of broad-spectrum countermeasures.
ADA585214	A Host Transcriptional Signature for Presymptomatic Detection of Infection in Humans Exposed to Influenza H1N1 or H3N2	DUKE UNIV DURHAM NC DEPT OF ELECTRICAL AND COMPUTER ENGINEERING	Woods, Christopher W.,McClain, Micah T.,Chen, Minhua,Zaas, Aimee K.,Nicholson, Bradly P.,Varkey, Jay,Veldman, Timothy,Kingsmore, Stephen F.,Huang, Yongsheng,Lambkin-Williams, Robert	1/9/2013	10	Not available	DARPA	U	A - 01	Approved for public release; distribution is unlimited.	Journal article	There is great potential for host-based gene expression analysis to impact the early diagnosis of infectious diseases. In particular, the influenza pandemic of 2009 highlighted the challenges and limitations of traditional pathogen-based testing for suspected upper respiratory viral infection. We inoculated human volunteers with either influenza A (A/Brisbane/59/2007 (H1N1) or A/Wisconsin/67/2005 (H3N2)), and assayed the peripheral blood transcriptome every 8 hours for 7 days. Of 41 inoculated volunteers, 18 (44%) developed symptomatic infection. Using unbiased sparse latent factor regression analysis we generated a gene signature (or factor) for symptomatic influenza capable of detecting 94% of infected cases. This gene signature is detectable as early as 29 hours post-exposure and achieves maximal accuracy on average 43 hours (p = 0.003 H1N1) and 38 hours (p-value = 0.005, H3N2) before peak clinical symptoms. In order to test the relevance of these findings in naturally acquired disease, a composite influenza A signature built from these challenge studies was applied to Emergency Department patients where it discriminates between swine-origin influenza A/H1N1 (2009) infected and non-infected individuals with 92% accuracy. The host genomic response to Influenza infection is robust and may provide the means for detection before typical clinical symptoms are apparent.

ADA249770	Trends and Methods in Identification of Human Immunodeficiency Virus (HIV) Seropositivity in Active-Duty U.S. Navy Enlisted Personnel: 1986-1989	NAVAL HEALTH RESEARCH CENTER SAN DIEGO CA	Gardland, Frank C.,Gorham, Edward D.,Cunnion, Steve O.,Miller, Milan R.,Balazs, Louis L.	9/24/1991	27	NHRC-90-40	NMRDC	U	A - 01	Approved for public release; distribution is unlimited.	Final rept. 1 Jan 1986-31 Dec 1989	Time-trends in the occurrence of HIV seropositivity are the basis for projecting the future course of the epidemic. This study presents quarterly rates of HIV infection during 1986 to 1989 in U.S. Navy active-duty enlisted personnel, a large, serially-tested population. During this period, the U.S. Navy administered 1,795,578 enzyme-linked immunosorbent assay (ELISA) tests to 848,632 active-duty Navy enlisted personnel. There were 2,438 seropositive personnel identified, including 778 with a previous negative test. Three types Of quarterly rates are reported here: the seropositive rate per 1,000 tested the seroconversion rate per 1,000 tested (with a previous negative test); and the seroconversion rate per 1,000 person-years. Rates by all three methods declined between 1986 and 1989. The mean seropositive rate per 1,000 tested showed a steady decline from 2.9 in 1986 to 0.5 in 1989 (p < 0.05). The mean age-adjusted seroconversion rate per 1,000 tested declined from 0.9 3.4 in 1986 to 0.5 in 1989 (p < 0.05). The mean seroconversion rate per 1,000 person-years declined from 0.9 in 1986 to 0.4 in 1989 (p < 0.05). The race ratio (black/white) declined from 3.9 to 2.7 over the same time-period. Mean seroconversion rates among male hospital corpsmen declined from 10.3 in 1986 to 1.5 in 1989 (p < 0. 05). The overall decline in HIV rates in the Navy could not be explained by changes in the population tested according to age, race, sex, occupational risk group, or geographic location of home port during the study period. The decline in rates in the Navy is encouraging. Human Immunodeficiency Virus (HIV) Acquired Immunodeficiency Syndrome (AIDS) Time trends.
ADA422069	Bioterrorism Preparedness Through Public Health and Medical Bio-Surveillance	INDUSTRIAL COLL OF THE ARMED FORCES WASHINGTON DC	Hepler, Oliver M., III	3/25/2003	20	Not available	NDU/ICAF	U	A - 01	Approved for public release; distribution is unlimited.	Not available	INTRODUCTION The first sign of a biological weapons or bioterrorism attack may be as inconspicuous as a flag on a computer screen in a small community. Yet this seemingly innocuous and lonely signal could mark the beginning of a national public health nightmare and response to a biological weapons attack. A bioterrorism attack may sneak up on cat's paws, following an insidious and unpredictable course and making itself known slowly and intermittently over a period of days or weeks. It may appear in places as disparate as doctor's offices, health clinics, and hospital emergency rooms. If not contained, its effects could spread to others not initially exposed, causing an epidemic and threat to our national security and the survival of our population.
ADA569675	Development of Antibacterials Targeting the MEP Pathway of Select Agents	GEORGE MASON UNIV FAIRFAX VA	Couch, Robin	2/1/2013	11	Not available	USAMRMC	U	A - 01	Approved for public release; distribution is unlimited.	Final rept. 10 Feb 2012-9 Feb 2013	The threat of bioterrorism and the use of biological weapons against both military personnel and civilian populations has become an increasing concern for governments around the world. The 1984 Rajneeshee Salmonella attack, 2001 anthrax letter attacks, 2003 SARS outbreak, 2009 H1N1 swine flu pandemic, and the current US flu epidemic all illustrate our vulnerability to both deliberate and natural outbreaks of infectious disease and underscore the necessity of effective antimicrobial and antiviral therapeutics. The prevalence of antibiotic resistant strains and the ease by which antibiotic resistance can be engineered into bacteria further highlights the need for continued development of novel antibiotics against new bacterial targets. This research project directly addresses this need through the development of a broad spectrum inhibitor of the biothreat agents Francisella tularensis and Yersinia pestis. During this period of performance, we have successfully cloned, expressed, purified and enzymatically characterized the Yersinia pestis IspC (aka MEP synthase), a validated target for the development of new broad spectrum antibiotics. This characterization enabled us to establish conditions for screening an in-house natural product library, and through this screening effort we have identified inhibitor-leads for the enzyme. We have performed detailed kinetic evaluation of one of these leads and have deduced that this new inhibitor is the founding member of a novel class of IspC inhibitors; functioning by binding to a previously undiscovered allosteric site on the enzyme (i.e. this new inhibitor binds the enzyme at a site outside of the active site). As an allosteric site has never been described for any IspC homolog, this exciting discovery affords the development of a completely new family of antibiotics targeting the IspC enzyme.

ADA605890	Regional Disease Vector Ecology Profile: North Africa	ARMED FORCES PEST MANAGEMENT BOARD WASHINGTON DC	Not available	5/1/2000	174	Not available	ODUSD(I/E)	U	A - 01	Approved for public release; distribution is unlimited.	Not available	Disease Vector Ecology Profiles (DVEPs) summarize unclassified literature on medically important arthropods, vertebrates and plants that may adversely affect troops in specific countries or regions around the world. Primary emphasis is on the epidemiology of arthropod-borne diseases and the bionomics and control of disease vectors. DVEPs have proved to be of significant value to commanders, medical planners, preventive medicine personnel, and particularly medical entomologists. These people use the information condensed in DVEPs to plan and implement prevention and control measures to protect deployed forces from disease, injury, and annoyance caused by vector and pest arthropods. Because the DVEP target audience is also responsible for protecting troops from venomous animals and poisonous plants, as well as zoonotic diseases for which arthropod vectors are unknown, limited material is provided on poisonous snakes, noxious plants, and diseases like hantavirus.
AD0784990	Tick-borne Pathogens with Special Reference to a Possible Extra-Human Cycle of Epidemic Typhus Infection.	MARYLAND UNIV BALTIMORE DEPT OF MICROBIOLOGY	Wisseman, Charles L. , Jr., McDade, Joseph E.	9/30/1973	34	Not available	Not available	U	A - 01	Approved for public release; distribution is unlimited.	Final rept.,	The studies undertaken are fully counter to the recent and much quoted contention that ticks and domestic animals play a significant role in the ecology of epidemic typhus and, instead, strongly suggest that the serological data that had been presented in support of such a hypothesis are based upon artifacts. Thus, out of 861 Ethiopian livestock sera and 2,849 sera from Egyptian domestic animals tested by complement fixation (CF) in the program, none of the samples contained antibodies specific for rickettsiae of either epidemic typhus or murine typhus. Moreover, 821 of 822 sera from Egyptian donkeys were anticomplementary and therefore nonspecifically positive in CF tests. The identical or a similar anticomplementary substance, identified as IgM, accounted for the results reported as 'positive' by earlier workers. These results indicate that such domestic animals could not serve as a reservoir or source of infection of ticks with R. prowazeki in nature. (Modified author abstract)
ADA619356	Adult Male Circumcision: Reflections on Successes and Challenges	NAVAL HEALTH RESEARCH CENTER SAN DIEGO CA	Justman, Jessica, Goldberg, Allison, Reed, Jason, Bock, Naomi, Njeuhmeli, Emmanuel, Thomas, Anne G.	7/1/2013	6	NHRC-13-32	NMRC/MD	U	A - 01	Approved for public release; distribution is unlimited.	Journal article	Voluntary medical male circumcision (VMMC) is a cost-effective HIV prevention intervention that reduces the risk of HIV acquisition in men by 60%. Although some countries are successfully scaling-up VMMC, not all are. When VMMC scale-up experiences are viewed in the context of models for the diffusion of innovation, some themes emerge. Successful VMMC programs have in common locally-led campaigns, a cultural tolerance of VMMC, strong political leadership and coordination, and adequate human and material resources. Challenges with VMMC scale-up have been marked by less flexible implementation models that seek full integration of VMMC services at public medical facilities and struggles with targeting services versus equitable access to services. Innovation diffusion models, especially the endogenous technology model, and multiple levels of influence on diffusion -- individual males and their sex partners communities, and health systems -- remind us that the adoption of a prevention intervention, such as VMMC, is expected to start out slowly, and as information spreads, gradually speed up. In addition, the diffusion models suggest that customizing approaches to different populations is likely to accelerate VMMC scale-up and help achieve a long-term, sustainable impact on the HIV epidemic.
AD0837579	ON THE OCCURRENCE OF VARIOLA AMONG MONKEYS OF THE GENERA MYCETES AND CEBUS IN THE WAKE OF A POX EPIDEMIC ON THE TRIBUTARIES OF THE ALTO URUGUAY IN THE JUNGLES OF SOUTHERN BRAZIL	ARMY BIOLOGICAL LABS FREDERICK MD	Bleyer, J. C.	7/1/1968	6	TRANS-481	ABL	U	A - 01	Approved for public release; distribution is unlimited.	Not available	The prophylactic measures against dissemination of smallpox, such as inoculation and other sanitary precautions, have not always succeeded in controlling the spread of variola in Brazil, and could not prevent penetration of this extraordinarily infectious disease into distant jungle areas. Infection of Indians in the jungles was followed by infection of simian species (Mycetes seniculus Kuhl and Cebus capucinus Exl) found relatively often in these distant jungle areas. Cadavers of these monkeys were found under trees from which they had fallen. Diseased and dead animals were covered with numerous variola pustules which due to the furry coat were less visible than in man.

ADA444188	Modeling Shrimp Biomass and Viral Infection for Production of Biological Countermeasures	NORTH CAROLINA STATE UNIV AT RALEIGH CENTER FOR RESEARCH IN SCIENTIFIC COMPUTATION	Banks, H. T.,Bokil, V. A.,Hu, S.,Dhar, A, K.,Bullis, R. A.,Bullis, R. A.,Browdy, C. L.,Allmutt, F. C.	12/9/2005	32	Not available	AFOSR	U	A - 01	Approved for public release; distribution is unlimited. This document is not available from DTIC in microfiche.	Not available	We consider a novel approach for developing a stable operational platform for the rapid production of large quantities of therapeutic and/or preventative countermeasures. The ideas developed here can also serve as the foundations in designing an economical platform for the production of complex protein therapeutics to replace mammalian cell culture production methods used in the pharmaceutical industry. This approach involves recruiting the biochemical machinery in an existing biomass for the production of a vaccine or antibody by infection using a virus carrying a passenger gene for the desired countermeasure. While our motivation derives from efforts related to first response to deliberate bio toxic attacks on populations, the models we develop may also have use in designing prophylactic production systems against epidemics originating naturally in populations which, without intervention, might result in pandemics. While our model is specific to virus growth and vaccine production in shrimp, the implications for other crustaceans are obvious. And of course the shrimp models we investigate can serve as a foundation for understanding viral progression in other species important to marine agriculture.
ADA469080	Production of Recombinant Protein Pap31 and Its Application for the Diagnosis of Bartonella bacilliformis Infection	NAVAL MEDICAL RESEARCH CENTER SILVER SPRING MD	Taye, A.,Chen, H.,Duncan, K.,Zhang, Z.,Hendrix, L.,Gonzalez, J.,Ching, W.	1/1/2005	7	Not available	NMRC/MD	U	A - 01	Approved for public release; distribution is unlimited.	Journal article	Tropical bartonellosis is a highly fatal epidemic and endemic infectious disease that occurs throughout the communities of the Andes Mountains in South America. The disease is caused by the facultative intracellular bacteria, Bartonella bacilliformis. The emergence of bartonellosis in new geographic areas and an increase in the number of reported cases suggest the need for a rapid test for epidemiologic study and investigation of the disease burden. The objective of this research is to develop a rapid serologic diagnostic test using recombinant antigens to overcome the limitations of the current standard IFA technique for laboratory diagnosis. Western blot analysis with patient sera of whole cell lysate separated on a 2D gel identified Pap31 as a dominant antigen. PCR primers were designed according to the sequence of ATCC strain 35685 to amplify the gene coding for Pap31 from a local isolate (HOSP 800-09, Peru). The amplicon was subsequently cloned into pET24a, adding the T7 tag, and expressed in E. coli. Patient sera with different IFA titers confirmed the diagnostic band of 31 kDa on a Western blot of SDS-PAGE. The performance of affinity-purified recombinant Pap31 (rPap31) was also evaluated in an ELISA format with 137 patient sera of known IFA titers. The range of ELISA reading from positive sera did not overlap with the range of those from negative sera, suggesting the potential application of rPap31 in both ELISA for high throughput regional hospital settings and in the construction of handheld rapid tests for rural clinical sites.
ADA475294	Asia Pacific Military Medicine Conference (APMMC) Simulation Symposium (16th) Held in New Delhi, India on March 26-31, 2006. Abstracts	HAWAII UNIV HONOLULU	Vincent, Dale S.	4/1/2006	222	Not available	USAMRMC	U	A - 01	Approved for public release; distribution is unlimited.	Conference abstracts	Not available
AD0843797	Rice-Blast (Piriculariosis)Epidemic in France in 1959	ARMY BIOLOGICAL LABS FREDERICK MD	Bernaux, P.	11/30/1967	20	TRANS-2080	ABL/MD	U	A - 01	Approved for public release; distribution is unlimited., Availability: Document partially illegible.	Not available	Rice-growers have been alerted, on numerous occasions, to the possibility that certain epidemic diseases of rice might be introduced into Camargue (an area in the Rhone Delta). An identification was made of rice-blast disease, caused by Piricularia oryzae, especially on the variety 'Martelli.' A survey was made of the cause, distribution, control, etc.

ADA528854	Worldwide Emerging Environmental Issues Affecting the U.S. Military. Summarizing Environmental Security Monthly Scanning May 2005 - May 2006	FEDERATION OF UN ASSOCIATIONS WASHINGTON DC MILLENNIUM PROJECT	Not available	5/1/2006	206	Not available	AEPI	U	A - 01	Approved for public release; distribution is unlimited.	Final rept.	The purpose of the monthly scanning reports is to assess worldwide environment-related events in order to identify and analyze issues that might trigger future international environmental regulations and/or modifications to the existing ones with potential implications for the military. Environmental security continues to move up on national, regional, and international agendas due to increasing scientific evidence of climate change, extreme weather events, the number and intensity of natural disasters, pollution, potentials for pandemics, and nuclear-biological-chemical threats. The Army Strategy on the Environment reflects this new direction. Environmental diplomacy is increasingly being used to support conflict prevention efforts and to build international confidence, while human security is gaining recognition in both military and diplomatic circles. Environmental security is a link between the two. The Millennium Project defines environmental security as environmental viability for life support, with three sub-elements: *preventing or repairing military damage to the environment, *preventing or responding to environmentally caused conflicts, and *protecting the environment due to its inherent moral value. This summarizing paper presents the events and emerging environmental security-related issues identified since May 2005, organized around this definition.
ADA503787	FY2009 Spring Supplemental Appropriations for Overseas Contingency Operations	LIBRARY OF CONGRESS WASHINGTON DC CONGRESSIONAL RESEARCH SERVICE	Daggett, Stephen,Epstein, Susan B.,Tarnoff, Curt,Margesson, Rhoda,Nakamura, Kennon H.,Kronstadt, K. A.,Lister, Sarah A.	7/15/2009	86	CRS-R40531	CRS/DC	U	A - 01	Approved for public release; distribution is unlimited.	Congressional rept.	On June 11, 2009, the House and Senate Appropriations Committees announced a conference agreement on H.R. 2346, a bill providing supplemental appropriations for the remainder of FY2009. The House passed the conference report (226 to 202) on June 16; the Senate passed it (91 to 5) on June 18. President Obama signed it into law (P.L. 111-32) on June 24. On key issues, the agreement includes: \$5 billion, as in the Senate bill, to support U.S. loans to the International Monetary Fund, does not include a Senate provision allowing the Secretary of Defense to exempt photos of military detainees from release under the Freedom of Information Act; does not include \$80 million requested for the Department of Defense and the Department of Justice to facilitate closure of the Guantanamo Bay prison; prohibits the release of Guantanamo detainees in the United States and prohibits transfers of prisoners except to be prosecuted; provides \$1.9 billion for H1N1 pandemic flu preparedness (declared to be a pandemic by the World Health Organization on June 11), along with \$5.8 billion more, contingent on the President determining it is needed; and \$1 billion for the Cash for Clunkers" program to provide payments to consumers who trade in their inefficient vehicles and purchase more fuel efficient ones."
AD0676673	THE TYPES OF EPIDEMIC OUTBREAKS OF TULAREMIA	ARMY BIOLOGICAL LABS FREDERICK MD	Maisky, I. N.	7/1/1968	5	SMUFD-TRANS-677	ABL/MD	U	A - 01	Approved for public release; distribution is unlimited. Document partially illegible.	Not available	Tularemia infections in epidemic outbreaks have no focal character and are not only connected with persons participating in the threshing or in the cultivation of agricultural products, but also with general illnesses in isolated populated places. In this connection the tularemia morbidity rate in such outbreaks bears a mass character.
ADA560222	Recruiting the Future Force: A Proactive Approach	ARMY WAR COLL CARLISLE BARRACKS PA	Smith, Randy L.	3/24/2011	54	Not available	USAWC	U	A - 01	Approved for public release; distribution is unlimited.	Strategy Research Project	The Department of Defense (DoD) plays a critical role in the national security strategy of the United States, and the military s success is predicated on recruiting highly qualified applicants to fulfill this vital mission. For almost forty years the all volunteer force (AVF) proved a remarkably successful approach to manning the most effective and dominant military in history. Today, however, the concept of a volunteer force is stressed as never before. Nearly a decade of protracted conflict, increasing deficiencies in our public education system and nearly epidemic obesity among our nation s youth provide a new set of challenges to our recruiting force. Currently recruiting efforts focus on a passive strategy; simply extracting the qualified individuals from the available resource pool. This is a short term strategy that has run its course. In the future, we must focus on a more proactive approach to the resource pool requiring not only mining the current pool of America s youth, but also taking proactive steps to increase the number of qualified applicants. This paper will discuss the background of the AVF and provide recommendations for how DoD can shape the recruiting environment to overcome these challenges.

AD0763674	Point Processes in Epidemiology	STANFORD UNIV CA DEPT OF STATISTICS	Gani, J.	5/15/1973	30	TR-203	ONR	U	A - 01	Approved for public release; distribution is unlimited.	Technical rept.	The paper consists of six sections. The first is devoted to chain binomial methods and their use in the statistical analysis of measles and hepatitis data. A second considers time dependent results for carrier-borne epidemics, and the use of matrix methods in computing probabilities of their final size. The third surveys the application of perturbation techniques to the general stochastic epidemic, and the estimation of infection and removal parameters in this model on the basis of smallpox data. The fourth section summarizes asymptotic results for the general stochastic epidemic when the initial populations of susceptibles and infectives are both very large. In the fifth, some recent results are outlined on the costs of epidemics; these depend on the stochastic path integral under the infective curve. Finally, a brief account is given of the analysis of space-time interactions in epidemic processes.
ADA583069	Genomic Characterization of Adenovirus 21 Strains Associated With Outbreaks of Febrile Respiratory Illness in United States Military Recruit Training Centers Between 1996 and 2005	NAVAL HEALTH RESEARCH CENTER SAN DIEGO CA	Kajon, Adriana E., Moseley, Jennifer M., Russell, Kevin L., Metzger, David	5/2/2006	37	NHRC-06-15	NMRC/MD	U	A - 01	Approved for public release; distribution is unlimited.	Technical rept. Oct 1998- May 2006	Adenovirus type 21 (Ad21) is a well-known causative agent of acute respiratory disease among both military recruits and children. In an effort to characterize the molecular epidemiology of Ad21 infections in the military environment, genome-typing work was carried out on a collection of 75 Ad21 strains isolated from the pharyngeal swabs of military recruits presenting with symptoms of febrile respiratory illness between 1996 and 2005 at eight US training centers. One further strain from an ill serviceperson deployed at sea was also characterized. Restriction enzyme analysis with BamHI discriminated two distinct DNA variants, Ad21a and Ad21b. Further analysis with Bg/I, Bg/II, BstEII, HindIII, KpnI, and SmaI discriminated two new subtypes, Ad21a1 and Ad21b1. Ad21a was the most prevalent genome type, accounting for 69 of the 76 strains examined. Genome type Ad21a1 was identified only among the strains isolated at the Marine Corps Recruit Depot, San Diego, CA. Genome types Ad21b and Ad21b1 were identified among strains isolated in 2005 and seem to have emerged after a 4-year (1999-2002) disappearance of all Ad21 genome types. After the reintroduction of the Ad4/Ad7 vaccine in 2008, Ad21 is expected to become a predominant adenovirus serotype in US recruit training centers once again. Knowledge of circulating genome types and their epidemic behavior will be of significant value to ongoing surveillance efforts in these highly susceptible and impacted populations.
AD0659037	WORK OF THE ARMED FORCES IN THE ECONOMIC AND SOCIAL DEVELOPMENT OF THE COUNTRIES (MILITARY CIVIC ACTION).	INTER-AMERICAN DEFENSE BOARD WASHINGTON D C	Not available	6/8/1965	90	T-255,65/112	Not available	U	A - 01	Approved for public release; distribution is unlimited.	Not available	Reports on accomplishments in the field of military civic action and opens a first approach to the study of this field of economic-social activities of the armed forces. The information is organized, on functional bases, in the following chapters: Farming and stock raising development; Cartography, studies and research; Industrial development; Education and training; Health, housing and community development; Transportation and communication routes; Telecommunications; and Military civic action of the Armed Forces of the United States of America. It should be noted, moreover, that in emergency situation such as floods, earthquakes, epidemics, and other disasters, the Armed Forces move in with their entire human and material resources. They do work in the various situations above mentioned, in support of the populations affected, and in close coordination with other civilian agencies.
ADA598493	Global Emerging Infection Surveillance and Response (GEIS)- Avian Influenza Pandemic Influenza (AI/PI) Program	KENYA MEDICAL RESEARCH INST NAIROBI	Mpoke, Solomon, Coldren, Rodney L.	10/1/2012	12	Not available	USAMRMC	U	A - 01	Approved for public release; distribution is unlimited.	Annual rept. 13 Sep 2011- 12 Sep 2012	The purpose of this contract is to carry out emerging infectious disease surveillance in Kenya. Specific areas in which work is performed include respiratory illness surveillance (particularly influenza), acute febrile illness surveillance, malaria resistance surveillance, diarrhea etiology and antimicrobial resistance surveillance, sexually transmitted illness surveillance, and capacity building. KEMRI maintained surveillance sites in both Kenyan Defense Forces and Ministry of Health clinics and hospitals throughout Kenya. KEMRI operated reference laboratories for this work in Nairobi, Kericho, and Kisumu, including the National Influenza Center (NIC), the arbovirus reference laboratory, the antimalarial resistance laboratory, entomology facilities, the Center of Excellence in Microscopy, the microbiology reference laboratory. Capacity development projects include continuation of a laboratory and medical maintenance student attachment program and a safety training program. The program was able to characterize respiratory viruses causing influenza-like illness in Kenya, determine etiologies of diarrheal illnesses and the antimicrobial resistance patterns of bacterial causes, determine the etiologies of sexually transmitted infections and acute febrile illnesses in military and civilian populations, and establish the pattern of antimalarial resistance across Kenya. An outbreak of dengue was investigated on the coast. Initial work to characterize leishmaniasis begun.

ADA080887	On the Normal Convergence of a Class of Simple Batch Epidemics.	FLORIDA STATE UNIV TALLAHASSEE DEPT OF STATISTICS	Langberg,Naftali A.	10/1/1979	18	FSU-STATISTICS- M495R,TR-D-41- ARO,ARO- 16713.5-M	16713.5-M	U	A - 01	Approved for public release; distribution is unlimited.	Technical rept.,	A group of n susceptible individuals exposed to a contagious disease is considered. It is assumed that at each instant in time one or more susceptible individuals can contract the disease. The progress of this epidemic is modeled by a stochastic process $X_{sub n}(t)$ , $t$ in $(0, infinity)$ representing the number of infective individuals at time $t$ . It is shown that $X_{sub n}(t)$ , with the suitable standardization and under a mild condition, converges in distribution as $n$ approaches infinity to a normal random variable for all $t$ in $(0, t_{sub 0})$ , where $t_{sub 0}$ is an identifiable number. (Author)
ADA491298	U.S. Army Medical Department Journal (April- June 2006)	ARMY MEDICAL DEPT CENTER AND SCHOOL FORT SAM HOUSTON TX	Weightman, George W.,Cates, Michael B.,Craig, Stephen C.,Ciesla, John J.,Petrucelli, Bruno,Knapik, Joseph,Debboun, Mustapha,Sames, William J.,Eng, Robert R.,Pearson, Curtis W.,Kirkpatrick, Jeffrey S.,Moser, Christine,Hutchens, Brad E.,Madson, James A.,Alsip, Bryan J.,Taylor, Patterson W.,Zapor, Michael J.	6/1/2006	80	PB8-06-2	AMEDDCS	U	A - 01	Approved for public release; distribution is unlimited.	Journal	The focus of this issue of the AMEDD Journal is Preventive Medicine.
ADA473718	Compliance with Community Mitigation and Interventions in Pandemic Influenza: A Community Policing Strategy	NAVAL POSTGRADUATE SCHOOL MONTEREY CA	Alben, Sr., Timothy P.	9/1/2007	99	Not available	NPS	U	A - 01	Approved for public release; distribution is unlimited.	Master's thesis	A number of response plans and strategies have been published concerning preparation for an oncoming Pandemic Influenza. The majority of federal guidance and state planning with respect to pandemic preparation focuses excessively on the availability and distribution of effective vaccine and antiviral remedies; pharmaceutical solutions. Effective vaccines, presently unavailable, will not be in production and available for application for at least eight months after the onset of an identified pandemic. Community mitigations and interventions such as school closures, event cancellations, limited travel, quarantine and work at home plans are traditional responses to slowing the spread of a virus. In order to effectively implement these time tested strategies, voluntary community compliance with interventions becomes exceedingly important. The recent global experience with SARS and current mathematical modeling of virus spread characteristics support community mitigation efforts. The community policing model, having evolved over the last twenty years, provides a pre-existing framework to engage the public in grass roots pandemic education, awareness, planning and problem solving partnerships. The Incident Command System provides a structure for collaborative, multi-agency approach to successfully implementing a community awareness and compliance initiative. Community mitigations will save lives.



ADA456158	Interrogation of Detainees: Overview of the McCain Amendment	LIBRARY OF CONGRESS WASHINGTON DC CONGRESSIONAL RESEARCH SERVICE	Garcia, Michael J.	9/25/2006	13	Not available	CRS/DC	U	A - 01	Approved for public release; distribution is unlimited.	CRS Rept. for Congress	Controversy has arisen regarding U.S. treatment of enemy combatants and terrorist suspects detained in Iraq, Afghanistan, and other locations, and whether such treatment complies with U.S. statutes and treaties such as the U.N. Convention Against Torture and Other Forms of Cruel and Inhuman or Degrading Treatment or Punishment (CAT) and the 1949 Geneva Conventions. Congress approved additional guidelines concerning the treatment of detainees via the Detainee Treatment Act (DTA), which was enacted pursuant to both the Department of Defense, Emergency Supplemental Appropriations to Address Hurricanes in the Gulf of Mexico, and Pandemic Influenza Act, 2006 (P.L. 109-148), and the National Defense Authorization Act for FY2006 (P.L. 109-163). Among other things, the DTA contains provisions that (1) require Department of Defense (DOD) personnel to employ United States Army Field Manual guidelines while interrogating detainees, and (2) prohibit the cruel, inhuman and degrading treatment or punishment of persons under the detention, custody, or control of the United States Government. These provisions of the DTA, which were first introduced by Senator John McCain, have popularly been referred to as the McCain Amendment. This report discusses the McCain Amendment, as modified and subsequently enacted into law. This report also discusses the application of the McCain Amendment by the DOD in the updated 2006 version of the Army Field Manual, particularly in light of the Supreme Court's ruling in Hamdan v. Rumsfeld. In addition, the report discusses recent legislation relating to Al Qaeda detainees that references the McCain Amendment.
ADA461819	COHORT: An Integrated Approach to Decision Support for Military Subpopulation Health Care	OFFICE OF THE SURGEON GENERAL (AIR FORCE) WASHINGTON DC	Demetry, Peter	1/1/2004	19	Not available	USAFOSG	U	A - 01	Approved for public release; distribution is unlimited.	Briefing charts	Overview of presentation: What is COHORT? What is Parallax? Why COHORT is different. Does it Work? A Case Study. How did we do it? Other applications to medical research. COHORT is a series of relevant databases that have been consolidated into a datamart that allow for the continuous monitoring, analysis and early detection of epidemics, disease trends, and health anomalies among and across an infinite selection of cohorts through a variety of data applications. It provides temporal and geographic medical surveillance of every Air Force member from induction through retirement.
AD1009270	A Single Residue in Ebola Virus Receptor NPC1 Influences Cellular Host Range in Reptiles	USAMRIID Frederick United States	Herbert,Andrew S.,Dye,John M.,Chandran,Kartik,Nd ungo,Esther,Raaben,M atthijs,Obernosterer,G regor,Biswas,Rohan,Mi ller,Emily H.,Wirchnianski,Ariel S.,Carette,Jan E.,Brummelkamp,Thijn R.,Whelan,Sean P.	9/7/2016	31	Not available	Not available	U	A - 01	Approved For Public Release;	Journal Article	Filoviruses are the causative agents of an increasing number of disease outbreaks in human populations, including the current unprecedented Ebola virus disease (EVD) outbreak in Western Africa. One obstacle to controlling these epidemics is our poor understanding of the host range of filoviruses and their natural reservoirs. Here, we investigated the role of the intracellular filovirus receptor, Niemann-Pick C1 (NPC1) as a molecular determinant of Ebola virus (EBOV) host range at the cellular level. Whereas human cells can be infected by EBOV, a cell line derived from a Russells viper (Daboia russellii) (VH-2) is resistant to infection in an NPC1-dependent manner. We found that VH-2 cells are resistant to EBOV infection because the Russells viper NPC1 orthologues bound poorly to the EBOV spike glycoprotein (GP). Analysis of panels of viper-human NPC1 chimeras and point mutants allowed us to identify a single amino acid residue in NPC1, at position 503, that directionally influenced both its binding to EBOV GP as well as its viral receptor activity in cells. Significantly, this single residue change perturbed neither NPC1's endosomal localization nor its housekeeping role in cellular cholesterol trafficking. Together with other recent work, these findings identify sequences in NPC1 that are important for viral receptor activity by virtue of their direct interaction with EBOV GP, and suggest that they may influence filovirus host range in nature. Broader surveys of NPC1 orthologues from vertebrates may delineate additional sequence polymorphisms in this gene that control susceptibility to filovirus infection.

ADA488712	South Africa: Current Issues and U.S. Relations	LIBRARY OF CONGRESS WASHINGTON DC CONGRESSIONAL RESEARCH SERVICE	Ploch, Lauren	10/7/2008	29	CRS-RL31697	CRS/DC	U	A - 01	Approved for public release; distribution is unlimited.	Congressional rept.	Over a decade after the South African majority gained its independence from white minority rule under apartheid, the Republic of South Africa is firmly established as a regional superpower and is considered to be one of the United States' two strategic partners on the continent, along with Nigeria. With Africa's largest Gross Domestic Product (GDP) and a government eager to play an active role in the promotion of regional peace and stability, South Africa is poised to have a substantial impact on the economic and political future of Africa. South Africa, twice the size of Texas, has a population of 44 million, of which about 79% is African and 10% white, and a diverse economy. The South African political system is regarded as stable, but it faces serious long-term challenges arising from poverty, unemployment, and the AIDS epidemic. The September 2008 resignation of President Thabo Mbeki, replaced by interim President Kgalema Motlanthe, is not expected to result in major policy changes prior to the 2009 elections. The African National Congress (ANC), which led the struggle against apartheid, continues to dominate the political scene, controlling the presidency, over two-thirds of the National Assembly, all nine provinces, and five of the nation's six largest cities. The Congress of South African Trade Unions (COSATU) and the South African Communist Party, key ANC partners, have been critical of the Mbeki government, arguing that its policies have increased unemployment and failed to respond adequately to the HIV/AIDS epidemic. U.S. relations with South Africa are cordial, and South Africa has benefited from export opportunities offered under the African Growth and Opportunity Act. However, the U.S. and South African administrations have expressed differences with respect to the situations in Zimbabwe, Iran, and Iraq, and over South African positions while it served on the UN Security Council.
ADA518100	The Joe 2010 Joint Operating Environment	UNITED STATES JOINT FORCES COMMAND NORFOLK VA	Mattis, J. N.	2/18/2010	77	Not available	XD	U	A - 01	Approved for public release; distribution is unlimited.	Research rept.	The Joint Operating Environment is intended to inform joint concept development and experimentation throughout the Department of Defense. It provides a perspective on future trends, shocks, contexts, and implications for future joint force commanders and other leaders and professionals in the national security field. This document is speculative in nature and does not suppose to predict what will happen in the next twenty-five years. Rather, it is intended to serve as a starting point for discussions about the future security environment at the operational level of war.
ADA448619	Avian Influenza Pandemic May Expand the Military Role in Disaster Relief	ARMY WAR COLL CARLISLE BARRACKS PA	Sherod, II, Frank W.	3/15/2006	27	Not available	USAWC	U	A - 01	Approved for public release; distribution is unlimited.	Research paper	Recent involvement by the U.S. military with hurricane relief and comments by the President on expanding the DOD's role in disaster relief indicates increased missions for an already stretched military. The next national disaster facing the U.S. could be an influenza pandemic. The bird flu virus H5N1 currently threatening Asia and Europe can potentially mutate into a deadly human influenza pandemic with global consequences. The last major flu pandemic in 1918 killed 50 million people worldwide and 600,000 in the U.S. alone. The United States is not prepared for a human pandemic and the military will have a significant role in any national response. While some departmental level planning has been accomplished recently, interdepartmental coordination and clear identification of the lead federal agency is still lacking. This project explains possible effects of a pandemic on the U.S. and current responsibilities of federal departments involved in disaster relief. Analysis is presented on the evolving role the DOD plays should this event become reality and finally recommends preparations that should be accomplished to prepare the nation for this very real threat. An ad-hoc approach to a pandemic will have severe negative and far reaching affects on our nation and must be avoided.

ADA620696	The Use of Twitter to Predict the Level of Influenza Activity in the United States	NAVAL POSTGRADUATE SCHOOL MONTEREY CA	Ng, Kok W.	9/1/2014	125	Not available	NPS	U	A - 01	Approved for public release; distribution is unlimited.	Master's thesis	Controlling the outbreak of epidemic diseases such as influenza has always been a concern for the United States. Traditional surveillance tools such as the ILINet and Virologic provide the Centers for Disease Control and Prevention (CDC) with influenza surveillance statistics at a lag of 1 to 2 weeks. The CDC requires a tool that can forecast the level of influenza activity. The rise in the popularity of social media websites such as Flickr, Twitter and Facebook has transformed the web into an interactive sharing platform. The huge amount of generated unstructured data has become an invaluable source for detecting patterns or novelties. This research explores the correlation between Twitter messages (tweets) and CDC ILI and Virologic surveillance data. Using 17 months of tweets, regression models are developed to predict influenza-related statistics. The proposed approach aggregates the weekly frequencies of hand-chosen words that are indicative of an influenza attack using separate predictor variables. The predictions generated by the best models are found to have a Pearson s correlation coefficient of 0.900 (95% CI: 0.732, 0.965) and 0.833 (95% CI: 0.574, 0.940) against the CDC ILI surveillance data and CDC Virologic surveillance data, respectively.
ADA091771	Serum Antibodies Reactant with Korean Haemorrhagic Fever Agent in Scandinavian Endemic Benign Nephropathy (Nephropathia Epidemica) Demonstrated by Immunofluorescence Utilizing an in vitro Antigen Source.	ARMY MEDICAL RESEARCH INST OF INFECTIOUS DISEASES FREDERICK MD	Friman,Goran,French, George R.,Hambraeus,Lars,Beisel,William R.	6/27/1980	19	Not available	Not available	U	A - 01	Approved for public release; distribution is unlimited.	Rept. for Jan 79-Jun 80,	A newly developed spot slide immunofluorescence method utilizing an in vitro antigen source was used for the first time for the assay of antibodies reactant with the Korean haemorrhagic fever (KHF) agent in sera from patients diagnosed with Scandinavian endemic benign (epidemic) nephropathy (nephropathia epidemica, EBN) and from 42 age-matched control patients living in the same area but suffering from other maladies. KHF antibodies were demonstrated in all of 14 EBN patients who were followed prospectively, 7 of whom exhibited seroconversion, and in 6 of 8 EBN patients studied retrospectively, but in only one of the 42 controls. Similar to that seen in KHF, antibodies in EBN appeared within the first week of onset of symptoms and persisted for long periods of time. The time from the onset of the illness until maximal antibody titre was recorded varied from 9 days to 1 month. On average, the level of the antibody titres measured to EBN was lower than that usually encountered in the Korean disease. The results indicate a close antigenic relationship between the KFH and EBN agents and demonstrate that the reliability of our new spot slide method is similar to that of another previously reported and more laborious immunofluorescence method using lung sections from infected rodents as antigen source. (Author)
ADA601242	Quantitative Modeling of Virus Evolutionary Dynamics and Adaptation in Serial Passages Using Empirically Inferred Fitness Landscapes	BIOTECHNOLOGY HIGH PERFORMANCE COMPUTING SOFTWARE APPLICATIONS INST FREDERICK MD	Woo, Hyung Jun,Reifman, Jaques	1/1/2014	13	Not available	ASAALT/DC	U	A - 01	Approved for public release; distribution is unlimited.	Journal article	We describe a stochastic virus evolution model representing genomic diversification and within-host selection during experimental serial passages under cell culture or live-host conditions. The model incorporates realistic descriptions of the virus genotypes in nucleotide and amino acid sequence spaces, as well as their diversification from error-prone replications. It quantitatively considers factors such as target cell number, bottleneck size, passage period, infection and cell death rates, and the replication rate of different genotypes, allowing for systematic examinations of how their changes affect the evolutionary dynamics of viruses during passages. The relative probability for a viral population to achieve adaptation under a new host environment, quantified by the rate with which a target sequence frequency rises above 50%, was found to be most sensitive to factors related to sequence structure (distance from the wild type to the target) and selection strength (host cell number and bottleneck size). For parameter values representative of RNA viruses, the likelihood of observing adaptations during passages became negligible as the required number of mutations rose above two amino acid sites. We modeled the specific adaptation process of influenza A H5N1 viruses in mammalian hosts by simulating the evolutionary dynamics of H5 strains under the fitness landscape inferred from multiple sequence alignments of H3 proteins. In light of comparisons with experimental findings, we observed that the evolutionary dynamics of adaptation is strongly affected not only by the tendency toward increasing fitness values but also by the accessibility of pathways between genotypes constrained by the genetic code.

ADA517332	Confronting Biological Threats to the Homeland	NATIONAL DEFENSE UNIV WASHINGTON DC INST FOR NATIONAL STRATEGIC STUDIES	Chertoff, Michael	1/1/2008	6	Not available	NDU/INSS	U	A - 01	Approved for public release; distribution is unlimited.	Journal article	One of the most important priorities for any government is to protect society from lethal threats. Part of that mission necessarily involves guarding against the havoc that biological forces are capable of wreaking on any population. Such forces can come in the form of pandemics or very serious epidemics-deadly communicable diseases that can ravage communities and potentially threaten the fabric of society. While such diseases have surfaced throughout history in discrete areas of the world, the interdependent, global nature of today's world can facilitate their rapid spread across oceans and continents. This naturally occurring peril is compounded by the fact that the modern wonders of science and technology enable dangerous individuals and groups to harness these potent biological forces, turning them into actual weapons of mass destruction. While such natural threats as pandemic influenza have yet to reach fully efficient human-to-human transmission, our post-9/11 society faces a more immediate, manmade threat from individuals seeking to unleash destruction. In the wake of 9/11, we saw anthrax attacks at home, and we have since seen ricin attacks in other parts of the world. In response to these dangers, we have taken a number of steps to help mitigate at least some of the risk. And we have begun to think seriously and in a disciplined fashion about how to plan for dealing with a major natural pandemic or biological attack. The challenge is to act decisively and effectively to minimize damage in an environment in which there will be imperfect information and potentially hundreds of thousands, if not millions, of lives lost. The key to meeting the challenge is to approach it in a systematic, comprehensive way. We must fully examine the biological threats we face, address the capabilities we must continue to build in order to mitigate them, and consider the complex legal and ethical issues that will arise during a biological calamity if ever we have one.
ADA411836	What Are the True Benefits of School-Based Drug Prevention Programs?	RAND CORP SANTA MONICA CA	Not available	2/1/2003	5	RAND/RB-6009-RWJ	XD	U	A - 01	Approved for public release; distribution is unlimited.	Research brief	The purpose of school-based drug prevention programs is to prevent, or at least diminish, children's use of a variety of substances, including licit substances such as alcohol and tobacco as well as illicit ones such as cocaine and marijuana. In fact, most successful school-based drug prevention programs, such as Lifeskills and Project ALERT, are not targeted to specific substances. Which drugs then, in terms of usage, do they affect? Where are the benefits of a drug prevention program realized? Through a reduction in crime related to a contracting cocaine market? Through higher productivity associated with diminished alcohol use? Or through less money spent on health care for smokers? To put the question more provocatively, are school-based drug prevention programs better viewed as a weapon in the war against illegal drug use or as a public health program for decreasing the adverse effects of licit substances?
AD0690317	SOME PROPERTIES OF THE AUTOINTERFERING VIRUS RECOVERED FROM THE GASTRIC CONTENT OF PATIENTS WITH EPIDEMIC HEPATITIS	ARMY BIOLOGICAL LABS FREDERICK MD	Fomin, D. K.	1/1/1966	6	SMUFD-TRANS-2465	ABL/MD	U	A - 01	Approved for public release; distribution is unlimited.	Not available	From the gastric content of patients with epidemic hepatitis an autointerfering virus was isolated which was capable of reproducing in passages on transplanted cultures of Detroit-6, HEp-2, KEM, and in 9-12 day old chick embryos. The virus isolated possesses autointerfering properties; its cytopathic activity was manifested during dilution of virus-containing culture fluid to 10 to the minus 7th power--10 to the minus 10th power. In cultures of transplanted cells of Detroit-6, HEp-2, HeLa, KEM, Changa, and L, infected with the AIF-virus, a substance of the interferon or inhibitor type was revealed which suppressed the cytopathic effect of the virus. It is destroyed by heating up to 56-60 deg for 30 minutes, and under the influence of 0.1% solution of pepsin and 0.025% solution of trypsin. The antiviral activity of the substance is manifested in homologous tissue culture and is absent in heterologous. Based on these properties the substance revealed is close to interferon. The capacity of AIF-virus to be cultivated in transplanted tissue cultures and chick embryos, its autointerfering properties, high resistance to heating, absence of hemagglutinating activity, and other properties pointed out in the work distinguish it from the known enteric and respiratory viruses.
ADA096612	Collateral Damage and Communicable Disease with Particular Reference to Tactical Nuclear War in Europe.	R AND D ASSOCIATES MARINA DEL REY CA	Mitchell, Harold H.	10/31/1978	72	RDA-TR-107004-011,DNA-5430T	5430T	U	A - 01	Approved for public release; distribution is unlimited.	Topical rept. 1 Oct 77-31 Oct 78,	This report examines the question of whether major epidemics are likely to follow a tactical nuclear war in Europe. The relationship between the bombing campaign and the increase in communicable diseases during World War II (with special emphasis on Germany) is examined, as well as the limited data relating nuclear radiation and the incidence of disease. The report tentatively concludes that, barring a breakdown in society, major epidemics are not likely to result. (Author)

ADA501574	Honduran-U.S. Relations	LIBRARY OF CONGRESS WASHINGTON DC CONGRESSIONAL RESEARCH SERVICE	Meyer, Peter J.,Sullivan, Mark P.	2/27/2009	21	CRS-RL34027	CRS/DC	U	A - 01	Approved for public release; distribution is unlimited.	Congressional rept.	The Central American nation of Honduras, one of the hemisphere's poorest countries, faces significant challenges in the areas of crime, human rights, and improving overall economic and living conditions. While traditional agricultural exports of coffee and bananas are still important for the economy, nontraditional sectors, especially the maquiladora, or export-processing industry, have grown significantly over the past decade. Among the country's development challenges are a poverty rate over 60%, high infant mortality, and a significant HIV/AIDS epidemic. Despite these challenges, increased public spending on health and education have reaped significant improvements in development indicators over the past decade. Current President Manuel Zelaya of the Liberal Party won a 4-year term in the November 2005 elections. The country has enjoyed 27 years of uninterrupted elected civilian democratic rule. The economy, which grew 6.3% in 2007 and is expected to have grown 4% in 2008, has benefited from significant debt reduction by international financial institutions that is freeing government resources to finance poverty-reduction programs. However, the U.S. recession and global financial crisis will likely slow Honduran economic growth sharply in 2009. The United States has a close relationship with Honduras, characterized by an important trade partnership, a U.S. military presence in the country, and cooperation on a range of transnational issues, although there have been some recent strains in relations in light of President Zelaya's move toward closer relations with Venezuela. Honduras is a party to the Dominican Republic-Central America Free Trade Agreement (DR-CAFTA). There has been extensive cooperation with Honduras on port security. Some 78,000 Hondurans living in the United States have been provided temporary protected status (TPS) since the country was devastated by Hurricane Mitch in 1998. In October 2008, TPS was extended until July 2010.
ADA512311	Field Investigations of an Outbreak of Ebola Hemorrhagic Fever, Kikwit, Democratic Republic of the Congo, 1995: Arthropod Studies	WALTER REED ARMY INST OF RESEARCH WASHINGTON DC DEPARTMENT OF ENTOMOLOGY	Reiter, Paul,Turell, Michael,Coleman, Russell,Miller, Barry,Maupin, Gary,Liz, Jorge,Kuehne, Ana,Barth, James,Geisbert, Joan,Dohm, David,Glick, Jason,Pecor, James,Robbins, Richard,Jahrling, Peter,Peters, Clarence,Kaiazek, Thomas	1/1/1999	8	Not available	WRAIR/DE	U	A - 01	Approved for public release; distribution is unlimited.	Journal article	During the final weeks of a 6-month epidemic of Ebola hemorrhagic fever in Kikwit, Democratic Republic of the Congo, an extensive collection of arthropods was made in an attempt to learn more of the natural history of the disease. A reconstruction of the activities of the likely primary case, a 42-year-old man who lived in the city, indicated that he probably acquired his infection in a partly forested area 15 km from his home. Collections were made throughout this area, along the route he followed from the city, and at various sites in the city itself. No Ebola virus was isolated, but a description of the collections and the ecotopes involved is given for comparison with future studies of other outbreaks.

ADA502843	Individual Differences in Diabetes Risk: Role of Sleep Disturbances	CHICAGO UNIV IL	Van Cauter, Eve	8/1/2008	44	Not available	USAMRMC	U	A - 01	Approved for public release; distribution is unlimited.	Annual rept. 15 Jul 2007-14 Jul 2008	Chronic partial sleep loss, due to bedtime restriction, is a hallmark of modern society and highly prevalent in active duty army personnel. During the past few years, evidence from laboratory and epidemiological studies has indicated that decreased sleep duration has an adverse effect on glucose regulation and on the neuroendocrine control of appetite (1-3). Taken together, the findings suggest that chronic partial sleep deprivation may be involved in the current epidemic of obesity and diabetes. Our group has strong evidence for the existence of large individual differences in metabolic as well as cognitive vulnerability to sleep loss. We have recently obtained preliminary data in a small group of young men that suggest that a specific heritable trait of the sleep electroencephalogram (EEG), known as slow-wave activity (SWA), accounts for the majority of individual variability in the adverse effects of sleep loss on diabetes risk. The objectives are to identify SWA as a predictor of diabetes risk in a subject population with a gender, ethnic and age distribution similar to that of active duty army personnel and to test the hypothesis that individuals with low SWA are at much higher risk to develop diabetes following chronic partial sleep restriction than those with higher SWA. The studies will also explore the potential relationships between individual differences in diabetes risk following sleep loss and individual differences in risk of weight gain and in the magnitude of cognitive deficits.
ADA462200	U.S. and International Responses to the Global Spread of Avian Flu: Issues for Congress	LIBRARY OF CONGRESS WASHINGTON DC CONGRESSIONAL RESEARCH SERVICE	Salaam-Blyther, Tiaji	5/1/2006	38	CRS-RL33219	CRS/DC	U	A - 01	Approved for public release; distribution is unlimited.	Congressional rept.	There are many strains of avian influenza virus infecting poultry. Influenza A/H5N1 is a strain of influenza currently spreading throughout the world. Although it is a bird flu, it has infected a relatively small number of people and killed more than half of those infected. Some scientists are concerned that H5N1 may cause the next influenza pandemic. Since 1997, when the first human contracted H5N1 in Hong Kong, the virus has resurfaced and spread to nearly 50 countries in Asia, Europe, the Middle East, and Africa infecting more than 200 people. In February 2006, the virus spread from Asia and central Europe to western Europe. By March 2006, health experts had confirmed new bird flu cases among more than 20 countries across Europe, Asia, and Africa. Most of the countries were experiencing their first H5N1 cases. The first human H5N1 fatalities outside of Asia occurred in 2006 when Turkey and Iraq announced their first human deaths related to H5N1 infection in January and February, followed by Azerbaijan and Egypt in March.
AD0624899	ON THE GENERAL STOCHASTIC EPIDEMIC,	MICHIGAN STATE UNIV EAST LANSING DEPT OF STATISTICS	Gani,J.	9/1/1965	11	RM-144,JG-8	Not available	U	A - 01	Approved for public release; distribution is unlimited.	Not available	Not available
ADA372860	Preventing Deadly Conflict	CARNEGIE CORP OF NEW YORK	Not available	12/1/1997	301	Not available	DOD	U	A - 01	Approved for public release; distribution is unlimited.	Final rept.	
AD0747171	Overview of the 1971 Texas Venezeulan Equine Encephalomyelitis Epizootic	ARMY MEDICAL RESEARCH INST OF INFECTIOUS DISEASES FORT DETRICK MD	Spertzel, Richard O.	1/1/1971	4	Not available	USAMRIID	U	A - 01	Approved for public release; distribution is unlimited. Document partially illegible.	Not available	The etiologic agent of Venezuelan equine encephalomyelitis (VEE) is a member of Casal's group A arboviruses. There are currently 4 major antigenic subtypes, of which the first is subdivided into 5 minor antigenic variants. The present epidemic of highly virulent subtype 1B probably had its origin in Ecuador, and was introduced into Guatemala in 1969. From there, the disease spread rapidly through El Salvador and portions of Honduras and Nicaragua. In 1970, VEE reoccurred in Honduras and spread into Costa Rica and Mexico. Although slowed in 1970, VEE continued its inexorable spread toward the United States, and by April, 1971, was occurring near Tampico, Mexico. The first recognized encephalitis horse in South Texas was sick on 23 June. Vaccination was begun on a voluntary basis on 25 June in a 13-county area of South Texas. After confirmation of VEE by virus isolation on 9 July, vaccination was extended statewide in Texas on 13 July, and to New Mexico, Oklahoma, Arkansas, and Louisiana on 17 July.

ADA226563	Hepatitis B and HIV in Sudan: A Serosurvey for Hepatitis B and Human Immunodeficiency Virus Antibodies Among Sexually Active Heterosexuals	NAVAL MEDICAL RESEARCH INST BETHESDA MD	McCarthy, Michael C.,Burans, James P.,Constantine, Niel T.,EL-Hag, Ahmed A.,El-Tayeb, Mahgoub	1/1/1989	7	NMRI-89-123	NMRI	U	A - 01	Approved for public release; distribution is unlimited.	Not available	A serosurvey was conducted in Port Sudan and Suakin, Sudan in October and March 1987 to determine the prevalence and risk factors associated with the transmission of hepatitis B, human immunodeficiency virus type 1 (HIV-1), and syphilis among sexually active heterosexuals on the coast of Sudan. A total of 536 subjects, including 202 female prostitutes, 95 long-distance truck drivers, 103 soldiers, 72 Ethiopian refugees, and 54 Sudanese outpatients, were enrolled in the study. Seventy-eight percent (202/259) of the female study subjects were engaged in prostitution, and 57% (157/277) of the men admitted to prior sexual relations with prostitutes. Serologic markers for hepatitis B and syphilis were detected in 68% and 17% of the entire study population, respectively. In contrast, antibody to HIV-1 was detected in none of the 536 sera tested. Risk factors found to be independently predictive of hepatitis B infection by multivariate analysis included prostitution, positive serology for syphilis, and a history of anti-schistosomal therapy. The absence of HIV-1 infection among the prostitutes enrolled in this study is in marked contrast to the current AIDs epidemic in neighboring sub-Saharan countries, suggesting that HIV-1 has not been widely introduced on the coast of Sudan. Reprints.
AD1042730	The Case for Nation-building: Why and How to Fix Failed States	National Defense University Fort Lesley J. McNair United States	Miller, Paul D.	12/1/2011	12	Not available	Not available	U	A - 01	Approved for public release; distribution is unlimited.	Journal Article	Nation-building has a bad reputation. The phrase conjures up images of well-meaning but hapless U.S. Soldiers or United Nations (UN) peacekeepers involved in an expensive, complicated, and ultimately futile effort to fix other peoples problems. Worse, nation-building is often seen as both dangerous and peripheral to anyones vital national security interests. Iraq, Somalia, and Haiti are routinely trotted out as proof that such missions are doomed to debacle. In the post-Iraq era of softer power and tightening budgets, it seems prudent to set aside notions that the United States or UN can or should deploy force to remake countries abroad in the liberal worlds image. Unfortunately, the need to engage in nation-building is inescapable. State failure incubates serious threats to regional and internationalorder, such as insurgent movements (West and Central Africa), organized crime and drug-trafficking networks (Southeast Europe, Central Asia), piracy (East Africa, Southeast Asia), pandemic disease (AIDS), and ecological disaster to say nothing of the occasional global terrorist organization. Time and time again, history demonstrates that state failure, when left unaddressed, causes demonstrable harm to neighbors, whole regions, and occasionally the international order itself. Happily, the popular image of nation-building is largely founded on a few famous examples of dramatic failure. A closer look at the history and practice of nation-building illustrates that the international community has learned key lessons and improved its ability to foster stability and democracy in states confrontedwith violence, illegitimacy, poverty, and institutional breakdown. The challenges that the international community faces in the 21st century provide an ideal opportunity for a timely reappraisal of nation-building, its goals, prospects, and uses.
ADA327464	Evaluation of the Risk for Work-Related Upper Extremity Musculoskeletal Symptoms in USAF Air Traffic Controllers: A Pilot Feasibility Study	AIR FORCE INST OF TECH WRIGHT-PATTERSON AFB OH	Kapp, Evan Z.	7/11/1997	72	AFIT-97-086	AFIT	U	A - 01	Approved for public release; distribution is unlimited.	Master's thesis,	The relationship between work and painful musculoskeletal disorders was first described over 200 years ago. This relationship has become increasingly important in the past few decades to a point where Repetitive Strain Injuries or Cumulative Trauma Disorders (which will be referred to as work-related upper extremity disorders or WRUEDs) have been called the occupational epidemic of the 1990s (19). The actual prevalence of WRUEDs in the working population is uncertain, although it is well documented in some specific fields and occupations often labeled as 'high-risk' for these illnesses. Only recently have ergonomic considerations received emphasis in designing work stations and tools for the worker rather than the task. Understanding the risk factors responsible as well as the amount of that risk is the first step in reducing the problem.

ADA538253	Department of Defense Influenza and Other Respiratory Disease Surveillance during the 2009 Pandemic	ARMED FORCES HEALTH SURVEILLANCE CENTER SILVER SPRING MD	Burke, Ronald L., Vest, Kelly G., Eick, Angelia A., Sanchez, Jose L., Johns, Matthew C., Pavlin, Julie A., Jarman, Richard G., Mothershead, Jerry L., Quintana, Miguel, Palys, Thomas	1/1/2011	10	Not available	AFHSC	U	A - 01	Approved for public release; distribution is unlimited.	Journal article	The Armed Forces Health Surveillance Center's Division of Global Emerging Infections Surveillance and Response System (AFHSC-GEIS) supports and oversees surveillance for emerging infectious diseases, including respiratory diseases, of importance to the U.S. Department of Defense (DoD). AFHSC-GEIS accomplishes this mission by providing funding and oversight to a global network of partners for respiratory disease surveillance. This report details the system's surveillance activities during 2009, with a focus on efforts in responding to the novel H1N1 Influenza A (A/H1N1) pandemic and contributions to global public health. Active surveillance networks established by AFHSC-GEIS partners resulted in the initial detection of novel A/H1N1 influenza in the U.S. and several other countries, and viruses isolated from these activities were used as seed strains for the 2009 pandemic influenza vaccine. Partners also provided diagnostic laboratory training and capacity building to host nations to assist with the novel A/H1N1 pandemic global response, adapted a Food and Drug Administration-approved assay for use on a ruggedized polymerase chain reaction platform for diagnosing novel A/H1N1 in remote settings, and provided estimates of seasonal vaccine effectiveness against novel A/H1N1 illness. Regular reporting of the system's worldwide surveillance findings to the global public health community enabled leaders to make informed decisions on disease mitigation measures and controls for the 2009 A/H1N1 influenza pandemic. AFHSC-GEIS's support of a global network contributes to DoD's force health protection, while supporting global public health.
ADA530392	A Question of Ethics	AIR UNIV MAXWELL AFB AL AIRPOWER JOURNAL	Not available	1/1/1996	9	Not available	AU	U	A - 01	Approved for public release; distribution is unlimited.	Journal article	The breakdown of character is the number-one crisis in America. I am not in politics anymore. I have done my time, literally and figuratively, but I can't help watching with dismay what is happening in our country. Watergate was a great shock because so many of us close to the president got in trouble. Now it is routine. Witness what has happened in the last decade. For the first time in history, 10 senators at once were called before the Ethics Committee. A Speaker of the House was forced out of office. Sen Robert Packwood (R-Oreg.) resigned. The Department of Justice bragged that 1,150 state legislators had been successfully prosecuted in one year--the biggest year the department had ever had, as if it were good news. I think it is tragic. But the crisis is not just in politics. It is in business as well. There was a time when a fiduciary handling someone else's money was a trustee--a respected, honored position of trust. But look at what happened to Ivan Boesky, who went to the UCLA School of Business in 1986 and said, Greed is a good thing." He ended up in prison. Other examples include Michael Milken and Leona Helmsley
ADA605892	Disease Vector Ecology Profile: Peru	ARMED FORCES PEST MANAGEMENT BOARD WASHINGTON DC	Not available	12/1/1998	82	Not available	ODUSD(I/E)	U	A - 01	Approved for public release; distribution is unlimited.	Not available	Disease Vector Ecology Profiles (DVEPs) summarize unclassified literature on medically important arthropods, vertebrates and plants that may adversely affect troops in specific countries or regions around the world. Primary emphasis is on the epidemiology of arthropod-borne diseases and the bionomics and control of disease vectors. DVEPs have proved to be of significant value to commanders, medical planners, preventive medicine personnel, and particularly medical entomologists. These persons use the information condensed in DVEPs to plan and implement prevention and control measures to protect deployed forces from disease, injury, and annoyance caused by vector and pest arthropods. Because the DVEP target audience is also responsible for protecting troops from venomous animals and poisonous plants, as well as zoonotic diseases for which arthropod vectors are unknown, limited material is provided on poisonous snakes, noxious plants, and diseases like hantavirus.



ADA618093	HIV Seroprevalence, Associated Risk Behavior, and Alcohol Use Among Male Rwanda Defense Forces Military Personnel	NAVAL HEALTH RESEARCH CENTER SAN DIEGO CA	Harbertson, Judith,Grillo, Michael,Zimulinda, Eugene,Murego, Charles,Brodine, Stephanie,May, Susanne,Sebagabo, Marcellin,Araneta, Maria G.,Cronan, Terry,Shaffer, Richard	1/1/2013	15	NHRC-12-26	BUMED/VA	U	A - 01	Approved for public release; distribution is unlimited.	Journal article	A cross-sectional study was conducted among active-duty male soldiers, > 21 years old, in the Rwanda Defense Forces (RDF) and included an anonymous behavioral survey and HIV rapid testing to determine risk factors associated with HIV seroprevalence. Overall prevalence was 2.6% (95% CI 1.84 3.66); personnel who were higher ranking, served >6 years, never deployed, divorced, separated or widowed, uncircumcised, reported STI symptoms, had >6 lifetime sex partners, or screened positive for a drinking problem (via Alcohol Use Disorders Identification Test) had higher HIV prevalence. Ever being divorced/separated/widowed (OR 29.8, 95%CI 5.5 159.9), and STI symptoms (OR 3.4, 95%CI 1.5 7.6) were significantly associated with infection after multivariable adjustment while circumcision was protective (OR 0.4, 95% CI 0.2 0.9). Despite mobility and other factors that uniquely influence HIV transmission in militaries, RDF prevalence was similar to the general population. A reason for this finding may be conservative sexual behavior combined with effective leadership-supported prevention programs. Data suggest a concentrated rather than generalized epidemic with targets identified for intervention.
ADA576985	Percolation Processes and the Design of Large-Scale Wireless Networks	YALE UNIV NEW HAVEN CT	Yeh, Edmund	5/30/2012	10	ARO-52601-NS.17	52601-NS.17,ARO	U	A - 01	Approved for public release; distribution is unlimited.	Final rept. 1 Aug 2007-31 Jul 2011	This project has supported the analysis and design of large-scale wireless networks for army applications, including information dissemination algorithms for fixed wireless and mobile wireless networks, energy management algorithms for sensor networks, resilience of wireless networks to virus epidemics, network coding capacity of wireless networks, coding for mobile wireless networks, polar coding for multiple-access networks, and the capacity of wireless relay networks. The project has supported the education and research activities of a postdoctoral fellow and a graduate student.
ADA469440	A Novel, Rapid Assay for Detection and Differentiation of Serotype-Specific Antibodies to Venezuelan Equine Encephalitis Complex Alphaviruses	TEXAS UNIV MEDICAL BRANCH AT GALVESTON CENTER FOR BIODEFENSE AND EMERGING INFECTIOUS DISEASES (CBEID)	Wang, Eryu,Paessler, Slobodan,Smith, Darci R.,Coffey, Lark L.,Kang, Wenli,Estrada-Franco, Jose,Weaver, Scott C.,Aguilar, Patricia V.,Pfeffer, Martin,Olson, James	1/1/2005	7	Not available	NIH	U	A - 01	Approved for public release; distribution is unlimited.	Journal article	An epitope-blocking enzyme-linked immunosorbent assay was developed for the rapid differentiation of serologic responses to enzootic variety IE and ID versus epizootic variety IAB and IC strains of Venezuelan equine encephalitis (VEE) virus. Two monoclonal antibodies that differentially recognize epizootic versus enzootic VEE virus epitopes were used to measure the serotype-specific blocking abilities of antibodies in sera of naturally infected humans, equines, and bovines, as well as in experimentally infected equines. The assay is simple, species-independent, rapid, and sensitive, and will improve surveillance for VEE emergence. It could also be used to determine the epidemic potential of a VEE virus following an intentional introduction for bioterrorism.
ADA413446	AIDS and National Security	ARMY WAR COLL CARLISLE BARRACKS PA	Baldwin, David S.,Biddle, Tami	4/7/2003	48	Not available	USAWC	U	A - 01	Approved for public release; distribution is unlimited.	Research project	Acquired Immunodeficiency Syndrome (AIDS) has become a rapidly spreading pandemic. Over 22 million people have died of AIDS since the epidemic began in the 1970s. In 2001, 3 million people died and an estimated 60 million people have been infected with the Human Immunodeficiency Virus (HIV) suspected of causing the disease. The rapid spread of AIDS and the related deaths pose a significant threat because of the destabilizing effect of the disease on those regions it has hit the hardest. In the short term, AIDS will continue to destabilize Africa. As the disease spreads through Asia and Eastern Europe, the impact will be global. The scale of the HIV/AIDS pandemic and the potential for disruption of the internal security of many nations makes this disease a clear and direct threat to U.S. national security. Recognizing the threat of the disease, President George W. Bush outlined a plan to expand the U.S. global HIV/AIDS programs and their funding levels in the National Security Strategy of 2002. Elements of the Bush international HIV/AIDS policy include increasing U.S. development assistance, expanding prevention and treatment programs, and relaxing protection of intellectual property rights for pharmaceutical patents in order to increase access to expensive drugs in developing nations.

ADA278335	Cocaine. A Trans-National Issue	INDUSTRIAL COLL OF THE ARMED FORCES WASHINGTON DC	Lalumiere, Frank	4/1/1993	45	NDU-ICAF-93-S93	NDU/ICAF	U	A - 01	Approved for public release; distribution is unlimited.	Research rept. Aug 1992-Apr 1993	During the last four years, the U.S. has spent some 38 billion dollars on drug treatment, education, interdiction, and assorted other counter- drug measures. Our sizeable investment notwithstanding, cocaine use continues to be one of the most intractable of our drug abuse problems. The U.S. strategy has been one of ever increasing expenditures on both the supply and demand sides of the drug equation, including use of the military. Progress, however, has been limited at best. As discussed in the following pages, the economics inherent in cocaine, not to mention the underlying and reinforcing social, political, and economic conditions of the three primary source countries (Colombia, Bolivia, and Peru) present obstacles far beyond the ability of the U.S. alone to overcome. In the last few years, there are signs that the cocaine epidemic is spreading to Europe, Japan, and other industrialized countries. The solution to this growing trans-national problem will ultimately require trans-national cooperation and resolve. The U.S. should play a leadership role in forging an international alliance to address this multi-faceted and complex issue. Only then, can we realistically hope to win the battle at home.
AD0754116	Forecasting Disease Morbidity.	DECISION SCIENCE INC SAN DIEGO CALIF	Fogel, Lawrence J.,Mout,Michael L.,Gill,Robert S.	12/1/1972	99	DSI-1272	Not available	U	A - 01	Approved for public release; distribution is unlimited.	Final rept. 1 Nov 69-31 Dec 72,	Data concerning the incidence of certain diagnoses in the Navy population was examined in order to reveal regularities which might permit forecasts of significant incidence suitable for the planning of research activity in connection with such prospective incidence. The analysis includes a review of predictive procedures and requirements, the history of predictive epidemiology as relevant to this task, the use of statistical analysis of the data base, and reference to the larger data base available through publications of the World Health Organization in order to find justification for specific mathematical models of individual diseases. On this basis a general mathematical procedure was developed which analyzes the data in terms of epidemics, regularities within the non-epidemic data base, and provides projections of the incidence in the near future for individual diagnoses. The results are scored in terms of percent correct as well as in terms of percent of pay off, this latter index provides a measure of credibility of the forecasts generated. (Author)
ADA558008	Interspecies Interactions and Potential Influenza A Virus Risk in Small Swine Farms in Peru	NAMRID	McCune, Sarah,Arriola, Carmen S.,Romero, Robert H.,Ayvar, Viterbo,Cama, Vitaliano A.,Montgomery, Joel M.,Gonzales, Armando E.,Bayer, Angela M.	3/15/2012	25	Not available	NAMRID	U	A - 01	Approved for public release; distribution is unlimited.	Journal article	The recent avian influenza epidemic in Asia and the H1N1 pandemic demonstrated that influenza A viruses pose a threat to global public health. The animal origins of the viruses confirmed the potential for interspecies transmission. Swine are hypothesized to be prime mixing vessels" due to the dual receptivity of their trachea to human and avian strains.
ADA550147	The Armed Forces Health Surveillance Center: Global Emerging Infections Surveillance & Response System, FY 2010	ARMED FORCES HEALTH SURVEILLANCE CENTER SILVER SPRING MD	Not available	1/1/2010	30	Not available	AFHSC	U	A - 01	Approved for public release; distribution is unlimited.	Annual rept.	The Armed Forces Health Surveillance Center (AFHSC) was created to centralize Department of Defense (DoD) domestic and international healthcare surveillance efforts. The organization provides relevant, timely, actionable, and comprehensive health information and supports the military and military-associated populations. The Global Emerging Infections Surveillance and Response System (GEIS) at AFHSC promotes national and international preparedness for emerging infections while maintaining its focus on protecting the health of all DoD health care beneficiaries. The surveillance programs of GEIS focus on five categories of infectious diseases: respiratory infections (RI) with an emphasis on avian and pandemic influenza, gastrointestinal infections (GI), febrile and vector-borne infections (FVBI), antimicrobial resistance (AR), and sexually transmitted infections (STI). In an effort to improve the efficiency and effectiveness of surveillance activities and impose scientific rigor, GEIS initiated steering committees to serve as advisors in FY10. Another significant undertaking in 2010 was the integration of World Health Organization s (WHO) International Health Regulations (IHR (2005)) core capacities into all surveillance activities.

AD0419937	TASK SURPRISE. PROJECT SUMMIT. A STUDY OF AN EPIDEMIC OF STAPHYLOCOCCAL ENTEROTOXIN FOOD POISONING	PENNSYLVANIA UNIV PHILADELPHIA INST FOR COOPERATIVE RESEARCH	Not available	10/10/1960	103	Not available	USACHPPM/EDS	U	A - 01	Approved for public release; distribution is unlimited.	Final rept.	Not available
ADA469937	Modeling Insurgency Attrition and Population Influence in Irregular Warfare	NAVAL POSTGRADUATE SCHOOL MONTEREY CA	Howell, Jeffrey M.	6/1/2007	77	Not available	NPS	U	A - 01	Approved for public release; distribution is unlimited.	Master's thesis	The author develops a model that is a combination of Lanchester and Deitchman attrition models and population epidemic models. His fundamental premise is that a combination of these two types of models can yield important insights into the key relationships between an insurgency and the contested population. The two models are a base model with constant parameters, and more a advanced model with opportunistic and idealistic recruitment, various levels of government effort against the insurgency. and different ways of modeling population support. He finds, much like the real world, that initial conditions and policy decisions have a strong impact on the outcome of the conflict. Opposing factions that tailor their tactics to the situation (a government focusing on securing the population in a security-minded public) have a much greater chance of success. He also demonstrates the importance of good intelligence. Based on different attrition, recruitment, and transition rules, he studies the relationships between dynamic population flow and insurgency success or failure. The goal of the work is to provide an analytical framework for these situations, and to analyze the effect of different initial conditions and interactions on the success or failure of an insurgency. The models developed herein are descriptive, not predictive, and are designed to give decision makers an insight into a complex insurgency process.
ADA057652	Korean Hemorrhagic Fever.	KOREA UNIV SEOUL COLL OF MEDICINE	Lee, Ho Wang	3/1/1978	38	Not available	Not available	U	A - 01	Approved for public release; distribution is unlimited.	Final rept. 1 Jan-31 Dec 77,	Epidemic hemorrhagic fever was recognized for the first time in Korea in 1951 and since that time it has been known as Korean hemorrhagic fever (KHF). Diseases similar to KHF have been known in Manchuria, the Soviet Union, Scandinavia, Eurasia and Japan. The purpose of the research was (1) to isolate the etiologic agent of KHF, (2) to propagate the etiologic agent of KHF in animals; and (3) to study the serologic relationship between KHF agent and other acute hemorrhagic fevers of the world. The etiologic agent of KHF was isolated from lung tissues of Apodemus rodents and from acute phase sera of patients by FAT. The agent was successfully propagated in Apodemus agrarius through 26 passages but could not be cultivated in cell cultures nor in laboratory animals.
ADA425846	Fitness and Nutrition, an 8-Week Program for Obese Children and Their Parents	AIR FORCE INST OF TECH WRIGHT-PATTERSON AFB OH	Federici, Karen M.	7/29/2004	47	AFIT-CI04-567	AFIT	U	A - 01	Approved for public release; distribution is unlimited.	Major rept.	Pediatric obesity is rising in epidemic proportions in the United States and the implications cause social, physical, psychosocial, and emotional burdens on the children and their families. The causes of pediatric obesity are multifaceted and the effect on the children can be profound. There is a need for intervention for these children, yet few studies have been done on the available intervention for the obese pediatric patient. Once the pediatric patient is identified as being obese through the use of the BMI, the patient can then be referred to the appropriate intervention based on the patient and families readiness for change. A literature review was conducted on identification, risk factors, and interventions for pediatric obesity. In addition, a national pediatric weight management program, SHAPEDOWN was examined. Information regarding the Transtheoretical Model of Change, and The Health Promotion Model of Health was also reviewed. The program was developed with the Health Promotion Model as the framework. The finished product is an 8-week fitness and nutrition program for overweight children and their parents. The program will be for the families who are ready to make a commitment to a plan of care and demonstrate a readiness to make lifestyle changes. The program will be implemented in a military pediatric clinic in southwestern Ohio. At conclusion of the program, the outcomes will be compared to the SHAPEDOWN outcomes. An evaluation by the referring providers and the participants will be used to make changes to the program. If the program shows improvement in the child's weight, behaviors, activity and nutrition; the program will then be distributed to other pediatric clinics in the military.

ADA387813	GLOBAL HEALTH: U.S. Agency for International Development Fights AIDS in Africa, but Better Data Needed to Measure Impact	GENERAL ACCOUNTING OFFICE WASHINGTON DC	Not available	3/1/2001	53	GAO-01-449	XD	U	A - 01	Approved for public release; distribution is unlimited.	Not available	The Human Immunodeficiency Virus/Acquired Immunodeficiency Syndrome (HIV/AIDS) is the leading cause of death in the countries of sub-Saharan Africa, where more than two-thirds of the people who are infected with HIV live. Despite efforts by the international community to reduce the spread of HIV/AIDS in sub-Saharan Africa, the National Intelligence Council estimates 1 that as many as one-quarter of the population of the hardest-hit countries in that region will die from AIDS over the next 10 years. Further, given the scale of the epidemic, AIDS has grown beyond a public health problem to become a humanitarian and developmental crisis. For example, the National Intelligence Council concluded that the persistence of infectious diseases, such as HIV/AIDS, is likely to aggravate and in some cases provoke economic decline, social fragmentation, and political destabilization. In addition, the Council found that the epidemic threatens to weaken the military capabilities of countries and because of the involvement of sub-Saharan African troops in international peacekeeping efforts it could hinder those activities as well. Since the 1980s, the U.S. Agency for International Development has provided assistance to help fight AIDS in sub-Saharan Africa.
ADA253200	AIDS-Related Knowledge, Attitudes, Beliefs, and Behaviors in Los Angeles County	RAND CORP SANTA MONICA CA	Kanouse, David E.,Berry, Sandra H.,Gorman, E. M.,Yano, Elizabeth M.,Carson, Sally	1/1/1991	103	RAND/R-4054-LACH	XD	U	A - 01	Approved for public release; distribution is unlimited.	Not available	This report documents the results of a survey of the general public conducted for the AIDS Program Office, Los Angeles County Department of Health Services. The purposes of the survey were to provide information about the occurrence within the general population of Los Angeles County of sexual and drug-taking behaviors that can spread human immunodeficiency virus (HIV) infection and to determine the public's knowledge, attitudes, and opinions about the AIDS epidemic. This information may be used to guide programmatic efforts in planning effective education and prevention activities aimed at reducing the risk of HIV infection in the general public. The survey was conducted by telephone from October 1989 to January 1990 on a random sample of 1,305 residents of Los Angeles County. Black and Hispanic households were oversampled to obtain adequate information about ethnic populations in the county.
AD1081298	Development of a Cholera Epidemiological Risk Assessment Framework	CONSTRUCTION ENGINEERING RESEARCH LAB (ARMY) CHAMPAIGN IL CHAMPAIGN United States	Bastian,Elizabeth,Munaretto,Claire,Myers,Natalie R.,Baxter,Carey L.,Fishman,Jamie,Westervelt,James D.,Ehlschlaeger,Charles R.,Burkhalter,Jeffrey A.	9/1/2019	302	ERDC/CERL-TR-19-13	Not available	U	A - 01	Approved For Public Release;	Technical Report	This report presents technical explanations and specific enumerations for a cholera risk framework developed as a part of a multi-year project funded by the Army Research, Development, Test and Evaluation Program. This effort employed a novel data-conflation technology called the Framework for the Integration of Complex Urban Systems (FICUS), which uses a broad base of peer-reviewed research on established indicators of sociocultural or health-driven risk conditions of interest for intelligence or threat analysis in a given region. Researchers performed a specialized case study that incorporates results and data from previous programmatic work, including FICUS development and an existing theoretical humanitarian crisis (HC) framework. New data required for this framework included identification of conditions for contracting cholera, micro-survey data from global resources, and a digital population model that matches the survey data to existing population census data. The cholera framework research succeeded in using relevant microdata from the HC framework, then manipulating the HC framework to better inform cholera risk modeling. In general, the use of risk-analysis frameworks with FICUS is intended to produce case studies that provide non-obvious insights to the user while accounting for and reducing data gaps and uncertainties.
ADA523226	Posture Statement of Admiral Michael G. Mullen, USN Chairman of the Joint Chiefs of Staff, Before the 111th Congress Senate Armed Services Committee	JOINT CHIEFS OF STAFF WASHINGTON DC	Mullen, Michael G.	2/2/2010	20	Not available	JCS	U	A - 01	Approved for public release; distribution is unlimited.	Congressional testimony	This past year witnessed significant achievements by America's men and women in uniform. Their efforts and sacrifices - as part of a learning and adapting organization - have sustained us through more than eight years of continuous war. Thanks to them we are in position to finish well in Iraq. Thanks to them, we can begin to turn the corner in Afghanistan and Pakistan. In conjunction with our many partner nations, they've provided humanitarian relief assistance to millions, helped contain a threatening H1N1 pandemic, expanded support to national law enforcement for enhanced border security, and disrupted terrorist sanctuaries world-wide. And, thanks to them, we have a global presence protecting our national security and prosperity. The demands of the present remain high, and our military role in national security remains substantial. This will continue for the foreseeable future. Yet as I have testified before this body in past appearances, the military serves America best when we support, rather than lead United States foreign policy.

ADA557423	Genetic Characterization of Zika Virus Strains: Geographic Expansion of the Asian Lineage	TEXAS UNIV MEDICAL BRANCH AT GALVESTON CENTER FOR BIODEFENSE AND EMERGING INFECTIOUS DISEASES (CBEID)	Haddow, Andrew D.,Schuh, Amy J.,Yasuda, Chadwick Y.,Kasper, Matthew R.,Heang, Vireak,Huy, Rekol,Guzman, Hilda,Tesh, Robert B.,Weaver, Scott C.	2/28/2012	8	Not available	DOD	U	A - 01	Approved for public release; distribution is unlimited.	Journal article	Zika virus (ZIKV) is a mosquito-borne flavivirus distributed throughout much of Africa and Asia. Infection with the virus may cause acute febrile illness that clinically resembles dengue fever. A recent study indicated the existence of three geographically distinct viral lineages; however this analysis utilized only a single viral gene. Although ZIKV has been known to circulate in both Africa and Asia since at least the 1950s, little is known about the genetic relationships between geographically distinct virus strains. Moreover, the geographic origin of the strains responsible for the epidemic that occurred on Yap Island, Federated States of Micronesia in 2007, and a 2010 pediatric case in Cambodia, has not been determined. Methodology/Principal Findings: To elucidate the genetic relationships of geographically distinct ZIKV strains and the origin of the strains responsible for the 2007 outbreak on Yap Island and a 2010 Cambodian pediatric case of ZIKV infection, the nucleotide sequences of the open reading frame of five isolates from Cambodia, Malaysia, Nigeria, Uganda, and Senegal collected between 1947 and 2010 were determined. Phylogenetic analyses of these and previously published ZIKV sequences revealed the existence of two main virus lineages (African and Asian) and that the strain responsible for the Yap epidemic and the Cambodian case most likely originated in Southeast Asia. Examination of the nucleotide and amino acid sequence alignments revealed the loss of a potential glycosylation site in some of the virus strains, which may correlate with the passage history of the virus. Conclusions/Significance: The basal position of the ZIKV strain isolated in Malaysia in 1966 suggests that the recent outbreak in Micronesia was initiated by a strain from Southeast Asia. Because ZIKV infection in humans produces an illness clinically similar to dengue fever and many other tropical infectious diseases, it is likely greatly misdiagnosed and underreported.
ADA614484	Building the Case Toward a Definitive Clinical Trial: Saline Versus Plasma-Lyte	ARMY INST OF SURGICAL RESEARCH FORT SAM HOUSTON TX	Chung, Kevin K.,Dubick, Michael A.	4/1/2014	3	Not available	USAMRMC	U	A - 01	Approved for public release; distribution is unlimited.	Journal article	Since its first reported use during the cholera pandemic in 1831, the potential pitfalls of sodium chloride (saline) as a resuscitative fluid for hypovolemic conditions have been described in numerous animal and human studies (1). Decrease in strong ion difference (SID) leading to hyperchloremic metabolic acidosis (2) and resultant effects on renal blood flow and renal insufficiency (3) and even potential immune dysfunction (4) are well-known phenomenon linked to saline-based resuscitation. Recent clinical studies have highlighted some of these deleterious effects. In a randomized, controlled, double-blinded, crossover study in 12 healthy volunteers, Chowdhury et al (5) demonstrated sustained hyperchloremia, reduced SID, and decreased mean renal artery velocity and renal cortical tissue perfusion when normal (0.9%) saline was administered compared with a more balanced crystalloid solution. In another single-center, prospective, sequential period study, Yunos et al (6) demonstrated significantly less acute kidney injury (AKI) and use of renal replacement therapy after the institution of a chloride restrictive resuscitation strategy when compared with a more liberal saline-based strategy used in the previous 6 months. Yet, despite these well-described deleterious effects, normal saline remains the most commonly used resuscitative crystalloid solution used today (7) and has often been the control fluid used in preclinical and clinical studies comparing resuscitation strategies. Aside from being inexpensive and compatible with many drugs and blood products, its common use likely reflects continued questions surrounding the true clinical significance of hyperchloremia.
ADA052810	The Mean Duration Time of Carrier-Borne Epidemics.	FLORIDA STATE UNIV TALLAHASSEE DEPT OF STATISTICS	Conlon,Susan L.,Billard,L.	8/1/1977	20	FSU-STATISTICS-M426,TR-24,ARO-13888.10-MX	13888.10-MX	U	A - 01	Approved for public release; distribution is unlimited.	Technical rept.,	In this paper, the two-population model for a carrier-borne epidemic posed by Bailey (The Mathematical Theory of Infectious Diseases and its Applications, 1975, p. 211) is formulated in a mathematically tractable manner. This model reflects the epidemiology of diseases such as malaria, where the progress of the disease depends on the interaction of a population of mosquitoes and a population of humans. An expression for the mean duration time of the epidemic is obtained and a computationally feasible algorithm is presented. Results of a study investigating the consequences on the mean duration time of varying the infection and removal rates in the two populations are given. (Author)

ADA620089	Adenovirus Microsatellite Reveals Dynamics of Transmission during a Recent Epidemic of Human Adenovirus Serotype 14 Infection	NAVAL MEDICAL RESEARCH CENTER SILVER SPRING MD	Houng, Huo-Shu H.,Lott, Lisa,Gong, Heping,Kuschner, Robert A.,Lynch, Julia A.,Metzgar, David	7/1/2009	9	NHRC-08-31	NHRC	U	A - 01	Approved for public release; distribution is unlimited.	Journal article	Adenoviruses are the leading cause of reported illness and lost work time among basic trainees in the Department of Defense. Last year, a new serotype of adenovirus (Ad14) emerged in the United States and caused several severe outbreaks of febrile respiratory infection and pneumonia among both recruits and civilians. One death was reported among recruits. This paper describes a novel method for discriminating the otherwise identical strains of this virus circulating at different sites, and describes the epidemiological conclusions reached using the new method to track those strains. Different recruit sites were affected by different strains of Ad14, and those strains were stably associated with specific sites for several months at a time. Several readily discernable variants of the identified strain marker (a microsatellite DNA sequence) were discovered, allowing simple methods to be used to discriminate the observed site-specific strains. These data show that those strains were endemic to those sites, and that transmission between recruits in the training was the primary source of infection (as opposed to redundant re-importation from civilian communities with the incoming recruits). Analysis of the highly variable strain marker described in this work is shown to be an effective way to discriminate otherwise identical adenoviruses.
ADA501433	Project BioShield: Purposes and Authorities	LIBRARY OF CONGRESS WASHINGTON DC CONGRESSIONAL RESEARCH SERVICE	Gottron, Frank	5/4/2009	11	CRS/DC	Not available	U	A - 01	Approved for public release; distribution is unlimited.	Congressional rept.	Many potential chemical, biological, radiological, and nuclear (CBRN) terrorism agents lack available countermeasures. In 2003, President Bush proposed Project BioShield to address this need. The 108th Congress passed the Project BioShield Act of 2004, and President Bush signed it into law on July 21, 2004 (P.L. 108-276). The main provisions of this law include (1) relaxing procedures for some CBRN terrorism-related spending, including hiring and awarding research grants; (2) guaranteeing a federal government market for new medical countermeasures; and (3) permitting emergency use of unapproved countermeasures. The Department of Health and Human Services (HHS) has used each of these authorities. The HHS used expedited review authorities to approve grants relating to developing treatments for radiation exposure. The HHS used the authority to guarantee a government market to obligate approximately \$2.3 billion to acquire countermeasures against anthrax, botulism, radiation, and smallpox. In response to the 2009 influenza A (H1N1) swine flu" outbreak
ADA547350	Obesity: A Threat to National Security?	USAWC	Gattis, Vanessa M.	3/16/2011	32	Not available	USAWC	U	A - 01	Approved for public release; distribution is unlimited.	Research paper	In order to meet the strategic and operational demands placed upon the U.S. military as a joint war fighting force, service members must be physically fit. Obesity, poor physical fitness and health are seriously threatening the overall readiness and operational effectiveness of our U.S. military. Currently serving military men and women are increasingly overweight and out-of-shape while many of those who aspire entry into our Armed Forces are alarmingly, Too Fat to Fight." The recent strategic implication of obesity within our Armed Forces is threatening the National Security of this nation. Currently
ADA539095	Do Frogs Still Get Their Kicks On Route 66? A Transcontinental Transect For Amphibian Chytrid Fungus (Batrachochytrium Dendrobatidis) Infection On U.S. Department Of Defense Installations	NAVAL FACILITIES ENGINEERING COMMAND NORFOLK VA ATLANTIC DIV	Lannoo, Michael J.,Petersen, Christopher,Lovich, Robert E.,Nanjappa, Priya,Phillips, Christopher,Mitchell, Joseph C.,Macallister, Irene	1/4/2011	17	Not available	LRMP-VA	U	A - 01	Approved for public release; distribution is unlimited.	Not available	One fifth of the world's amphibians now face extinction. A major factor in these declines has been the spread of infection by the chytrid fungus, Batrachochytrium dendrobatidis (Bd), which, as a disease (chytridiomycosis) has been devastating amphibian populations globally. To better understand the spatial and temporal scales of infection by this pathogen, we conducted a transcontinental transect for the presence of Bd. United States Department of Defense (DoD) installations were sampled from west to east along U.S. Highway 66 from California into central Illinois, and continuing eastward from there across to the Atlantic Seaboard along U.S. Interstate 64 (in sum from Camp Pendleton in California to Naval Air Station Oceana in Virginia, between 33 deg and 39 deg N latitude). We sampled each installation across the 2009 warm season using standardized collection and analytical techniques. This study represents the most geographically extensive survey for Bd conducted to date. Half of the amphibian species sampled (15/30) tested positive for Bd. There was a strong spatial component to our dataset; the 10 eastern temperate DoD installations had higher rates of Bd infection (18.9%) than the five bases situated in the more arid west (4.8%). There was also a strong temporal (seasonal) component to our dataset. In total, 78.5% of all positive samples were collected in the first (spring/early-summer) sampling period. These data support the conclusion that Bd is now widespread, from coast to coast, and argue that Bd, a pathogen that was once likely epidemic, can today be considered endemic, extending transcontinentally across much of North America.

ADA001375	Isolation, Purification and Characterization of Neuraminidase.	MICHIGAN UNIV ANN ARBOR	Davenport, Fred M.	7/23/1974	7	Not available	Not available	U	A - 01	Approved for public release; distribution is unlimited.	Terminal progress rept. 1 Jul 73-30 Jun 74,	Physical-chemical studies of neuraminidase were carried out. An investigation of the peptide nature of the subunits was undertaken by trypsin digestion of neuraminidase subunits treated with 14C-iodoacetamide. 14C-labeled cysteinyl peptides were mapped by successive chromatography and high voltage electrophoresis. Three epidemic strains of influenza virus (1957, 1960 and 1969) were compared in order to detect alterations in their fingerprint patterns which could be correlated with the antigenic differences between the strains. Alternate methods of obtaining solubilized neuraminidase were surveyed. The objective was to increase yield of enzyme from several strains of virus and to release the entire molecule without loss of a fragment. The triton X100 dissociation and dissociation methods are discussed.
AD0834640	KINDERGARTEN EPIDEMIC CAUSED BY ADENO-VIRUS 7	ARMY BIOLOGICAL LABS FREDERICK MD	Osvath, P., Troth, M.	11/1/1966	10	TRANS-1910	SMUFD	U	A - 01	Approved for public release; distribution is unlimited. Document partially illegible.	Not available	A report is presented of a kindergarten epidemic caused by adeno-7 virus and manifesting itself with symptoms of the air passages. Seventy two per cent of the children in the community fell ill with a mild or moderately serious infection of the air passages. It was possible to isolate the virus in 14 of the 22 cases tested virologically. In another 6 cases the conversion of the 'HAG' or 'Complement fixation test' indicated the probability of an analogous etiology. This made it possible to show the course of an adeno-7 infection which showed manifest clinical symptoms as well in 55% of the children. In 35% of the cases a mild pneumonia which appeared mainly in evidence obtained from cultures was determined. In the remaining cases the infection appeared as a bronchitis or rhino-pharngitis.
ADA528286	Increasing Rates of Obesity Among HIV-Infected Persons During the HIV Epidemic	UNIFORMED SERVICES UNIV OF THE HEALTH SCIENCES BETHESDA MD	Crum-Cianflone, Nancy, Roediger, Mollie P., Eberly, Lynn, Headd, Maryam, Marconi, Vincent, Ganesan, Anuradha, Weintrob, Amy, Barthel, R. Vincent, Graser, Susan, Agan, Brian K.	4/1/2010	10	Not available	USUHS	U	A - 01	Approved for public release; distribution is unlimited.	Journal article	Background: The prevalence and factors associated with overweight/obesity among human immunodeficiency virus (HIV)- infected persons are unknown. Methods: We evaluated prospective data from a U.S. Military HIV Natural History Study (1985?2004) consisting of early diagnosed patients. Statistics included multivariate linear regression and longitudinal linear mixed effects models. Results: Of 1682 patients, 2% were underweight, 37% were overweight, and 9% were obese at HIV diagnosis. Multivariate predictors of a higher bodymass index (BMI) at diagnosis included more recent year of HIV diagnosis, older age, African American race, and earlier HIV stage (all p,0.05). The majority of patients (62%) gained weight during HIV infection. Multivariate factors associated with a greater increase in BMI during HIV infection included more recent year of diagnosis, lower BMI at diagnosis higher CD4 count, lower HIV RNA level, lack of AIDS diagnosis, and longer HIV duration (all p,0.05). Nucleoside agents were associated with less weight gain; other drug classes had no significant impact on weight change in the HAART era. Conclusions: HIV-infected patients are increasingly overweight/obese at diagnosis and during HIV infection. Weight gain appears to reflect improved health status and mirror trends in the general population. Weight management programs may be important components of HIV care.
ADB150915	Double Blind, Placebo Controlled Clinical Trial of Ribavirin Therapeutic Efficacy in the Treatment of Epidemic Hemorrhagic Fever.	HUBEI MEDICAL COLL (CHINA) VIRUS RESEARCH INST	Hsiang, Chin-Min	11/15/1990	11	Not available	Not available	U	A - 01	Approved for public release; distribution is unlimited.	Final rept. 1 Nov 85-31 Oct 90,	Not available

ADA618991	Aviation and Health: A Key Nexus for the US Air Force's Regional Security-Building Efforts	AIR UNIV MAXWELL AFB AL AIR FORCE RESEARCH INST	Chambers, James A.,Garretson, Peter A.,Rolleston, Mort M.,Alder, Jeffrey R.,Podbielski, Peter J.	6/1/2015	17	Not available	AU-AFRI	U	A - 01	Approved for public release; distribution is unlimited.	Journal article	<p>A confluence of fiscal challenges, lessons learned from Afghanistan and Iraq, and increased emphasis on US influence in the Asia-Pacific region has significantly shaped national strategic guidance in recent years. One emergent theme is the importance of integrated diplomacy, development, and defense ( 3D ) to prevent conflict and build partner nation (PN) capacity. The 2010 National Security Strategy mandated enhancing regional security through spur[ring] economic growth, strengthen[ing] weak and failing states, lift[ing] people out of poverty, combat[ing] . . . epidemic disease, and strengthen[ing] . . . governance. Reinforcing that imperative, Presidential Policy Directive 23, published in 2013, aims to help partner nations build the sustainable capacity to address common security challenges; promote partner support for the policies and interests of the United States; strengthen collective security and . . . promote universal values. Building PN infrastructure is a complex task involving a myriad of interdependent facets of a nation's resources, including aviation. The United States helps PNs develop their whole-of-nation aviation enterprise to improve governance and economy. Doing so requires the coordinated expertise of a wide variety of US resources such as the US Trade and Development Agency, which has advanced public-private aviation partnerships overseas for over 20 years, linking industry leaders with US government resources such as the Federal Aviation Administration. A second critical resource is health care. The United States Global Health Initiative, established in 2009, reflects the president s commitment to improving PNs health, underscored by creation of the Office of Global Health Diplomacy in the Department of State (DOS) last year.</p>
AD1004143	Vesicular Stomatitis Virus Pseudotyped with Ebola Virus Glycoprotein Serves as a Highly Protective, Non-infectious Vaccine Against Ebola Virus Challenge	USAMRIID Frederick United States	Dye,John M.,Lennemann,Nicholas J.,Brouillette,Rachel,Rhein,Bethany,Perschbacher,Katherine J.,Cooney,Ashley L.,Hunt,Catherine M.,Maury,Wendy,Herbert,Andrew S.,Bakken,Russell A.	7/1/2016	25	Not available	Not available	U	A - 01	Approved for public release; distribution is unlimited.	Journal Article	<p>An epidemic caused by Ebola virus (EBOV) continues in West Africa, demonstrating the significant public health burden of filovirus infections and highlighting the need for preventive measures to combat the associated disease. Since, no vaccines or antivirals are currently FDA approved, we sought to assess protection conferred by an EBOV vaccine composed of noninfectious vesicular stomatitis virus (VSV) pseudovirions bearing EBOV glycoprotein (GP). A prime/boost vaccination regime protected mice against lethal challenge with mouse-adapted Ebola virus (MA-EBOV) in a dose-dependent manner. As N-linked glycans are thought to shield conserved regions of GP, we also tested if pseudovirions containing GPs lacking N-linked glycans on GP1 would provide effective immunity. High doses of GP/VSV partially or fully denuded of N-linked glycans on GP1 protected mice against MA-EBOV challenge. However, deglycosylated mutants proved less effective than WT GP/VSV at lower doses. Further, neither N-linked glycan deficient GP/VSV provided significant cross protection against Sudan virus. As others have reported, serum from vaccinated mice that were protected against lethal challenge had few to no detectable neutralizing antibodies, indicating that EBOV vaccines do not need to elicit neutralizing antibodies to protect against lethal challenge. A strong correlation was found between the amount of vaccine-induced GP-specific Ig and protection. Our results show that non-infectious GP/VSV pseudovirions serve as a successful vaccination platform, but reduction of the glycan shield is not an effective means of enhancing immunogenicity of EBOV GP. Further, we identify that GP-specific Ig levels provide a good immune correlate of protection.</p>
ADA088108	Functional Difference Equations and an Epidemic Model.	BROWN UNIV PROVIDENCE RILEY SCHETZ CENTER FOR DYNAMICAL SYSTEMS	Turyn,Lawrence	6/9/1980	13	AFOSR-TR-80-0565	TR-80-0565	U	A - 01	Approved for public release; distribution is unlimited.	Interim rept.,	<p>We consider an epidemic model for the form <math>S</math> implies <math>I</math> which implies <math>S</math> iwth history on <math>(-\infty, 0]</math>. The well-known threshold phenomenon is discussed in terms of the stability of a functional difference equation, also known as the translation-invariant renewal equation. Since the difference equation has infinite delay, the work of other authors on finite-delay problems is extended. Also, epidemic models with spatial effects are discussed by extension of the results to difference equations in a Banach space. (Author)</p>
AD0833621	LIVE-VACCINES AGAINST DISEASES OF ANIMALS	ARMY BIOLOGICAL LABS FREDERICK MD	Mayr, Anton	5/1/1966	13	TRANS-1760	SMUFD	U	A - 01	Approved for public release; distribution is unlimited.	Not available	<p>The best specific preventive methods for the protection of herds against infectious diseases has proved to be prophylactic innoculation. These innoculations are especially important in the case of virus-generated epidemics, because up to now it has not been possible to combat virus diseases with either chemicals or antibiotics, as is possible in the case of bacterial diseases. Prophylactic protective innoculations are the means with which animal husbandry can be freed of the constant difficulties which sweep over it again and again with each new epidemic. The center of interest is the live-virus vaccines which combat virus diseases of animals.</p>



ADA446659	An Epidemiological Approach to Terrorism	AIR FORCE INST OF TECH WRIGHT-PATTERSON AFB OH SCHOOL OF ENGINEERING AND MANAGEMENT	Bentson, Kjirstin A.	3/1/2006	130	AFIT/GOR/ENS/06-03	AFIT	U	A - 01	Approved for public release; distribution is unlimited.	Master's thesis, Mar 2005-Mar 2006	There are many types of models for counterterrorism, explaining different problems that the military faces in the fight against terrorism. This thesis proposes that one of the fundamental assumptions underlying existing models of counterterrorism is that the struggle with terrorists can be understood as a war in the traditional sense of the term. We propose to rethink the struggle against terrorism as a fight against an infection. The epidemic of terrorist ideology within part of the world is a result, from this perspective, of the infectiousness of that ideology. Using the insights of the field of the epidemiology of ideas, this research looks into the models and methods used to understand and fight biological epidemics. We work with the SIR model from mathematical epidemiology, which partitions populations into susceptible, infected, and recovered categories, and apply that model with notional starting rates to the epidemic of terrorist ideology. This research allows another set of assumptions for models used in counterterrorism because the insights gained from viewing terrorism as a symptom of an epidemic can expand our understanding of the problem that we fight.
ADA525270	Literature-Related Discovery: Potential Treatments and Preventives for SARS	MITRE CORP MCLEAN VA	Kostoff, Ronald N.	1/1/2010	36	Not available	XD	U	A - 01	Approved for public release; distribution is unlimited.	Not available	Literature-related discovery (LRD) is the linking of two or more literature concepts (that have not been linked previously in the literature; i.e., disjoint) in order to produce novel, interesting, plausible, and intelligible connections (i.e., potential discovery). The open discovery systems (ODS) component of LRD starts with an unsolved problem, and generates solutions to that problem through potential discovery. ODS LRD has been used to identify potential treatments or preventative actions for challenging medical problems, among myriad other applications. For the present paper, SARS was selected as the first application of LRD to an infectious disease. The first goal of this research was to identify non-drug non-surgical treatments that would 1) prevent the occurrence, or 2) reduce the progression rate, or 3) stop/reverse the progression of SARS. The MeSH taxonomy of Medline was used to restrict potential discoveries to selected semantic classes, and to identify potential discoveries efficiently. The second goal was to generate large amounts of potential discovery in more than an order of magnitude less time than required for the author's previous Raynaud's Phenomenon LRD study. To enhance the volume of potential discovery, databases were used in addition to Medline. These included the Science Citation Index (SCI) and a full text database for the first time. Because of the richness of the full text, 'surgical' queries were developed that targeted the exact types of potential discovery of interest while eliminating clutter more efficiently.
ADA546219	Enhanced Vaccine Control of Epidemics in Adaptive Networks	NAVAL RESEARCH LAB WASHINGTON DC PLASMA PHYSICS DIV	Shaw, Leah B.,Schwartz, Ira B.	4/29/2010	9	ARO-54682-MA.2	54682-MA.2,ARO	U	A - 01	Approved for public release; distribution is unlimited.	Journal article	We study vaccine control for disease spread on an adaptive network modeling disease avoidance behavior. Control is implemented by adding Poisson-distributed vaccination of susceptibles. We show that vaccine control is much more effective in adaptive networks than in static networks due to feedback interaction between the adaptive network rewiring and the vaccine application. When compared to extinction rates in static social networks, we find that the amount of vaccine resources required to sustain similar rates of extinction are as much as two orders of magnitude lower in adaptive networks.
ADA371843	Field Manual of Wildlife Diseases. General Field Procedures and Diseases of Birds	GEOLOGICAL SURVEY MADISON WI BIOLOGICAL RESOURCES DIV	Friend, Milton,Franson, J. C.	1/1/1999		ITR-1999-001	USGS	U	A - 01	Approved for public release; distribution is unlimited.	Final rept.,	The Field Manual of Wildlife Diseases
ADA471654	Maximum Utility for Limited Vaccine Stocks - A Case Study using Agent-based Modelling	DEFENCE SCIENCE AND TECHNOLOGY ORGANISATION EDINBURGH (AUSTRALIA) LAND OPERATIONS DIV	Forsyth, Adam,Fry, Ash	10/1/2003	23	Not available	DSTO/LOD	U	A - 01	Approved for public release; distribution is unlimited.	Briefing charts	Briefing on using agent-based modelling to determine the maximum utility for vaccine stocks.

ADA568159	High Depth, Whole-Genome Sequencing of Cholera Isolates from Haiti and the Dominican Republic	ARMY MEDICAL RESEARCH INST OF INFECTIOUS DISEASES FORT DETRICK MD	Sealfon, Rachel,Gire, Stephen,Ellis, Crystal,Calderwood, Stephen,Qadri, Firdausi,Hensley, Lisa,Kellis, Manolis,Ryan, Edward T.,LaRocque, Regina C.,Harris, Jason B.	9/11/2012	25	Not available	USAMRIID	U	A - 01	Approved for public release; distribution is unlimited.	Journal article	Whole-genome sequencing is an important tool for understanding microbial evolution and identifying the emergence of functionally important variants over the course of epidemics. In October 2010, a severe cholera epidemic began in Haiti, with additional cases identified in the neighboring Dominican Republic. We used whole-genome approaches to sequence four <i>Vibrio cholerae</i> isolates from Haiti and the Dominican Republic and three additional <i>V. cholerae</i> isolates to a high depth of coverage (>2000x); four of the seven isolates were previously sequenced.
AD1023063	Military Contingencies in Megacities and Sub megacities	U.S. Army War College Strategic Studies Institute Carlisle United States	Williams,Phil,Selle,Werner	12/1/2016	163	Not available	Not available	U	A - 01	Approved for public release; distribution is unlimited.	Technical Report	Urbanization is one of the most important mega-trends of the 21st century. Consequently, the possibility of U.S. military involvement in a megacity or sub-megacity is an eventuality that cannot be ignored. After elucidating the nature of urbanization and developing a typology in terms of smart, fragile, and feral cities, we give consideration to the kinds of contingencies that the U.S. military, especially the Army, needs to think about and prepare for. Six kinds of contingencies have since been identified: humanitarian disaster relief; military support for civilian authorities in a restoration of order; intervention for whatever reason in a strategic city (also termed a critical or alpha city); military involvement in a city in the context of counter-insurgency; use of military force in a city in an interstate conflict; and containment or quarantine of an urban pandemic. Many debates arise concerning whether the appropriate focus should be predominantly on megacities or on smaller, but possibly more important, cities or perhaps on both. If the U.S. Army has the capacity to intervene militarily in a megacity, then it is likely that it could do the same in a smaller city. Consequently, the authors of this monograph focus on megacities and sub-megacities.
AD1013519	HIV Risk Assessment Practices of Primary Care Physicians: A National Study	Uniformed Services University Of The Health Sciences Bethesda United States	High ,Patrick M.	1/1/2008	174	Not available	Not available	U	A - 01	Approved for public release; distribution is unlimited.	Technical Report	Background: Twenty five years after it was first discovered HIV/AIDS has become a pandemic that continues to take millions of lives each year. During this time, numerous U.S. Federal agencies and professional societies have recommended that physicians assess their patients risk for HIV infection. Despite increased options for HIV treatment, it has been more than a decade since any research on provider compliance with risk assessment practices has been published. Purpose: The primary purpose of this study was to assess the proportion of U.S. physicians who are Always/Often conducting HIV risk assessments. The second purpose of our study was to understand the factors that are associated with physician compliance. Finally, we assessed the proportion of physicians that Always/Often asked eight risk assessment questions for four at-risk patient groups (i.e., men who have sex with men [MSM], injection drug users [IDU], HIV+ and patients with symptom or diagnosis of a sexually transmitted disease [STD]) and continuing adult patients.
ADA507045	Interagency Collaboration. Key Issues for Congressional Oversight of National Security Strategies, Organizations, Workforce, and Information Sharing	GOVERNMENT ACCOUNTABILITY OFFICE WASHINGTON DC	Not available	9/1/2009	62	GAO-09-904SP	GAO	U	A - 01	Approved for public release; distribution is unlimited.	Congressional rept.	While national security activities, which range from planning for an influenza pandemic to Iraq reconstruction, require collaboration among multiple agencies, the mechanisms used for such activities may not provide the means for interagency collaboration needed to meet modern national security challenges. To assist the 111th Congress and the new administration in developing their oversight and management agendas, this report, which was performed under the Comptroller General's authority, addresses actions needed to enhance interagency collaboration for national security activities: (1) the development and implementation of overarching, integrated strategies; (2) the creation of collaborative organizations; (3) the development of a well-trained workforce; and (4) the sharing and integration of national security information across agencies. This report is based largely on a body of GAO work issued since 2005.
ADA382544	Research and Training in Tropical and Emerging Infectious Diseases in Brazil	FUNDAÇÃO CECILIANO ABEL DE ALMEIDA VITORIA (BRAZIL)	Dietze, Reynaldo	1/1/2000	18	Not available	USAMRMC	U	A - 01	Approved for public release; distribution is unlimited.	Final rept. 1 Jan 1998-31 Jan 2000	Evaluation of the cellular immune responses on patients with febrile illnesses during a Dengue epidemic in the State of Minas Gerais, Brazil: Preliminary results: In the present study we evaluated by flow cytometry the activation of both CD4+ and CD8+ T cells through the analysis of CD3+ cells co-expressing either CD4+ CD69+ or CD8+ CD69+ in patients with primary Dengue infection.

ADA478930	U.S. National Security and Strategy: A Selected Bibliography	ARMY WAR COLL LIBRARY CARLISLE BARRACKS PA	Not available	10/1/2007	38	AWC/LIB	Not available	U	A - 01	Approved for public release; distribution is unlimited.		The study of U.S. national security and strategy is embedded in the core of the curriculum of the U.S. Army War College (USAWC). Compiled as a springboard into the research and understanding of an intertwined subject area, this selected bibliography reflects books, documents, periodical articles, and web sites relating to this topic. With a few notable exceptions, the materials in this bibliography are dated 2004 to the present. For older materials, please see the bibliography titled U.S. National Security and Strategy
ADA565931	Adaptive Network Dynamics - Modeling and Control of Time-Dependent Social Contacts	NAVAL RESEARCH LAB WASHINGTON DC	Schwartz, Ira B.,Shaw, Leah B.,Shkarayev, Maxim S.	7/1/2011	9	Not available	ONR	U	A - 01	Approved for public release; distribution is unlimited.	Conference paper	Real networks consisting of social contacts do not possess static connections. That is, social connections may be time dependent due to a variety of individual behavioral decisions based on current network connections. Examples of adaptive networks occur in epidemics, where information about infectious individuals may change the rewiring of healthy people, or in the recruitment of individuals to a cause or fad, where rewiring may optimize recruitment of susceptible individuals. In this paper, we will review some of the dynamical properties of adaptive networks, and show how they predict novel phenomena as well as yield insight into new controls. The applications will be control of epidemic outbreaks and terrorist recruitment modeling.
ADA123093	Inbred Rat Strains Mimic the Disparate Human Response to Rift Valley Fever Virus Infection	ARMY MEDICAL RESEARCH INST OF INFECTIOUS DISEASES FORT DETRICK MD VIROLOGY DIV	Peters, C. J.,Slone, T. W.	1/1/1982	10	Not available	USAMRIID	U	A - 01	Approved for public release; distribution is unlimited.	Journal article	Rift Valley fever virus (RFFV) has long been a major pathogen of domestic animals and humans in sub-Saharan Africa. In the last 5 years it has been recognized that this agent not only causes a self-limited febrile illness in humans but may also lead to fatal hemorrhagic fever and encephalitis. In 1977 the disease invaded Egypt for the first time in recorded history, resulting in an extensive epizootic/epidemic and threatening additional spread into the Middle East. Because of this unprecedented geographical extension and the florid human disease associated with it, we have studied the pathogenicity of an Egyptian isolate (Zagazig Hospital 501) for laboratory animals. During the course of these studies, inbred rat strains were found to have three distinct patterns of response. Wistar-Furth and Brown Norway rats were exquisitely susceptible to the virus and died with extensive hepatic necrosis 3 to 5 days after inoculation of only 5 plaque-forming units (pfu). Lewis, Buffalo, DA, and Fischer 344 rats resisted subcutaneous infection with 5 x 10 (expn 5) pfu. ACI and Maxx rats were moderately susceptible to the lethal effects of 5 x 10 (expn 3) to 5 x 10 (expn 5) pfu of the virus and died within 2 to 3 weeks with encephalitis. These findings suggest that the genetic susceptibility of the host is responsible for the markedly different evolution of RVF in the rats. The clinical and virologic events following rat inoculation resembled the course of benign, encephalitic, or fulminant human disease. The inbred rat model may be useful in defining the critical determinants of severe human RVF and suggests that more attention should be directed to host genetic factors.
ADA520137	Trust Management for Encounter-Based Routing in Delay Tolerant Networks	VIRGINIA POLYTECHNIC INST AND STATE UNIV BLACKSBURG OFFICE OF SPONSORED PROGRAMS	Chen, Ing-Ray,Bao, Fenyue,Chang, Moonjeong,Cho, Jin-Hee	5/15/2010	8	Not available	ONR	U	A - 01	Approved for public release; distribution is unlimited.	Quarterly technical rept. 15 Feb-May 2010	We propose and analyze a class of trust management protocols for encounter-based routing in delay tolerant networks (DTNs). The underlying idea is to incorporate trust evaluation in the routing protocol, considering not only quality-of-service (QoS) trust properties (connectivity) but also social trust properties (honesty and unselfishness) to evaluate other nodes encountered. Two versions of trust management protocols are considered: an equal-weight QoS and social trust management protocol (called trust-based routing) and a QoS only trust management protocol (called connectivity-based routing). By utilizing a stochastic Petri net model describing a DTN behavior, we analyze the performance characteristics of these two routing protocols in terms of message delivery ratio, latency, and message overhead. We also perform a comparative performance analysis with epidemic routing for a DTN consisting of heterogeneous mobile nodes with vastly different social and networking behaviors. The results indicate that trust-based routing approaches the ideal performance of epidemic routing in delivery ratio, while connectivity-based routing approaches the ideal performance in message delay of epidemic routing, especially as the percentage of selfish and malicious nodes present in the DTN system increases. By properly selecting weights associated with QoS and social trust metrics for trust evaluation, our trust management protocols can approximate the ideal performance obtainable by epidemic routing in delivery ratio and message delay without incurring high message overhead.

ADA110207	The Extended Horizons of Rift Valley Fever: Current and Projected Immunogens	ARMY MEDICAL RESEARCH INST OF INFECTIOUS DISEASES FORT DETRICK MD	Eddy, G. A.,Peters, C. J.	1/1/1980	13	Not available	USAMRIID	U	A - 01	Approved for public release; distribution is unlimited.	Journal article	The first detailed description of Rift Valley Fever (RVF) was based on a sheep epizootic in an area where the great Rift Valley runs through Kenya. RVF is a viral disease causing arthropod-borne epidemics of domestic animals during which man is also infected. Sheep epizootics resembling RVF occurred in Kenya during the first two decades of the 20th century, but it was not until 1930 that Daubney and coworkers studied the disease in detail and established the viral etiology of RVF. Initial scientific progress was rapid. Field operations and laboratory studies revealed that (a) a wide variety of domestic, wild, and laboratory animals were susceptible to RVF virus infection with the characteristic pathological lesion being focal liver necrosis; (b) the virus could be isolated from, and transmitted by, a number of mosquito species; and (c) many African nations had serological evidence of human or animal infection by RVF virus. The disease continued to cause periodic epizootics, but until 1977 it was geographically limited to Sub-Saharan Africa. During many epizootics (and as a result of numerous laboratory infections), human RVF was described as a mild, dengue-like, febrile illness. However, during the 1975 epizootic in South Africa, severe clinical disease was reported in a small number of people, and the first fatalities directly attributable to RVF were documented. In 1977, an outbreak of the disease was reported in the Nile delta, a new geographic area and extensive human involvement with numerous fatalities occurred during the epizootic. The Egyptian epizootic re-emphasized the importance of this disease, as well as our lack of detailed understanding of the epidemiology, virology and pathogenesis of RVF. It also served as a graphic example of the potential of RVF to circulate in a number of differing geographic and climatic settings, since the virus has now spread in a 7,000-km north-south range throughout Africa. Although we do not know whether the virus will...
ADA605535	Emerging Vectors in the Culex pipiens Complex	WALTER REED ARMY INST OF RESEARCH SILVER SPRING MD DEPT OF ENTOMOLOGY	Fonseca, Dina M.,Keyghobadi, Nusha,Malcolm, Colin A.,Mehmet, Ceylan,Schaffner, Francis,Mogi, Motoyoshi,Fleischer, Robert C.,Wilkerson, Richard C.	3/5/2004	5	Not available	NIH	U	A - 01	Approved for public release; distribution is unlimited.	Journal article	In the Old World, some mosquitoes in the Culex pipiens complex are excellent enzootic vectors of West Nile virus, circulating the virus among birds, whereas others bite mainly humans and other mammals. Here we show that, in northern Europe, such forms differing in behavior and physiology have unique microsatellite fingerprints with no evidence of gene flow between them, as would be expected from distinct species. In the United States, however, hybrids between these forms are ubiquitous. Such hybrids between human-biters and bird-biters may be the bridge vectors contributing to the unprecedented severity and range of the West Nile virus epidemic in North America.
AD0699814	CHARACTERISTICS OF EPIDEMIOLOGICAL TYPES OF MORBIDITY OF HEMORRHAGIC FEVER WITH RENAL SYNDROME (HFRS) IN TULA REGION,	NAVAL MEDICAL RESEARCH UNIT NO 3 CAIRO (EGYPT) DEPT OF MEDICAL ZOOLOGY	Myasnikov,Yu. A.,Ravdonikas,O. G.,Levacheva,Z. A.	1/1/1969	8	NAMRU-3-Trans-336	Trans-336	U	A - 01	Approved for public release; distribution is unlimited.	Not available	In accordance with conditions of infection and other epidemiological features agricultural, industrial, forest and environmental epidemiological types of hemorrhagic fever with renal syndrome incidence are distinguished differing markedly by sex, age and occupation of patients and seasonal distribution of infections. Human morbidity during epidemic outbreaks and in the interepidemic periods differs not only by the number of cases, but also by prevalence of different epidemiological types of cases, which is very important in planning prophylactic and antiepidemic measures. (Author)

ADA441180	The Bug Stops Here: Force Protection and Emerging Infectious Diseases	NATIONAL DEFENSE UNIV WASHINGTON DC CENTER FOR TECHNOLOGY AND NATIONAL SECURITY POLICY	Thompson, Donald F.,Swerdlow, Joel L.,Loeb, Cheryl A.	11/1/2005	71	Not available	NDU/CTNSP	U	A - 01	Approved for public release; distribution is unlimited.	Monograph	Despite significant advances in medical research and treatment in the past century, infectious diseases remain among the leading causes of death worldwide. These diseases are appearing in places they have never been seen before or were thought to have been eradicated, are spreading faster and more frequently, and are posing an increasing global health threat that will affect national and international security in both the near- and long-term future, even affecting the success of U.S. military missions and operations. Force health protection is an urgent priority for the Department of Defense (DoD), as increasing threats of natural outbreaks of infectious disease could seriously undermine mission readiness and success. U.S. national security might be impacted by military operations in regions with endemic and epidemic occurrences of infectious disease, where disease activity may prevent the successful completion of a mission or operation or may even result in infected soldiers carrying a contagious disease back to the United States. Changing military doctrine and tactics call for a fresh approach to force protection. The purpose of this paper is to review important lessons that have been learned in the past, and to revisit the older but proven principles of force protection that are in danger of being forgotten in today's technology-focused military environment. Recognizing that infectious diseases could have a significant impact on military operations, this report provides a series of case studies that analyze health threats to each regional combatant command and presents both tactical and strategic recommendations that will better prepare the entire DoD for future outbreaks of disease. These recommendations focus on procedural changes that will allow the U.S. military to regain its competitive advantage.
ADA511154	The 2009 Influenza Pandemic: An Overview	LIBRARY OF CONGRESS WASHINGTON DC CONGRESSIONAL RESEARCH SERVICE	Lister, Sarah A.,Redhead, C. S.	10/15/2009	38	CRS-R40554	CRS/DC	U	A - 01	Approved for public release; distribution is unlimited.	Congressional Report	
AD0838931	AN EPIDEMIC DUE TO THE MALASSEZ AND VIGNAL BACILLUS	ARMY BIOLOGICAL LABS FREDERICK MD	Mollaret, Henri H.,Berthon, P.	4/15/1965	15	TRANS-1342	SMUFD	U	A - 01	Approved for public release; distribution is unlimited. Document partially illegible.	Not available	From a diagnostic point of view, serology and skin tests, permitted identification of the Malassez and Vignal bacillus in six reported observations. The antibody titer found in these patients although weak were significant. The skin hypersensitivity test was specific. From the clinical view point, these 6 observations show the extreme polymorphism of the infection by the Malassez and Vignal bacillus. They also show the absence of boundaries between the localized forms (mesenteric or iliac) and the generalized forms.
ADA598747	Policies for Biodefense Revisited: The Prioritized Vaccination Process for Smallpox	NAVAL POSTGRADUATE SCHOOL MONTEREY CA DEPT OF OPERATIONS RESEARCH	Kress, Moshe	5/1/2005	38	Not available	NPS	U	A - 01	Approved for public release; distribution is unlimited.	Not available	Handling bioterror events that involve contagious agents is a major concern in the war against terror, and is a cause for debate among policymakers about the best response policy. At the core of this debate stands the question which of the two post-event policies to adopt: mass vaccination-where maximum vaccination capacity is utilized to uniformly inoculate the entire population, or trace (also called ring or targeted) vaccination-where mass vaccination capabilities are trade d off with tracing capabilities to selectively inoculate only contacts (or suspected contacts) of infective individuals. We present a dynamic epidemic-intervention model that expands previous models by capturing some additional key features of the situation and by generalizing some assumptions regarding the probability distributions of inter-temporal parameters. The model comprises a set of difference equations. The model is implemented to analyze alternative response policies. It is shown that a mixture of mass and trace vaccination policies-the prioritized vaccination policy-is more effective than either of the two aforementioned policies.

ADA505867	Analysis of Chemical Off-Gassing from Filtering Facepiece Respirators after Decontamination (PREPRINT)	APPLIED RESEARCH ASSOCIATES INC TYNDALL AFB FL	Salter, W. B., Kinney, Kimberly, Wallace, William H., Lumley, April E., Heimbuch, Brian K., Wander, Joseph D.	8/1/2009	24	AFRL-RX-TY-TP-2009-4565	TP-2009-4565, AFRL-RX-TY	U	A - 01	Approved for public release; distribution is unlimited.	Journal Article PREPRINT	A major concern among healthcare experts is a shortage of supplies during a pandemic. An item of particular interest is the N95 filtering facepiece respirator (FFR), which is responsible for protecting individuals from infectious aerosols. Most experts agree there will be a shortage of N95 FFRs if a severe pandemic occurs and one option for mitigating an FFR shortage is to decontaminate and reuse the devices. Many parameters must be studied to verify the effectiveness of this strategy: biocidal efficacy of the decontamination treatment, filtration performance, pressure drop, fit, and toxicity to the end user post treatment. The focus of this research effort was to measure chemical off-gassing of six types of FFRs following decontamination. Our data indicate that for disinfectants, such as hydrogen peroxide and bleach, the amount of residual decontaminants is below the Permissible Exposure Limit (PEL). Toxic by-products were also evaluated, and they were detected for ethylene oxide treatment of FFR rubber straps. These data are encouraging and may contribute to the evolution of effective strategies for decontamination and reuse of FFRs.
AD0651864	LEGAL FOUNDATIONS OF MILITARY LIFE IN COLOMBIA,	RAND CORP SANTA MONICA CALIF	Kozolchyk, Boris	2/1/1967	74	RM-5172-PR	Not available	U	A - 01	Approved for public release; distribution is unlimited.	Not available	An examination of a major portion of the legal provisions for the Colombian Republic's military establishment. Among the findings are that virtually all aspects of Colombian military life are regulated by law. The Constitution provides for the establishment of a permanent army, and statutory and decree law regulate in detail the recruitment, assignment, training, promotion, retirement, compensation, and discipline of military personnel. When disputes arise over the enforcement of military rights and duties, they are adjudicated by both military and nonmilitary tribunals. The Colombian military appear to have easier access to the legislative process than other sectors of Colombian society, and laws affecting the military tend to be enacted with unusual dispatch. Legislative sources also point to increased military participation in such activities as building roads, manufacturing weapons, handling airmail and air freight, fighting epidemics, and building and managing hotels.
ADA487522	Honduran-U.S. Relations	LIBRARY OF CONGRESS WASHINGTON DC CONGRESSIONAL RESEARCH SERVICE	Sullivan, Mark P., Meyer, Peter J.	9/25/2008	23	CRS-RL34027	CRS/DC	U	A - 01	Approved for public release; distribution is unlimited.	Congressional rept.	The Central American nation of Honduras, one of the hemisphere's poorest countries, faces significant challenges in the areas of crime, human rights, and improving overall economic and living conditions. While traditional agricultural exports of coffee and bananas are still important for the economy, nontraditional sectors, especially the maquiladora, or export-processing industry, have grown significantly over the past decade. Among the country's development challenges are a poverty rate over 70%, high infant mortality, and a significant HIV/AIDS epidemic. Despite these challenges, increased public spending on health and education have reaped significant improvements in development indicators over the past decade.
ADA615898	The Diary of Jet Parker, September-December 1918	ARMY EDGEWOOD CHEMICAL BIOLOGICAL CENTER APG MD	Parker, Jet	12/1/1918	29	C390D1	ECBC	U	A - 01	Approved for public release; distribution is unlimited.	Not available	The diary of Jet Parker, from September 2 to December 5, 1918.
ADA084793	The Construction and Asymptotic Behaviour of Some m-Dimensional Simple Epidemic Models.	FLORIDA STATE UNIV TALLAHASSEE DEPT OF STATISTICS	Langberg, Naftali A.	2/1/1980	25	FSU-STATISTICS-M485(R), TR-D-44-ARO, ARO-16713.8-M	16713.8-M	U	A - 01	Approved for public release; distribution is unlimited.	Technical rept.,	A population of susceptible individuals exposed to m contagious diseases is considered. The progress of this epidemic among the individuals is modeled by an m-dimensional stochastic process. The components of this process represent the number of infective individuals with the respective diseases at time t. A class of m-dimensional stochastic processes is constructed. These processes describe the progress of the epidemic models considered in the sequel. Exact and approximate formulas for the joint and marginal state probabilities of these models are obtained. It is shown that the approximate formulas are relatively simple functions of time while, the derivations of the exact formulas involve tedious computations. The results obtained in the paper are applied to a sample of examples. (Author)

ADA613288	Global Emerging Infection Surveillance and Response (GEIS)- Avian Influenza Pandemic Influenza (AI/PI) Program	KENYA MEDICAL RESEARCH INST NAIROBI	Mpoke, Solomon,Coldren, Rodney L.	10/1/2014	19	Not available	USAMRMC	U	A - 01	Approved for public release; distribution is unlimited.	Annual rept. 13 Sep 2013-12 Sep 2014	The purpose of this contract is to carry out emerging infectious disease surveillance in Kenya. Specific areas in which work is performed include respiratory illness surveillance (particularly influenza), acute febrile illness surveillance, malaria resistance surveillance, diarrhea etiology and antimicrobial resistance surveillance, sexually transmitted illness surveillance, and capacity building. KEMRI maintained surveillance sites in both Kenyan Defense Forces and Ministry of Health clinics and hospitals throughout Kenya. KEMRI operated reference laboratories for this work in Nairobi, Kericho, and Kisumu, including the arbovirus reference laboratory, the antimalarial resistance laboratory, entomology facilities, the Center of Excellence in Microscopy, the microbiology reference laboratory. Capacity development projects include outbreak investigations, Ebola and Marburg virus testing, and continuation of a laboratory and medical maintenance student attachment program. The program was able to serve as the hemorrhagic virus reference laboratory for East Africa, determine etiologies of diarrheal illnesses and the antimicrobial resistance patterns of bacterial causes, determine the etiologies of sexually transmitted infections and acute febrile illnesses in military and civilian populations, and monitor the pattern of antimalarial resistance across Kenya.
ADA524035	Honduran-U.S. Relations	LIBRARY OF CONGRESS WASHINGTON DC CONGRESSIONAL RESEARCH SERVICE	Meyer, Peter J.,Sullivan, Mark P.	6/18/2010	27	CRS-7-5700,CRS-RL34027	CRS/DC	U	A - 01	Approved for public release; distribution is unlimited.	Congressional rept.	
ADA442341	Beauty is in the Eyes of the Beholder: Definitions of Attractiveness among African American and Caucasian Women	UNIFORMED SERVICES UNIV OF THE HEALTH SCIENCES BETHESDA MD DEPT OF MEDICAL AND CLINICAL PSYCHOLOGY	Davis, Dawnavan S.	1/1/2005	193	Not available	USUHS	U	A - 01	Approved for public release; distribution is unlimited.	Doctoral thesis	Obesity is a national epidemic affecting more than 127 million people (CDC, 2003). Nearly 78% of African American women in the nation are currently overweight or obese. Despite the negative health consequences associated with obesity, culturally mediated views of attractiveness and body image may serve as risk factors for obesity among certain ethnic groups. The traditional body image literature has been constrained by entirely focusing on body thinness as the only component of attractiveness. There is evidence to suggest that some African American women hold a multicomponent definition of attractiveness (Harris, 1990, Parker, 1995). A culturally sensitive silhouette assessment method is needed to assess these components. The current study used a Model Rating Task (MRT) that extended previous silhouette measures to include: (1) dressed models, (2) models of heavier BMI categories, and (3) shaded models to represent African Americans. With the MRT, the impact of attire, body size, and model ethnicity on definitions of attractiveness could be examined. Participants were 80 African American and 80 Caucasian women with a mean age of 41.40 years, a mean body mass index of 28.30 kg/sq m, an average educational level of 15.43 years, and average yearly income of \$50,000. Mean attractiveness rating scores (ranging from 1 to 8) were compared between ethnic groups for dressed and undressed models across five BMI categories ranging from underweight to class II obesity. Participant ethnicity did not affect overall attractiveness scores. However, model presentation did with both African Americans and Caucasians rating dressed models more attractive than undressed models. Contrary to expectations, participant ethnic identity and SES did not differentially impact the effects of participant ethnicity or model attire status on attractiveness. Using regression analysis, model dress was the only significant predictor of attractiveness with higher ratings for dressed models.

ADA494293	The Military Response to Pandemic: The New Global Threat	ARMY WAR COLL CARLISLE BARRACKS PA	Tornabene, Pietro	1/28/2009	29	Not available	USAWC	U	A - 01	Approved for public release; distribution is unlimited.	Strategy Research project	The more we develop, the more people gather in enormous urban conglomerates, the more we become intertwined in a complex society characterized by large availability of means of transportation, and the more the disruptive effects of a global plague stemming from an unknown infection will be. It is necessary to address this new type of menace in order to know the enemy we face, and once known, find feasible, acceptable, and suitable course of actions to defeat it or, at least, minimize the undesirable effects to our complex society. To fight this kind of war is not only the duty of a few researchers or doctors. The Army, as the ultimate bulwark between order and chaos when a threat becomes disruptive for the entire society, has a big role to play in order to assure order, deliver goods and medicines, control the stream of infected people, and maintain open vital communication's routes. The threat of pandemic does not find place in the The Spectrum of Conflict, and requires new tasks to be accomplished by the Armed Forces. This paper has been developed to address this kind of problem.
ADA483838	The National Disaster Medical System's Reliance on Civilian-Based Medical Response Teams in a Pandemic is Unsound	NAVAL POSTGRADUATE SCHOOL MONTEREY CA	Delaney, Jr, John B.	6/1/2007	10	Not available	NPS	U	A - 01	Approved for public release; distribution is unlimited.	Not available	The world is threatened with a pandemic. Such an event, considered by many to be the greatest public health risk the world faces, has the potential to kill up to forty or fifty million people, sicken hundreds of millions, and significantly impact the global economy. Countries and health organizations throughout the world are monitoring the threat and developing strategic plans and systems to prepare for what many consider an inevitable and possibly imminent event. The United States has made it a national priority to develop strategic plans to coordinate preparedness and response efforts at the federal, state, and local levels. A relatively small but critical aspect of these plans calls for the utilization of the National Disaster Medical System's (NDMS) civilian-based medical teams, to assist state and local governments in the event of a pandemic. Generally, past deployments of these federal assets have had positive results; however, the reliance on these civilian-based medical teams for response in a pandemic is problematic. The medical professionals who primarily comprise the team may be more reluctant to participate in a pandemic due to the increased health risks to themselves and their families. Moreover, the hospitals and medical systems that employ these civilian responders may be unwilling or unable to allow their participation in the federal response system. The federal government should reconsider its reliance on this civilian-based resource in the event of a pandemic, and focus instead on enhancing existing state and local public health and medical capabilities and resources.
ADA481049	A Double-Blind, Placebo Controlled Study to Evaluate the Safety and Immunogenicity of the New, Live, Oral Type-4 and Type-7 Adenovirus Vaccines in Military Trainees	WALTER REED ARMY INST OF RESEARCH SILVER SPRING MD	Lyons, Arthur,Longfield, Jenice,Kuschner, Robert,Straight, Timothy,Binn, Leonard,Seriwatana, Jitvimol,Reitstetter, Raven,Froh, Irma B.,Craft, David,McNabb, Kevin	9/27/2006	57	Not available	WRAIR/MD	U	A - 01	Approved for public release; distribution is unlimited.	Not available	Adenoviruses have been an important cause of febrile acute respiratory disease(ARD) in military recruits since they were first implicated as a cause of ARD in 1953 in an epidemic at Fort Leonard Wood, MO. Since then, adenovirus type 4 and 7 have been the most important cause of ARD among military recruits in the United States, resulting in significant morbidity, loss of training time, and in rare instances, mortality. Prior to the introduction of live, oral adenovirus vaccines in 1971, adenoviral infections caused the hospitalizations of 10% of military recruits, 90% of pneumonia hospitalizations, and more than 67% of all respiratory diseases in basic training. Outbreaks in the civilian population, though rare, have occurred.



ADA319862	White Papers - 2025. Volume 3. Book 1. Power and Influence.	AIR UNIV MAXWELL AFB AL CENTER FOR AEROSPACE DOCTRINE RESEARCH AND EDUCATION	Not available	11/1/1996	352	Not available	CADRE	U	A - 01,23	Availability: Document partially illegible.	Not available	The word frontier evokes an image of such distant borders as the American frontier of the nineteenth century or the beckoning unknown of space. It also suggests austerity, hardship, and lawlessness. The frontier of 2025 will be the streets and fields of the developing world. The battle will be for cooperation of people ravaged by poverty, disease, hunger, and crime. These problems will be epidemic, in some regions driving the US to choose wisely where, when, and how to act. The dilemma of 2025 will mirror today: whether to meet force with force or prevent violence by preempting it.' Within a domestic environment of increasing fiscal discipline and regard for life, the most efficient way to defend our national interest is to act before a situation flares into violence. One possibility is to dampen these violent flare-ups with a force dedicated to preventing or resolving conflict. However, this option requires a profound shift in focus and an unprecedented appreciation of degrees of conflict and hostility. Within each situation, there are instances where the application of lethal military force is appropriate. There are also instances where force is counterproductive. A murky void separates the two. We need to bridge that void. This paper advocates creating a small, rugged, and specialized composite force dedicated to creating and operating in the physical and psychological state we will call the peacespace. 2 The size and composition of the force will be crucial to success or failure. In 30 years, we envision that a composite force will consist of military, civil service, contractor, and international personnel. Aided by technological possibilities and new conceptual thinking, a security assurance force (SAF-pronounced Safe) will foster institutions required for long-term stability in a region.
ADA497308	The Impact of the Military Emergency Management Specialist (MEMS) Academy on State Defense Forces	Not available	Slotnick, Jeffrey A.	1/1/2006	6	Not available	SDF	U	A - 01	Approved for public release; distribution is unlimited.	Journal article	Our world is changing every day. As a result of this change, State Defense Forces are experiencing a period of dynamic change. As of this writing, (October 2006) several national events with significant impact are occurring. The war on terrorism is in full swing, pandemic flu is an emerging threat, wild fires are burning in many locations in the western United States, and the Gulf States are still trying to recover from the effects of hurricanes Katrina and Rita before the next hurricane season starts. This does not take into account state-specific issues like security for major sporting events, Army and Air Guard units mobilized to support Federal missions overseas, and Homeland Security duty on U.S. borders. Strained resources are becoming more the norm than the exception. How can State Defense Forces (SDFs) support these various missions as a viable force multiplier? In response to these challenges, the State Guard Association of the United States (SGAUS) developed a specialized Emergency Management qualification program for State Defense Forces and other authorized individuals titled Military Emergency Management Specialist (MEMS) Academy." This program prepares SDF personnel to effectively operate and function in a local or state-wide military emergency management mobilization. Individuals with MEMS qualification gain the knowledge
AD0652667	EPIDEMIOLOGICAL EFFECTIVENESS OF LIVE VACCINE AGAINST INFLUENZA DURING THE PERIOD OF THE OUTBREAKS OF A2 AND B INFLUENZA IN 1962	ARMY BIOLOGICAL LABS FREDERICK MD	Smorodintsev, A. A.,Dokuchaev, G. I.,Minichev, P. N.,Filippov, N. A.,Chalkina, O. M.	5/1/1966	12	TRANS-1802	ABL/MD	U	A - 01	Approved for public release; distribution is unlimited.	Not available	The qualitative performance and timely completion, prior to the onset of a regular outbreak, of a triple immunization encompassing the largest number of collectives, are considered the main conditions for exposing the epidemiological effectiveness of live influenza vaccine. The results of the immunization of 12,600 adult persons, distributed among 33 separate collectives, were studied during two successive epidemics of influenza type A2 and B in January -- April 1962. In January--February 1962 in the majority of these collectives an outbreak of type A2 influenza took place, and beginning with March a wave of influenza type B emerged. During this a significantly more intense incidence rate with type A2 and B influenza was observed in the control noninoculated collectives than in the collectives which were encompassed by the almost complete administration of live influenza vaccine.

AD1011449	The Role of the MHV Receptor and Related Glycoproteins in Murine Hepatitis Virus Infection of Murine Cell Lines	Uniformed Services University Of The Health Sciences Bethesda United States	Lu,Jinhua	4/13/1995	262	Not available	Not available	U	A - 01	Approved for public release; distribution is unlimited.	Technical Report	Mouse hepatitis virus strain A59 (MEV-A59), a murine coronavirus, infects different murine cell lines causing different levels of virus growth and virus-induced cell fusion. The role of the MEV receptor (MHVR) glycoprotein and related glycoproteins in determining the outcome of MEV infection in vitro was examined. A previously unknown murine CBA-related glycoprotein (now named Cea10) was discovered and found to be co-expressed with MHVR in the Cl1 D and F40 lines of mouse fibroblasts. A monoclonal anti-MHVR antibody, MAb-CC1, protected the Cl 1 D and F40 cells from MHV infection. A chimeric molecule in which the N-terminal domain of MHVR was replaced with that of Cea10 did not bind to MAb-CC1 or MHV-A59 virions in a virus overlay protein blot assay. Neither the expression of this chimeric protein in MHV-resistant BHK cells nor the native Cea10 conferred MHV susceptibility. The CealO protein was shown to be an approximately 35-37 kDa secreted glycoprotein. These results showed f or the first time that two murine CEA related genes can be co-expressed in some cell lines from inbred mice, while MHVR was the only MHV receptor in these cell lines.
AD0828316	ANTIMICROBIAL TREATMENT OF TUBERCULOSIS,	FOREIGN TECHNOLOGY DIV WRIGHT-PATTERSON AFB OH	Jancik, E.,Jancikova, M.,Novak, M.,Tousek, J.	9/1/1967	260	FTD-HT-66-565	Not available	U	A - 01	Approved for public release; distribution is unlimited.	Not available	The correct treatment of tuberculosis as an individual and epidemic disease is discussed. A presentation is given of laboratory methods of studying the bacillus and its resistance to various antitubercular agents. An exposition is presented of the various known methods of therapy using such antitubercutotics as streptomycin, isoniazide, and para-aminosalicylic acid in one category, and the use of corticoids as a second form of therapy. The treatment of resistant strains by use of so-called second-line antitubercutotics is covered in detail with attention to the known hazards connected with certain compounds.
AD0778205	Aerosol Immunization against Influenza Virus Infection.	FLORIDA UNIV GAINESVILLE COLL OF MEDICINE	Waldman,Robert H.,Johnson,Joseph E. , III,Small,Parker A. , Jr	3/1/1974	7	Not available	Not available	U	A - 01	Approved for public release; distribution is unlimited.	Final scientific rept. 1 Jul 69-31 Aug 70,	Studies have been carried out to determine the role of local immunity in influenza virus infection, and to investigate various parameters related to local immunization. The particle size in aerosol immunization was found to be important. Children respond in a similar fashion to adults. Aerosol-spray immunization elicited good protection in a subsequent influenza epidemic. The authors could not show significant protection against artificial challenge using aerosolized commercial gamma-globulin. (Author)
ADA556195	The ER Epidemic": Scope and Intervention Strategies"	RAND HEALTH SANTA MONICA CA	Kellermann, Arthur L.	1/1/2011	15	Not available	XD	U	A - 01	Approved for public release; distribution is unlimited.	Briefing charts	Not available
ADB329088	Vulnerability Assessment Tools for Complex Information Networks	HARVARD UNIV CAMBRIDGE MA	Cassandras, Christos G.,Gong, Weibo,Pepyne, David L.,Lee, Wenke,Liu, Hong,Ho, Yu-Chi,Pfeffer, Avrom	11/14/2006	27	ARO-42349-MA-CIP.2	42349-MA-CIP.2,ARO	U	A - 01	Approved for public release; distribution is unlimited.	Final rept. 15 May 2001-14 Nov 2006	The specific aims of this research is to develop theories, methodologies, tools, and implementable solutions for modeling, analyzing, designing, and securing information networks against information-based attack. Accomplishments during the current reporting period are documented in 49 publications and 1 patent application and include: New methods for the optimization of complex systems; simulation-based methods for real-time decision making; proof-of-concept implementations of solutions for malware spreading and wireless data-link security; a feedback control approach for defense against DDoS; randomized protocols for managing the performance vs. security trade-off in wireless networks; automated Red Teaming tools and intrusion traceback methods for mobile ad-hoc wireless networks; a new dynamic Bayesian network based approach for detection and estimation in networked environments; and an adaptive defense architecture for fast spreading internet worms. Plans for the coming year will focus on further exploration of optimization, feedback and randomness in security; continued development of methods for security assessment, particularly in wireless settings; completion of the dynamic Bayesian framework for detection and estimation in networks; and a continued exploration of vulnerabilities and methods for military enterprise networks. These efforts will contribute new understanding and new approaches for securing and managing distributed, decentralized command and control systems.

AD0676357	MIXED INFECTION OF (EXANTHEMATIC) TYPHUS AND RELAPSING FEVER	ARMY BIOLOGICAL LABS FREDERICK MD	Karchenko, K. A.	2/1/1955	7	SMUFD-TRANS-22	ABL/MD	U	A - 01	Approved for public release; distribution is unlimited. Document partially illegible.	Not available	A menacing epidemic which broke out in 1919 and 1920 in southern Russia furnished interesting material for observations and study of infectious diseases especially since the form of the diseases differed greatly, in the majority of cases, from the general descriptions, both in their symptomatology and in the course of their recovery. The study of them, in as far as is known, has disclosed some new methods of diagnosis and medical treatment. Thus the incubation period of ex. typhus was determined, the temperature curve was studied, the Weil-Felix Wiener reaction was applied to the populace; salvansan (arsphenamine) was applied during treatment of relapsing fever; adrenalin, strichnine and caffeine were generally employed during treatment of ex. typhus and finally even the actual 'carriers' of ex. typhus were found by Prof. Barykin.
AD1094005	Summary of Strategies to Increase the Availability of ICU Ventilator Capability to COVID-19 Patients with Respiratory Failure	Anesthesia Patient Safety Foundation (APSF) Rochester United States	Feldman,Jeffery M.	3/24/2020	4	APSF	Not available	U	A - 01	Approved For Public Release;	Technical Report	Several strategies are available to increase the mechanical ventilation capability at institutions where the supply of ICU ventilators becomes inadequate to meet the needs of C19 patients. All of these strategies are underway at various stages and with different potential to address the problem. While there is existing equipment that can readily be repurposed, an important imperative is enhancing and coordinating manufacturing to produce not only new ventilation devices but also the disposables that will be essential including breathing circuits and viral filters. Maintaining an adequate supply and distribution of oxygen is also a critical need. The following is a summary of each strategy along with an assessment of what is needed to use the strategy effectively. The potential impact in terms of the number of devices that can be available, the timeframe and how they will be distributed are essential questions to address. Those questions remain to be answered and will require a coordinated task force with the responsibility and authority to take action.
ADA501653	Avian Influenza/Pandemic Influenza Program. Addendum	HENRY M JACKSON FOUNDATION FOR THE ADVANCEMENT OF MILITARY MEDICINE ROCKVILLE MD	Hapner, Ralph W.	8/1/2008	7	Not available	USAMRMC	U	A - 01	Approved for public release; distribution is unlimited.	Final addendum	The U.S. Army Medical Research Acquisition Activity (USAMRAA) entered into a cooperative agreement between the Department of Defense Global Emerging Infections Surveillance and Response System (DoD-GEIS) central hub and the Henry M. Jackson Foundation for the Advancement of Military Medicine (HJF). DoD GEIS will initiate a plan to provide funding, personnel resources, the centralized management for coordination and reporting related to the DoD efforts for improving global surveillance and efforts in support of research related to avian influenza/pandemic influenza. The results of these efforts will be coordinated with the Unified Combatant Commands and other military and civilian organizations/agencies. to acquire the following unique capabilities for the Department of Defense Global Emerging Infections Surveillance and Response System (DoD-GEIS) work in support of the congressional mandated plan for the DoD avian/pandemic influenza surveillance: (1) management and oversight of the implementation of the comprehensive DoD avian/pandemic influenza surveillance with funding from the Presidents Emergency Budget for Pandemic Influenza (2) surveillance efforts domestically and internationally, including those using the Global Emerging Infections Systems (GEIS), and how such efforts are integrated with other ongoing surveillance systems (3) the surveillance efforts domestically and internationally, including those using the Global Emerging Infections Systems (GEIS), and how such efforts are integrated with other ongoing surveillance systems (4) acceleration of medical research and development related to pandemic influenza. (5) preparation of report for submission to Deputy Assistant Secretary of Defense (Force Health Protection).
AD0676361	TO THE QUESTION OF CONSERVATION OF VIRUS OF JAPANESE ENCEPHALITIS IN NATURE,	ARMY BIOLOGICAL LABS FREDERICK MD	Chagin,K. P.,Savoiskii,I. I.	7/1/1968	8	Trans-58	Not available	U	A - 01	Approved for public release; distribution is unlimited.	Not available	The examination of rodents does not give basis to consider them reservoirs of lengthy conservation of the virus of Japanese encephalitis. Studies of the vectors showed that their organism is the center of an intensive multiplication of the virus, also that there is a transovarial transmission of the virus from one generation to the other. Therefore, the mosquito is considered the most probable reservoir of conservation of the virus of Japanese encephalitis in the inter-epidemic period. (Author)

AD0651648	SOME TOPICS RELATED TO TRANSFORMATIONS, DISTRIBUTION FUNCTIONS AND STOCHASTIC PROCESSES	STATE UNIV OF NEW YORK AT BUFFALO AMHERST	Severo, Norman C.,Schillo, Paul J.,Rodine, Robert H.	11/1/1966	92	ARL-66-0231	ARL/WP	U	A - 01	Approved for public release; distribution is unlimited.	Final rept.	This report is divided into four independent sections. Section 1 contains a theorem giving sufficient conditions for the asymptotic distribution of a standardized location-scale random variable to have the distribution of a power of the random variable, and examples showing that the conditions are not necessary. Section 2 gives illustrations of the problem of deciding whether or not one random variable is a transform of another; and, in each case in which a transformation of the one random variable into the other is assured, the set of all such transformations is investigated. Section 3 consists of an example of the notion of robustness of a test as well as a tentative general definition of the concept of robustness of a test, and a brief study of the Kolmogorov metric on the space of location-parameter distributions. Section 4 presents simple iterative solutions of special systems of differential-difference equations, in which the constant coefficient matrices are triangular and satisfy conditions sufficient to insure that the solutions involve only exponential terms or terms that are products of linear factors and exponential factors. These methods are applied to the simple stochastic epidemic and to the general stochastic epidemic.
ADA521592	Joint Center for Operational Analysis Quarterly Bulletin. Volume 9, Issue 1, December 2006	UNITED STATES JOINT FORCES COMMAND SUFFOLK VA JOINT CENTER FOR OPERATIONAL ANALYSIS	Zacharias, David A.,Smith, William	12/1/2006	52	Not available	USJFCOM-JCOA	U	A - 01	Approved for public release; distribution is unlimited.	Bulletin	Pandemic Influenza (PI)-the threat is real and the United States Government is taking major steps to ensure that we, as a nation, are prepared to handle the effects should it occur. Over the last year, analysts from the Joint Center for Operational Analysis (JCOA) have been involved in a study of the threat from the H5N1 virus and the actions being taken within governmental and non-governmental agencies to prepare for it. Specifically, the JCOA analysts have focused on the planning and preparation by the military to respond to a PI event. In the aftermath of Hurricane Katrina, many changes in coordination of national disaster planning have been made. However, large scale governmental response still remains a major concern and there are no simple or universal remedies to the issue. The articles presented in this Bulletin articulate basic issues that must be considered by both government and military planners to integrate US military forces and resources when conducting defense support to civil authorities (DSCA). Recognizing that pandemic planning is a continuous process, and that the landscape of pandemic knowledge and preparations is in a state of constant change, the principles outlined in the following articles are offered by the authors for serious consideration during the course of conducting pandemic influenza planning. Each of the authors is an expert and presents his best insight into this planning effort. Content of this volume include the following articles: Pandemic Influenza Background; Planning for Defense Support to Civil Authorities; Educating the DOD Community on Pandemic Influenza; Joint Civilian-Military Planning for Pandemic Influenza: Training and Exercises; Achieving Unity of Effort within Government During a Pandemic Influenza Crisis; Fact Sheet: Implementation of the National Strategy for Pandemic Influenza: Six-Month Status Report.
AD0697744	STUDY OF RECRUIDESCENT TYPHUS IN ISRAEL	ISRAEL INST FOR BIOLOGICAL RESEARCH NESS ZIONA	Klingberg, Marcus A.,Goldwasser, Robert A.,Klingberg, Wanda	3/1/1969	78	ARDG(E)-E-1083	E-1083,ARDG(E)	U	A - 01	Approved for public release; distribution is unlimited.	Final technical rept. Aug 1967-Mar 1969	The study was undertaken in order to determine whether persons, once infected with epidemic typhus could subsequently suffer relapses, without clinical signs which could be detected by rises in antibody titer. Such cases of recrudescent typhus could presumably serve as sources of the microorganism in the interepidemic period and therefore be responsible for the initiation of new epidemics. The study was conducted among individuals most of whom had contracted epidemic typhus in Eastern Europe and immigrated to Israel after the Second World War. In enlisting volunteers for the study particular attention was paid to the reliability of their histories and the absence of murine typhus in their present environment. 294 individuals were thus selected. Interviews and sampling of bloods were conducted at regular two-three month's intervals. Six blood samples were obtained from 262 individuals and at least three samples from the rest. All sera obtained from any individual were examined in the same test for specific antibodies to epidemic typhus by complement-fixation and microagglutination.

ADA605287	Microbial Forensics for Natural and Intentional Incidents of Infectious Disease Involving Animals	DEPARTMENT OF AGRICULTURE RIVERDALE MD ANIMAL AND PLANT HEALTH INSPECTION SERVICE	McEwen, S. A., Wilson, T. M., Ashford, D. A., Heegaard, E. D., Kuiken, T., Kournikakis, B.	1/1/2006	12	Not available	XD	U	A - 01	Approved for public release; distribution is unlimited.	Journal article	Microbial forensics is a relatively new scientific discipline dedicated to analysing microbiological evidence from a crime for attribution purposes. It builds on traditional microbiology and epidemiology but within a legal framework. Important motives for forensic investigations include interdiction of criminals, prosecution of justice, and ideally, deterrence of others from committing similar acts. Forensic capabilities in animal health should focus on building capacity for detection and reporting of increases in infectious disease morbidity and mortality among animals that might reflect a covert release of a pathogen. Suspicion should be raised when epidemiological patterns are different from those expected for the animal population and the pathogen in question. Existing capacities for the detection and reporting of epidemic and even endemic diseases should be an international priority for the prevention of catastrophic losses in animal and potentially in human life. The veterinary community needs to be more aware of the legal requirements related to forensic investigations so that veterinarians will be prepared to handle evidence properly within their own fields.
ADA486292	The Environment, the US Military, and Southern Africa	AIR WAR COLL MAXWELL AFB AL	Henk, Dan	1/1/2006	21	Not available	USAWC	U	A - 01	Approved for public release; distribution is unlimited.	Journal article	Since the 1960s, the environment has become a consistent theme in international political discourse, no longer solely the concern of small groups of activists but a mainstream issue. As environmental concerns have gone increasingly global, countries like Norway and Finland have garnered international acclaim for their strong commitment to environmental causes. The government of the United States, in contrast, has been widely and vehemently criticized for its alleged disinterest. The bad press is ironic because the United States is engaged with other countries on a wide range of environmental issues. A significant amount of that involvement occurs in regions of the world where America's policy makers are hard pressed to find any vital interest. Perhaps more surprisingly, the U.S. Department of Defense is an actor in these activities, a situation doubly ironic because America's military leaders have never engaged in serious, protracted debate to define environmentally related military roles and responsibilities. This article briefly examines U.S. engagement on environmental issues with the countries of Botswana, Namibia, and South Africa, locating military involvement in the wider context of overall U.S. environmental partnerships. It argues that all these efforts could achieve better results if they were more coherently focused and integrated. While not advocating a lead role for the military, it concludes that a more concerted engagement on environmental issues could make a contribution both to regional stability and to better military-to-military relations with regional partners.
AD0837589	NEW VIEWPOINTS IN THE EPIDEMIOLOGY, PROPHYLAXIS AND THERAPY OF THE PLAGUE	ARMY BIOLOGICAL LABS FREDERICK MD	Krampitz, H. E.	6/1/1963	21	TRANS-817	SMUFD	U	A - 01	Approved for public release; distribution is unlimited.	Not available	A review is presented of the essential aspects of the epidemiology, prevention, and therapy of plague. The great significance of resistant rodent species in the local long-term preservation of the causative agent in natural foci, is emphasized. Possibilities and ways of transmission, and the seasonal variations in the incidence of plague, are influenced by the peculiar mode of life of the base-carriers among rodents to a much greater extent as hitherto believed. The conditions for the occurrence of a malignant explosively epidemic course of the disease are discussed, pointing out the role of the human flea (Pulex irritans) in the plague process. In the case of preventive actions, the difference between immediate emergency measures and long-term prophylaxis is discussed. The first consists of disinfection and medical protection of exposed persons, the latter of preventive vaccination and rodent eradication. In preventive vaccination, vaccines from killed bacteria are again strongly propagated today. Practical procedures are individually outlined for plague therapy by sulfonamides and antibiotics, underlining the complete uselessness of penicillin.
ADA537851	Super Bugs, Resurgent and Emerging Diseases, and Pandemics: A National Security Perspective	INST FOR NATIONAL SECURITY STUDIES US AIR FORCE ACADEMY CO	Pilch, Frances T., Grosselin, Kenneth	1/1/2008	37	Not available	INSS	U	A - 01	Approved for public release; distribution is unlimited.	Not available	

ADA489558	Civil-Military Medicine: On Dangerous Ground	NAVAL POSTGRADUATE SCHOOL MONTEREY CA CENTER FOR STABILIZATION AND RECONSTRUCTION STUDIES	Clunan, Anne L.	3/1/2006	113	Not available	NPS-CSRS	U	A - 01	Approved for public release; distribution is unlimited.	Workshop summary	The interaction between armed forces and civilian organizations providing medical and health aid in insecure environments is increasing. Recent examples include a U.S.-led anti-insurgent Joint Task Force providing disaster relief after mud slides in the Philippines, the international response to the Asian tsunami, and operations in Iraq and Afghanistan. Practitioners and scholars alike have noted that the rising incidence of civil-military medical assistance increases the need for better operational coordination and cooperation among the actors in the medical and health sector of humanitarian assistance. From January 29 to February 2, 2006, representatives from the U.S. Government, United Nations, and international nongovernmental organizations (NGOs) participated in an educational game at the Center for Stabilization and Reconstruction Studies (CSRS) at the Naval Postgraduate School in Monterey, California. The game focused on the operational challenges associated with providing medical and health assistance as part of disaster relief and development assistance in regions of conflict or instability. Three scenarios were used, and participants took the role of representing their respective medical communities: military, civilian government, international organization, and international nongovernmental organization. The first scenario focused on disaster relief in a post-conflict setting, the second posed a situation of a natural disaster occurring during ongoing combat operations, and the third concerned an epidemic of avian influenza among a mixed population of civilians and insurgent forces.
AD1057616	Finding Near-Optimal Groups of Epidemic Spreaders in a Complex Network	Electrical Engineering and Computer Science Department, United States Military Academy West Point United States	Moore, Geoffrey, Shakkarian, Paulo, Macdonald, Brian, Howard, Nicholas	4/2/2014	10	Not available	Not available	U	A - 01	Approved for public release; distribution is unlimited.	Journal Article - Open Access	In this paper, we present algorithms to find near-optimal sets of epidemic spreaders in complex networks. We extend the notion of local-centrality, a centrality measure previously shown to correspond with a node's ability to spread an epidemic, to sets of nodes by introducing combinatorial local centrality. Though we prove that finding a set of nodes that maximizes this new measure is NP-hard, good approximations are available. We show that a strictly greedy approach obtains the best approximation ratio unless $P = NP$ and then formulate a modified version of this approach that leverages qualities of the network to achieve a faster runtime while maintaining this theoretical guarantee. We perform an experimental evaluation on samples from several different network structures which demonstrate that our algorithm maximizes combinatorial local centrality and consistently chooses the most effective set of nodes to spread infection under the SIR model, relative to selecting the top nodes using many common centrality measures. We also demonstrate that the optimized algorithm we develop scales effectively.
ADA553712	Effectiveness of Three Decontamination Treatments Against Influenza Virus Applied to Filtering Facepiece Respirators	NEBRASKA UNIV MEDICAL CENTER OMAHA	Lore, Michael B., Brown, TeAnne L., Hinrichs, Steven H., Heimbuch, Brian K., Wander, Joseph D.	10/1/2010	12	AFRL-RX-TY-TP-2010-0080	TP-2010-0080, AFRL-RX-TY	U	A - 01	Approved for public release; distribution is unlimited.	Journal article	Single-use filtering facepiece respirators (FFRs) are effective precautions against airborne pathogenic microorganisms; however, during pandemics the demand for FFRs may far exceed availability. Reuse of FFRs following decontamination has been suggested but few studies to date have addressed the feasibility. Concerns regarding biocidal efficacy, filter performance post decontamination and cost of decontamination may affect the adoption of reuse measures. This study examined the effectiveness of three energetic decontamination methods (ultraviolet germicidal irradiation, microwave-generated steam and moist heat) on two NIOSH certified N95 FFRs contaminated with H5N1. An aerosol settling chamber was used to apply virus-laden droplets to FFRs in a method designed to simulate respiratory droplet deposition of viruses onto surfaces. Results differed based on the method used for detection of the virus. When the FFRs were examined post decontamination by virus culture, all three decontamination methods worked equally well and reduced virus load by $> 4 \log$ TCID50. Analysis of the treated FFRs using a quantitative molecular amplification assay (qRT-PCR) indicated that the UVGI decontamination method provided lower levels of detectable genome copies than the other two methods. Filter performance was evaluated before and after decontamination using a 1% NaCl aerosol. All FFRs displayed penetration below 5% at the 300- nm particle size. No reduction in filtration performance was found in FFRs that had been exposed to virus and subsequently decontaminated. These findings indicate that, when properly implemented, decontamination methods are effective for FFRs and do not affect their filtering function; however, other factors may affect the decision to re-use FFRs.

ADA226463	Hemorrhagic Fever with Renal Syndrome (Korean Hemorrhagic Fever)	KOREA UNIV SEOUL COLL OF MEDICINE	Wang, Lee H.	6/29/1990	50	Not available	USAMRDC	U	A - 01	Approved for public release; distribution is unlimited.	Annual summary rept. 10 Feb 1989-9 Feb 1990	World-wide, about 200,00 people are hospitalized with Hemorrhagic fever with renal syndrome (HFRS) (3-10%fatality) each year. The etiologic agents of HFRS are Hantann, Seoul and Puumala viruses of the genus Hantavirus, family Bunyaviridae. A severe form of HFRS, caused by Hantann virus, occurs in Asia and eastern parts of Europe, a moderate form, caused by Seoul virus, occurs in Asia, and a mild form, caused by Puumala virus, occurs in Europe. The reservoirs of hantaviruses are rodents and other small mammals. Global surveys of the distribution of hantaviruses and surveillance of HFRS are important for prevention of this highly fatal disease. A simple and rapid serologic diagnostic test for HFRS in the areas where hantaviruses exist is urgently needed. It is also important to investigate antigenic differences of strains of Hantavirus isolated from rodents caught in on-endemic areas of the world because HFRS patients have never been documented in many areas despite the finding of positive rodents there. The methods of diagnosis of HFRS, isolation of hantaviruses from man and rodents are described previously. A new high density silicone particles were used for a rapid serologic diagnostic test for HFRS. There were 430 cases of HFRS in Korea in 1989 and large outbreaks of scrub typhus, spotted fever and leptospirosis occurred before and during the epidemic season of HFRS. Antibody against hantaviruses was measured within forty minutes by a passive agglutination procedure using high density composite particles coated with purified Hantann virus antigen.
AD0675159	EPIDEMIC PROCESS	ARMY BIOLOGICAL LABS FREDERICK MD	Ter-Karapetyan, A. Z.	2/1/1968	7	SMUFD-TRANS-2206	ABL/MD	U	A - 01	Approved for public release; distribution is unlimited.	Not available	Not available
ADA048172	An Epidemiologic and Immunologic Study of Boutonneuse Fever in Israel.	ISRAEL INST FOR BIOLOGICAL RESEARCH NESS ZIONA	Klingberg, Marcus A., Goldwasser, Robert A., Swartz, Tiberio A., Klingberg, Wanda, Steiman, Yonel	12/1/1976	68	Not available	Not available	U	A - 01	Approved for public release; distribution is unlimited.	Final technical rept. Mar 75-Dec 76,	Sera from suspected cases of rickettsioses were tested by fluorescent antibody and complement fixation. The former method revealed more cases of past and present infection than the latter. Follow-up bleedings from cases of murine typhus and spotted fever indicated that IgM antibodies against rickettsiae may persist at low levels for six months or longer. Human sera were found to contain a non-antibody inhibitor of reverse passive hemagglutination. However, immune sera could be titrated by measuring the difference in agglutinating titer of antigen diluted in constant concentrations of the immune serum and of normal serum. Reverse passive hemagglutination can be used to differentiate between epidemic and murine typhus rickettsiae. A strain of spotted fever was isolated from the blood of a child just before death with disseminated intravascular coagulation. The strain was found to be antigenically similar to five of the six previously isolated in Israel. (Author)
AD0609960	ON A PARTIAL DIFFERENTIAL EQUATION OF EPIDEMIC THEORY. 2. THE MODEL WITH IMMIGRATION	MICHIGAN STATE UNIV EAST LANSING	Gani, J.	1/5/1965	15	RM-124-JG-4	ONR	U	A - 01	Approved for public release; distribution is unlimited. Document partially illegible.	Not available	A generalization of the basic model which arises in the stochastic theory of epidemics is that for which at time there are in circulation $r$ uninfected susceptibles and $s$ infectives, $m + n + a - r - s$ removals of infectives having occurred since time $t = 0$ . Here the integer $m$ represents the number of susceptible immigrants who have entered the population since time $t = 0$ , when the initial population consisted of $n$ susceptibles and $a$ infectives only. It will be found useful to keep track of the number of immigrants $m$ in the population as well.
AD0409550	LIFESPAN MEASUREMENTS IN THE MALE RAT	NORTHWESTERN UNIV EVANSTON IL TECHNOLOGICAL INST	Jones, D. C., Kimeldorf, D. J.	5/9/1963	37	USNRDL-TR-646	USNRDL	U	A - 01	Approved for public release; distribution is unlimited.	Not available	Measures of lifespan were determined for a population of male Sprague-Dawley derived male rats, comprised of 747 animals from eighteen experiments. Variations in $\ln$ measures among experiments were found even under stable environmental conditions in a single strain of rats with no known epidemic infections. Measures of central tendency and dispersion appeared to be uncorrelated with each other, and normally distributed among experiments. Within most experiments there was a definite tendency for an excess (above the normal distribution) of shorter lifespans, and in seven experiments this resulted in significant deviations from the normal distribution. On a composite basis, the frequency distribution of lifespans, and the associated survival curve, were not those of a normally distributed variate. Consideration of life expectancies at various ages and age specific death rates revealed that the force of mortality declines at advanced ages. These findings indicate the need for caution in selecting statistical procedures for analysis of lifespan information.

ADA508320	DoD Global Emerging Infections System -- Partnering in the Fight Against Emerging Infections, Fiscal Year 2004	ARMED FORCES HEALTH SURVEILLANCE CENTER SILVER SPRING MD	Not available	3/1/2005	61	Not available	AFHSC	U	A - 01	Approved for public release; distribution is unlimited.	Annual rept.	The FY04 DoD-GEIS Consolidated Annual Report presents a description of GEIS-related activities during this, its eighth year of funded operations. Global surveillance for emerging infectious disease threats, timely recognition of and response to outbreaks, together with the key laboratory and communications infrastructure supporting public health are cornerstones of national and global security. Events of 2001 (September 11th, anthrax incidents) continue to resonate; strengthening public health systems to address naturally occurring threats and preparations for bioterrorism are underway in many nations, including the US, and in DoD. The importance of global partnerships in prevention is evident in the world's success in controlling the SARS outbreak. Originating in China in 2002, it spread globally with 8,098 probable cases directly affecting 28 countries before it came under control. The global economic impact was immense. Avian influenza currently threatens large areas of Asia and national leaders recognize that it may trigger the next influenza pandemic. The vision of DoD-GEIS in the 1998 strategic plan was To Enhance Force Protection and Preventive Defense;" communication and coordination have been seen as key to this vision
AD0661263	MICROBIOLOGICAL, EPIDEMIOLOGICAL AND ECOLOGICAL FACTORS IN A STREPTOCOCCAL PHARYNGITIS OUTBREAK AT A NATO MILITARY TRAINING CENTER	DEPARTMENT OF THE AIR FORCE APO NEW YORK 09224 TUSLOG DETACHMENT 36 (USAFE)	Riordon, John P.,Johnson, Albert L.	10/23/1967	22	DET-36-TR-67-7	DET-36	U	A - 01	Approved for public release; distribution is unlimited.	Professional rept.	An explosive outbreak of pharyngitis involving 1954 trainees at the Turkish Army Engineering Training Center, near Izmir, Turkey, between 8 and 14 May 1967, was determined to have been caused by a massive introduction of bacitracin-sensitive, beta-hemolytic streptococci into the three training battalions comprising the center, probably by means of a contaminated food item consumed on or two days before the onset of symptoms. The course of the epidemic may have been influenced by the change from spring to summer weather conditions which occurred between 5 and 9 May 1967, and by the prompt and efficacious chemotherapy administered by the Turkish medical staff.
AD1010398	Targeted next generation sequencing for the detection of ciprofloxacin resistance markers using molecular inversion probes	USAMRIID Frederick United States	Stefan, Christopher P.,Koehler,Jeffrey W.,Minogue,Timothy D.	7/6/2016	22	TR-16-130	Not available	U	A - 01	Approved for public release; distribution is unlimited.	Journal Article	Antibiotic resistance (AR) is an epidemic of increasing magnitude requiring rapid identification and profiling for appropriate and timely therapeutic measures and containment strategies. In this context, ciprofloxacin is part of the first-line of countermeasures against numerous high consequence bacteria. Significant resistance can occur via single nucleotide polymorphisms (SNP) and deletions within ciprofloxacin targeted genes. Ideally, use of ciprofloxacin would be prefaced with AR determination to avoid overuse or misuse of the antibiotic. Here, we describe the development and evaluation of a panel of 44 single-stranded molecular inversion probes (MIPs) coupled to next-generation sequencing (NGS)for the detection of genetic variants known to confer ciprofloxacin resistance in Bacillus anthracis, Yersinia pestis, and Francisella tularensis. Sequencing results demonstrate MIPs capture and amplify targeted regions of interest at significant levels of coverage. Depending on the genetic variant, limits of detection (LOD) for high-throughput pooled sequencing ranged from approximately 300-1800 input genome copies. LODs increased 10-fold in the presence of contaminating human genome DNA. In addition, we show that MIPs can be used as an enrichment step with high resolution melt (HRM) real-time PCR which is a sensitive assay with a rapid time-to-answer. Overall, this technology is a multiplexable upfront enrichment applicable with multiple downstream molecular assays for the detection of targeted genetic regions.
ADA091097	The Discrete Asymptotic Behaviour of a Simple Batch Epidemic Process,	FLORIDA STATE UNIV TALLAHASSEE DEPT OF STATISTICS	Billard,L.,Lacayo,H.,Lan gberg,N. A.	7/14/1978	9	AFOSR-TR-80-0994	TR-80-0994	U	A - 01	Approved for public release; distribution is unlimited.	Not available	Not available
ADA415204	Implementing an Information Retrieval and Visualization Framework for Heterogeneous Data Types	AIR FORCE INST OF TECH WRIGHT-PATTERSON AFB OH SCHOOL OF ENGINEERING AND MANAGEMENT	Kowalchuk, Andrew J.	3/1/2003	83	AFIT/GCS/ENG/03/09	AFIT	U	A - 01	Approved for public release; distribution is unlimited. Availability: Hard copy only.	Master's thesis	In today's information focused world, there is no lack of entities focused on information gathering. However, there is still a widespread epidemic of information starvation in the Department of Defense (DoD). This starvation is attributed to the lack of interoperability between information gatherers and information consumers. To alleviate this problem, the DoD has put forth a vision of a Joint Battlespace Infosphere (JBI). This research proposes a framework for sharing and finding resources in a JBI. The framework uses an extensible metadata specification, agent technology, and the Control of Agent Based Systems (CoABS). It provides several tools for publication and subscription of resources, including a visual query wizard and a visualization of the results. This framework and tools provide visual query capability for the heterogeneous resources within the JBI.



ADA583262	Dynamic Trust Management for Delay Tolerant Networks and Its Application to Secure Routing	VIRGINIA POLYTECHNIC INST AND STATE UNIV BLACKSBURG DEPT OF COMPUTER SCIENCE	Chen, Ing-Ray,Bao, Fenyee,Chang, MoonJeong,Cho, Jin-Hee	9/28/2012	19	ARO-61420-NS-II-3	61420-NS-II-3,ARO	U	A - 01	Approved for public release; distribution is unlimited.	Final rept. 8 Dec 2011 - 7 Sep 2012	Delay tolerant networks (DTNs) are characterized by high end-to-end latency, frequent disconnection, and opportunistic communication over unreliable wireless links. In this paper, we design and validate a dynamic trust management protocol for secure routing optimization in DTN environments in the presence of well-behaved, selfish and malicious nodes. We develop a novel model-based methodology based on Stochastic Petri Net (SPN) techniques for the analysis of our trust protocol and validate it via extensive simulation. Moreover, we address dynamic trust management, i.e., determining and applying the best operational settings at runtime in response to dynamically changing network conditions to minimize trust bias and to maximize the routing application performance. We perform a comparative analysis of our proposed routing protocol against existing trust-based (SReD) and non-trust based (PROPHET and epidemic) protocols. The results demonstrate that our protocol is able to deal with selfish behaviors and is resilient against trust-related attacks. Furthermore, our trust-based routing protocol can effectively trade off message overhead and message delay for a significant gain in delivery ratio. Our trust-based routing protocol operating under identified best settings outperforms SReD and PROPHET, and approaches the ideal performance of epidemic routing in delivery ratio and message delay without incurring high message or protocol maintenance overhead.
ADA487632	Navigating the Information Revolution: Choices for Laggard Countries	RAND GRADUATE SCHOOL SANTA MONICA CA	Gatune, Julius	1/1/2007	183	Not available	XD	U	A - 01	Approved for public release; distribution is unlimited.	Doctoral thesis	The rapid diffusion of information and communication technologies (ICTs) during the last two decades has had a profound impact on all spheres of human endeavors, changes that are collectively referred to as the Information Revolution (IR). But the revolution has been uneven, with some countries being far ahead and others far behind in IR, resulting in the so called digital divide. Laggard countries need means to move ahead if they are to access the benefits that IR offers and not suffer the consequences of being left out. This study identifies stages of IR, classifies countries according to their various stages, and using country-level data, identifies the drivers that are important across stages of IR. This is done at two levels: (1) drivers of diffusion of IR artifacts (short term dynamics) and drivers of the broader IR concept (long term dynamics). This study finds that at lower stages, the factors that drive the information revolution tend to be those that have to do with the development of markets. In the intermediate stages, demand factors are the key drivers. At higher stages, supply factors are the key drivers of IR. Current use level or epidemic effects are the key drivers of the short term diffusion of ICT artifacts. The overriding drivers at all stages seem to be levels of human capital, quality of governance and the extent of urbanization. This analysis unifies long term adoption drivers with short term diffusion drivers to develop a road map that points the way for laggard countries as they ride the information revolution.
AD0753535	User's and Operator's Manual for the Local and Aggregate Total Emergency Health Care System Models. Revised Edition.	RESEARCH TRIANGLE INST DURHAM N C ENGINEERING DIV	Pyecha,John N.,Lyday,Russell O. , Jr.,Botkin,Gerald M.	12/1/1972	277	RTI-43U-555-3	Not available	U	A - 01	Approved for public release; distribution is unlimited.	Final rept. Sep 71-Sep 72,	The purpose of this volume is to provide the detailed instructions required to use the CDC 3600 FORTRAN computer programs developed under this study. Two models were designed to assist in analyzing postattack health consequences. The Aggregate Model can be applied in the study of health-related problems at the area, state, regional, or national levels. The Local Model is designed for single locality studies. The Local and Aggregate Models are of similar design in that each consists of three submodels or programs that provide essentially the same type of output for their respective geographic areas: (a) an Immediate Effects Submodel that covers the period (days 0 through 30) during which the medical effort is directed toward improving the prognosis of the immediate weapon effects injuries, (b) a Communicable Disease Submodel that covers days 31 through 365 and is directed toward prevention and cure of disease epidemics, and (c) a Physical Demands Potential Submodel that relates the degree of physical recovery of injured and/or diseases survivors to their ability to effectively meet the demands of various job or occupational categories over days 31 through 365 postattack. Key inputs to both the Local and Aggregate Models are the expected medical caseload and postattack availability of medical resources with which to treat these casualties. (Author)
ADA348894	JPRS Report, Epidemiology.	JOINT PUBLICATIONS RESEARCH SERVICE ARLINGTON VA	Not available	4/18/1989	41	JPRS-TEP-89-007	XD	U	A - 01	Approved for public release; distribution is unlimited.	Not available	Partial Contents: Leprosy Treatment, HIV, Meningitis, Epidemic Diseases, Hepatitis B, Rabies, Death, Clinical Medicine, Infectious Diseases, Blood Transfusion, Children, Medical Research.

AD0840536	LABORATORY DIAGNOSIS OF SMALLPOX AT THE INSTITUTE OF MARINE MEDICINE IN GDANSK	ARMY BIOLOGICAL LABS FREDERICK MD	Blawat, F.	5/9/1966	11	TRANS-2196	ABL/MD	U	A - 01	Approved for public release; distribution is unlimited.	Not available	This report describes the methods used by a virology laboratory in a laboratory diagnosis of smallpox during the epidemic which broke out in Poland during the third quarter of 1963.
ADA528326	Worldwide Emerging Environmental Issues Affecting the U.S. Military. May 2007 Report	FEDERATION OF UN ASSOCIATIONS WASHINGTON DC MILLENNIUM PROJECT	Not available	5/1/2007		Not available	Not available	U	A - 01	Approved for public release; distribution is unlimited.	Not available	The Economic and Environmental Forum of the Organization for Security and Co-operation in Europe (OSCE), held in May 2007 in Prague focused on constructive actions that would help its 56 participating States and 11 Partners tackle environmental security threats and promote stability. OSCE Chairman-in-Office, Spanish Foreign Minister Miguel Angel Moratinos said: Environmental co-operation can be an effective catalyst for reducing tensions
ADA471695	North American Plan for Avian and Pandemic Influenza	DEPARTMENT OF STATE WASHINGTON DC	Not available	8/1/2007	54	Not available	DOS	U	A - 01	Approved for public release; distribution is unlimited.	Plan summary	Canada, Mexico and the United States face a growing threat posed by the spread of avian influenza and the potential emergence of a human influenza pandemic. The highly pathogenic (HPAI) H5N1 avian influenza virus, which re-emerged in Asia in late 2003, has already spread to Europe, the Middle East, and Africa. Although the virus has not yet reached North America, Canada, Mexico, and the United States must be prepared for the day when it or some other highly contagious virus does. At the March 2006 Security and Prosperity Partnership of North America (SPP) summit in Cancun, the leaders of Canada, Mexico, and the United States committed to developing a comprehensive, coordinated and science-based North American approach to prepare for and manage avian and pandemic influenza. The North American Plan for Avian and Pandemic influenza outlines how Canada, Mexico, and the United States intend to work together to combat an outbreak of avian influenza or an influenza pandemic in North America. The Plan complements national emergency management plans and builds upon the core principles of the International Partnership on Avian and Pandemic Influenza, the standards and guidelines of the World Organization for Animal Health (OIE), the World Health Organization (WHO) -- including the revised International Health Regulations, as well as the rules and provisions of the World Trade Organization (WTO) and the North American Free Trade Agreement. This Plan outlines a collaborative North American approach that recognizes controlling the spread of avian influenza or a novel strain of human influenza, with minimal economic disruption, is in the best interest of all three countries. Coordination among Canada, Mexico, and the United States will be critical in the event of an avian influenza outbreak or pandemic. The Plan, therefore, describes the organizational emergency management frameworks in each of the three countries and how they intend to coordinate their activities.
ADA623976	If We Don't, Who Will? The Employment of the United States Army to Combat Potential Pandemic Outbreaks in West Africa	ARMY COMMAND AND GENERAL STAFF COLLEGE FORT LEAVENWORTH KS	Smith, Sylvan A.	6/12/2015	70	Not available	USACGSC	U	A - 01	Approved for public release; distribution is unlimited.	Master's thesis	A glance at a newspaper or news program between May through June of 2014 tells the story. The Ebola virus developed into the foremost major crisis in West Africa, more specifically Liberia. The Liberian government became increasingly unable to manage the situation and the pandemic outbreak threatened to de-stabilize civil society. But what does this have to do with the United States? Why should Americans worry about a virus affecting people 4,600 miles away? Beyond providing medical aid and money, why would the U.S. deploy the Army into this crisis area? What would such a military operation look like? These questions will be explored in order to support or refute use of the Army in response to potential pandemic outbreaks in West Africa.

ADA441683	A Micro-Threat With Macro-Impact: The Bio-Threat and the Need for a National Bio-Defense Security Strategy	NATIONAL WAR COLL WASHINGTON DC	Kadlec, Robert	4/23/2001	48	Not available	NDU/NWC	U	A - 01	Approved for public release; distribution is unlimited.	Not available	The United States enters the 21st Century facing many challenges and threats. Several commissions, such as the US Commission on National Security/21st Century, cite a myriad of threats including ballistic missiles, cyber-attacks against our infrastructure, attacks using conventional weapons and attacks using weapons of mass destruction (WMD). With the exception of thermonuclear war, the threat posing the greatest risk to the U.S. is a biological attack on the homeland. It is the only other one that can threaten our national survival because of its potential catastrophic results. The threat of a bio-attack is very real. The capability of nation states and terrorists to acquire, cultivate, and disseminate pathogens is widespread. Past events and present knowledge indicate that nations and terrorists possess the intent to use such weapons. The decline of the U.S.'s public health system leaves it unable to respond to a large natural epidemic, much less an intentional one, and further suggests a vulnerability to a bio-attack greater than anytime in recent history. Both the Administration and Congress have taken well-intentioned piecemeal actions to address this threat, but none reflect a comprehensive strategy. The contradictory laws and directives result in redundancies, inefficiencies, a waste of money, and confusion among federal, state, and local authorities responsible for responding to a bio-attack. The lack of a comprehensive national security strategy countering a bio-attack on the homeland places U.S. citizens, the very core of our national vital interests, and the nation itself at great peril. This paper assesses the credibility of the bio-threat to the U.S. homeland, reviews and assesses past Government actions to address the threat, and offers suggestions to establish a comprehensive and coherent national strategy to counter such a threat.
ADA555573	The Pandemic Influenza Policy Model: A Planning Tool for Military Public Health Officials	JOHNS HOPKINS UNIV LAUREL MD APPLIED PHYSICS LAB	Feighner, Brian H.,Chretien, Jean-Paul,Murphy, Sean P.,Skora, Joseph F.,Coberly, Jacqueline S.,Dietz, Jerrold E.,Chaffee, Jennifer L.,Sikes, Marvin L.,Mabee, Mimms J.,Russell, Bruce P.	6/1/2009	10	Not available	DOD	U	A - 01	Approved for public release; distribution is unlimited.	Journal article	The Pandemic Influenza Policy Model (PIPM) is a collaborative computer modeling effort between the U.S. Department of Defense (DoD) and the Johns Hopkins University Applied Physics Laboratory. Many helpful computer simulations exist for examining the propagation of pandemic influenza in civilian populations. We believe the mission oriented nature and structured social composition of military installations may result in pandemic influenza intervention strategies that differ from those recommended for civilian populations. Intervention strategies may differ between military bases because of differences in mission, location, or composition of the population at risk. The PIPM is a web-accessible user-configurable, installation-specific disease model allowing military planners to evaluate various intervention strategies. Innovations in the PIPM include expanding on the mathematics of prior stochastic models, using military-specific social network epidemiology, utilization of DoD personnel databases to more accurately characterize the population at risk, and the incorporation of possible interventions, e.g., pneumococcal vaccine, not examined in previous models.
ADA264657	Development of Safe, Effective Vaccines for Dengue Virus Disease by Recombinant Baculovirus	NATIONAL INSTITUTES OF HEALTH BETHESDA MD	Lai, Ching J.	8/25/1992	29	Not available	USAMRDC	U	A - 01	Approved for public release; distribution is unlimited.	Annual rept. 1 Mar 91-28 Feb 92,	Outbreaks and major epidemics of dengue continue to afflict human populations, especially in the tropical and subtropical regions of the world. Dengue viruses, transmitted predominantly by mosquito species of the Aedes genus, include four serotypes that are distinguishable by plaque reduction-- neutralization with type specific monoclonal antibodies. Dengue is characterized by fever, rash, severe headache, and joint pain. Its mortality rate is low. However, over the past few decades, a more severe form of dengue, characterized by hemorrhage and shock has been observed with increasing frequency in children and young adults. This severe form of dengue has a high mortality rate. Despite years of intensive research, an effective vaccine is still not available for prevention of dengue infection. For these reasons, research on dengue viruses and development of safe and effective vaccines have been given a high priority by the World Health Organization.... Dengue virus, Genetic engineering, Recombinant DNA, Vaccines, Biotechnology, Diseases, ID, RA I.

ADA412148	Melanoma: A Decision Analysis to Estimate the Effectiveness and Cost-Effectiveness of Screening and an Analysis of the Relevant Epidemiology of the Disease	RAND CORP SANTA MONICA CA	Beddingfield, Frederick C., III	1/1/2002	128	RAND/RGSD-167	XD	U	A - 01	Approved for public release; distribution is unlimited.	Doctoral thesis	Much has been written about the epidemic of melanoma in the United States and elsewhere in the world. Often debate has centered on the causes and consequences of recent epidemiological trends and even whether there truly has been an epidemic. Skin screening examinations by visual inspection are thought by many to be a reasonably simple, minimally invasive means by which melanoma morbidity and mortality could be reduced. However, some actually see increased melanoma screening as one of the causes of an apparent, though not real epidemic. Surprisingly few studies on effectiveness or cost-effectiveness of melanoma screening are available to guide policy makers on decisions regarding screening and thus there is little consensus among various groups regarding recommendations for such screening. This dissertation's main goal was to estimate the effectiveness and cost-effectiveness of melanoma screening from the best available data. The effectiveness and cost-effectiveness of melanoma screening were estimated using a decision analysis model. The reference case model represented outpatient screening for melanoma Using visual inspection of the skin by dermatologists in 1998 in a self-selected, higher-than-average-risk population by incorporating data from the American Academy of Dermatology (AAD) screenings and the National Cancer Institute's Surveillance and Epidemiology End Results (SEER) with estimates from the literature. The AAD screening results were compared to the SEER usual care" from the societal perspective and the results were reported as cost per year-of-life-saved (YLS). Other hypothetical cases targeting populations by age and gender were analyzed. A sensitivity analysis was performed to examine the influence of varying key estimates on the cost-effectiveness."
ADA511661	The Next Wave of HIV/AIDS: Nigeria, Ethiopia, Russia, India, and China	NATIONAL INTELLIGENCE COUNCIL WASHINGTON DC	Not available	9/1/2002	32	ICA-2002-04D	NIC/WDC	U	A - 01	Approved for public release; distribution is unlimited.	Not available	This Intelligence Community Assessment (ICA) highlights the rising HIV/AIDS problem through 2010 in five countries of strategic importance to the United States that have large populations at risk for HIV infection: Nigeria, Ethiopia, Russia, India, and China. The paper does not attempt to make aggregate projections about global trends. The five countries were selected because they are among the world's most populous countries, together representing over 40 percent of the world population; in the early-to-mid-stages of an HIV/AIDS epidemic; and led by governments that have not yet given the issue the sustained high priority that has been key to stemming the tide of the disease in other countries. This paper builds on the December 1999 unclassified National Intelligence Estimate, The Global Infectious Disease Threat and Its Implications for the United States
AD0630729	SOME CONTRIBUTIONS TO THE PROBLEM OF THE EPIDEMIC PROCESS. 2. BASIC LAWS GOVERNING THE TRANSMISSION OF INFECTIOUS DISEASES BY PARASITIC ARTHROPODA. INSECTS AND TICKS. SUMMARY ONLY	ARMY BIOLOGICAL LABS FREDERICK MD	Dyadichey, N. R.	1/1/1957	2	TRANS-102	ABL/MD	U	A - 01	Approved for public release; distribution is unlimited.	Not available	Not available
ADA531166	Malware Pandemics	SRI INTERNATIONAL MENLO PARK CA COMPUTER SCIENCE LAB	Porras, Phillip,Saidi, Hassen,Yegneswaran, Vinod	9/1/2010	36	P18944FTR	ONR	U	A - 01	Approved for public release; distribution is unlimited.	Final technical rept. 1 Apr 2009-31 Mar 2010	This final technical report summarizes the research activities and technical results produced by SRI International for the ONR research project. The key objective of this project is to develop a principled approach toward understanding the structural and dynamic properties of large-scale malware pandemics in the Internet. In particular, there is an emphasis on studying the structural properties (network address translation (NATs), proxies, dynamic host configuration protocol DHCP effects) and dynamic properties (pandemic evolution), and how these properties evolve during the different phases of a malware life cycle. We conducted an in-depth reverse engineering of the peer-to-peer (P2P) protocol of Conficker and published this in the form of a web report [28]. Our efforts toward developing new techniques for tracking the structural properties of the Conficker population (such as percent of NAT and DHCP hosts) and building epidemic models for predicting the long-term influence of worms such as Conficker are detailed in this report.

ADA577083	Connectivity and Resilience in Large-Scale Mobile Wireless Networks	NORTHEASTERN UNIV BOSTON MA	Yeh, Edmund M.	9/12/2012	9	AFRL-OSR-VA-TR-2012-1075	TR-2012-1075,AFRL-OSR-VA	U	A - 01	Approved for public release; distribution is unlimited.	Final rept. 1 Mar 2009-30 Nov 2011	This project has supported the analysis and design of large-scale mobile wireless networks for Air Force applications, including information dissemination algorithms for fixed wireless and mobile wireless networks, energy management algorithms for sensor networks, resilience of wireless networks to virus epidemics, network coding capacity of wireless networks, coding for mobile wireless networks, polar coding for multiple-access networks, and the capacity of wireless relay networks. The project has supported the education and research activities of a postdoctoral fellow and a graduate student.
ADA500418	The 2009 H1N1 Swine Flu" Outbreak: An Overview"	LIBRARY OF CONGRESS WASHINGTON DC CONGRESSIONAL RESEARCH SERVICE	Lister, Sarah A.,Redhead, C. S.	4/30/2009	16	CRS-R40554	CRS/DC	U	A - 01	Approved for public release; distribution is unlimited.	Congressional Report	
ADA346104	Worldwide Report, Epidemiology, No. 327.	JOINT PUBLICATIONS RESEARCH SERVICE ARLINGTON VA	Not available	8/10/1983	71	JPRS-84086	XD	U	A - 01	Approved for public release; distribution is unlimited.	Not available	Partial Contents: Epidemiology, Human Diseases, Health, Malaria, AIDS, Homosexual Male, Medical Administration, Rabies, Tuberculosis, Encephalitis Statistics, Gastroenteritie, Mystery Diseases, Children, Epidemics, Chickenpox, Measles, Eye Diseases, Dengue Fever, Infection, Meningitis, Death, Cancer, Children's Hospitals, Medical Supplies, Medical Equipment, Anthrax, Pneumonia Cases, Food Shortages, Herpes, Youth, Gonorrhea, Typhoid, Diarrhae, Cholera, Leprosy Treatment.
ADA620781	Connecting the Dots: How U.S. Global Health Programs Can Improve International Health Regulation Compliance	NAVAL POSTGRADUATE SCHOOL MONTEREY CA DEPT OF NATIONAL SECURITY AFFAIRS	Wesley, Brad A.	12/1/2014	127	Not available	NPS	U	A - 01	Approved for public release; distribution is unlimited.	Master's thesis	With a 2012 deadline, the majority of the World Health Organization (WHO) member states failed to achieve the legal obligations mandated under the International Health Regulations (IHR) of 2005. This lack of compliance coincides with the increased recognition of the threats posed by pandemics and infectious diseases. As the largest contributor of foreign global health assistance, the United States can serve an instrumental role in supporting global IHR compliance. This thesis analyzes, by U.S. government agency, which current global health programs and efforts align to the core capacities WHO member states are required to develop per the IHR. The agencies analyzed are the United States Agency for International Development, the U.S. Department of Defense, and the Centers for Disease Control and Prevention. As indicated in this thesis, all three agencies have cross-cutting efforts to assist WHO member states; however, four key programs align greatly to specific IHR core capacities. Moving forward, decision makers can utilize these key U.S. global health programs to address WHO member states core capacity deficiencies in surveillance, response, laboratory, and human resources. Finally, recommendations are given to address IHR monitoring and reporting, as well as gaps in critical core capacities and U.S. global health programs.
AD1042736	Sub-Saharan African Military and Development Activities	African Institute for Security Ouakam Senegal	Diop, Birame	12/1/2011	12	Not available	Not available	U	A - 01	Approved for public release; distribution is unlimited.	Journal Article	For the last two decades, African states have been facing more internal threats than external ones. In fact, the African continent is now dealing with ethnic-based conflicts, poverty, health issues, hunger, and, most recently, radicalization and violent extremism. In summary, security challenges throughout Africa have evolved in nature and are a lot more complex. In the health domain, for example, Africa has been decimated by multiple epidemics and pandemics, notably tuberculosis, malaria, and HIV/AIDS. For HIV/AIDS, sub-Saharan Africa alone is home to more than 22.5 million people infected with the disease, which is two-thirds of the total for the entire planet. Not only is the rate of infection high, but the quality of treatment has been woefully low. In 2009, 1.3 million Africans died from AIDS, while another 1.8 million became infected. Even though the rate of infection has been steadily declining in recent years, the situation remains dire, and its impact is felt throughout all sectors of African life, from education and agriculture to the general economic well-being of the African states.

ADM001912	Distributed Medical Intelligence (DMI): Disaster and Preparedness - From Hurricanes to Infectious Disease. Held in New Orleans, Louisiana on 19-21 April 2006 (DVD)	DISTRIBUTED MEDICAL INTELLIGENCE LLC WASHINGTON DC	Maiolo, Lori	6/1/2006	1	Not available	USAMRMC	U	A - 01	Approved for public release; distribution is unlimited.	Final proceedings rept. 19 Apr-30 Jun 2006	ELECTRONIC FILE CHARACTERISTICS: 800 files; Adobe Acrobat (.PDF), Windows Media Video (.WMV), MIME HTML (.MHT) and HTML. PHYSICAL DESCRIPTION: 1 DVD-ROM; 4 3/4 in.; 2.09 MB. ABSTRACT: National catastrophic events have heightened the awareness of the need to be prepared to rapidly respond to mass casualty situations. A critical element of disaster response is surge planning and the provision of medical triage and treatment, public health, and emotional and psychological support services. Distributed medical intelligence principles and technologies offer the potential to improve community readiness and the situational awareness necessary for critical resource sharing and effective incident command and control. Disastrous events precipitate even more problematic epidemics. Infectious diseases remain the single largest agent of mortality across the world. Today we live with the specter that Bird Flu could take as many as 50 million lives, 500, 000 in the United States. This type of catastrophe will change many social assumptions, and undoubtedly put even more stain on emergency communication capabilities. This conference will seek and identify practical solutions to maintaining continuity of operation in crisis.
ADA475951	Cold-Chain Logistics: A Study of the Department of the Defense OCONUS Pre-Pandemic Influenza Vaccine Distribution Network	NAVAL POSTGRADUATE SCHOOL MONTEREY CA	Jones, Daniel,Tecmire, Christopher	12/1/2007	75	Not available	NPS	U	A - 01	Approved for public release; distribution is unlimited.	MBA Professional Report	The purpose of this MBA project is to suggest a standardized distribution process for the DoD of the Pandemic Influenza vaccine, filling an existing void in the National Strategy for Pandemic Influenza. Also, this project is intended to foster the communication and planning process for vaccine distribution between all stakeholders, including the DLA, COCOMs, and regional commanders. Currently, no DoD pre-pandemic vaccine distribution plan exists. This project identifies the essential infrastructure assets needed to develop a cold-chain distribution network for vaccine in a military application. Furthermore, the key communication and transportation elements needed for successful execution of this network are identified, including a discussion on information and vaccine flow through the distribution network. These ideas are organized into a model to provide an easily usable decision-making tool for cold-chain network design. Finally, an example using the model is provided, with PACOM as the example area of operation.
ADA606236	A National Model for Diabetes Prevention and Treatment Program in Civilian and Military Beneficiary Populations (FY07)	PITTSBURGH UNIV MEDICAL CENTER PA	Barnes, Barbara,Siminerio, Linda,Ummmer, Brad,Kramer, Kaye,Kriska, Andrea,Storti, Kristi,Kanter, Justin	9/24/2013	85	Not available	AFMSA/ID	U	A - 01	Approved for public release; distribution is unlimited.	Final rept. 30 Sep 2008-31 Jan 2013	The prevalence of childhood overweight and obesity is increasing at an alarming rate in the United States (US). Prevalence among children and adolescents has doubled in the past 2 decades [1]. There is a strong link between obesity and diabetes, and other significant health problems such as cardiovascular disease and sleep apnea [2, 3]. The probability of childhood obesity persisting into adulthood is estimated to increase from approximately 20% at 4 years of age to approximately 80% by adolescence [4]. It is probable that co-morbidities will persist into adulthood as well [5]. The obesity epidemic is likely to affect the military most immediately as a result of increasing the need for dependent care for overweight and obese children. The purpose of this project was to develop and implement a comprehensive, evidence-based, multi-faceted approach to preventing diabetes in those at risk, as well as improving the lives of those already diagnosed with the disease. The principal investigator focused on transforming currently available knowledge into useful measures for everyday clinical health practice. This project addressed four areas in adult primary prevention for diabetes and cardiovascular disease through the use of web-based tools. The areas included an evidence-based pediatric weight management program, a modified diabetes prevention program, implanting diabetes treatment in the chronic care model (CCM), and the implementation inpatient management protocols with support from University of Pittsburgh Medical Center (UPMC).

ADA617371	Minimum Information Dominating Set for Critical Sampling over Graphs	CALIFORNIA UNIV DAVIS DEPT OF ELECTRICAL AND COMPUTER ENGINEERING	Gao, Jianhang,Zhao, Qing,Swami, Ananthram	4/1/2015	6	Not available	AMSRL-ARL	U	A - 01	Approved for public release; distribution is unlimited.	Conference paper	We consider the problem of sampling a node-weighted graph. The objective is to infer the values of all nodes from that of a minimum subset of nodes by exploiting correlations in node values. We first introduce the concept of information dominating set (IDS). A subset of nodes in a given graph is an IDS if the value of these nodes is sufficient to infer the information state of the entire graph. We focus on two fundamental algorithmic problems: (i) how to determine whether a given subset of vertices is an IDS (ii) how to construct a minimum IDS. Assuming binary node values and the local majority rule, we show that the first problem is co-NP-complete and the second problem is NP-hard in a general network. We then show that in acyclic graphs, both problems admit linear-complexity solutions by establishing a connection between the IDS problems and the vertex cover problem. For general graphs, we develop algorithms for solving both problems based on the concept of essential differential set. These results find applications in opinion sampling such as political polling and market survey in social-economic networks, and inferring epidemics and cascading failures in communication and infrastructure networks.
ADA436522	Dynamical Epidemic Suppression Using Stochastic Prediction and Control	NAVAL RESEARCH LAB WASHINGTON DC PLASMA PHYSICS DIV	Schwartz, Ira B.,Billings, Lora,Boltt, Erik M.	10/28/2004	17	Not available	ONR	U	A - 01	Approved for public release; distribution is unlimited.	Journal article	We consider the effects of noise on a model of epidemic outbreaks, where the outbreaks appear randomly. Using a constructive transition approach that predicts large outbreaks prior to their occurrence, we derive an adaptive control scheme that prevents large outbreaks from occurring. The theory is applicable to a wide range of stochastic processes with underlying deterministic structure.
AD0672862	WARS AND EPIDEMICS	ARMY BIOLOGICAL LABS FREDERICK MD	Elkin, I. I.	7/1/1968	9	TRANS-486	ABL/MD	U	A - 01	Approved for public release; distribution is unlimited.	Not available	Not available
ADA588464	What Makes a Message Stick? The Role of Content and Context in Social Media Epidemics	AUSTRALIAN NATIONAL UNIV CANBERRA	Xie, Lexing,Christen, Peter	9/23/2013	5	Not available	AOARD	U	A - 01	Approved for public release; distribution is unlimited.	Final rept. 29 Sep 2012-28 Sep 2013	When will a message go viral? This is one of the most important questions one can ask when analyzing and trying to understand social media. Our one-year AOARD project tackles this question from two perspectives: understanding individual user preferences, and understanding message popularity from collective user behavior. Our work focuses on building models that predict user behavior and overall popularity. In addition, we also present and analyze observations that explain such behavior from content characteristics and social interactions.
ADA402898	Modeling Man-Made Epidemics	NAVAL POSTGRADUATE SCHOOL MONTEREY CA	Paterson, Ryan	3/1/2002	76	Not available	NPS	U	A - 01	Approved for public release; distribution is unlimited.	Master's thesis	This thesis develops a mathematical model to explore epidemic spread through the Ground Combat Element (GCE) of the Marine Expeditionary Unit (MEU). The model will simulate an epidemic caused by a biological attack using an agent that has the ability to spread through person-to-person contact (small pox hemorrhagic fever, etc.) A stochastic modeling process will be used along with widely accepted mathematical formulas an SEIR (Susceptible- Exposed- Infectious-Removed) epidemic model. A heterogeneous population composed of numerous homogenous subgroups with varying interaction rates simulates the unique structure of military combat units. The model will be evaluated to determine which units facilitate the most rapid spread of the epidemic. The model will then test a number of different scenarios to determine the effects of varying quarantine techniques, vaccination strategies and protective postures on the spread of the diseases.

ADA060212	Fungous and Bacterial Skin Infections in the Tropics.	MIAMI UNIV FLA DEPT OF DERMATOLOGY	Taplin, David	8/1/1978	114	Not available	Not available	U	A - 01	Approved for public release; distribution is unlimited.	Final rept. 1 Jun 71-31 May 76,	Bacterial skin infections in the tropics are the predominant cause of dermatological disease in civilians and are directly related to temperature, humidity, exposure, and living conditions. Substandard housing and poor hygiene, biting and vector insects contribute to high rates of infection. Tropical skin infections are usually streptococcal. In military populations, personnel on field operations are at highest risk. Support troops, even in the tropics, have a much lower incidence of streptococcal pyoderma. Currently available deodorant soaps do not prevent skin infections, but chlorhexidine gluconate looks promising. Epidemic furunculosis is related to close social contact, and may be more common than most physicians realize. Early treatment with antibiotics plays a significant role in prevention of new furuncles among contacts. Antibiotic resistant strains of bacteria pose new problems in cutaneous microbiology. Severe fungal infections of the skin may attack up to 70% of military personnel in hot humid environments. Occlusion is the most significant factor, and appears to be related to accumulation of CO2 under damp clothing. Combined therapy of tinea corporis/cruris with topical miconazole/hydrocortisone is highly effective. Hydrocortisone alone makes these infections worse in the tropics. Topical clotrimazole is effective in the treatment of dermatophytosis, but tinea pedis is difficult to treat and usually recurs.
ADA511445	Honduran-U.S. Relations	LIBRARY OF CONGRESS WASHINGTON DC CONGRESSIONAL RESEARCH SERVICE	Meyer, Peter J.	9/10/2009	28	CRS-7-5700, CRS-RL34027	CRS/DC	U	A - 01	Approved for public release; distribution is unlimited.	Congressional research rept.	On June 28, 2009, the Honduran military detained President Manuel Zelaya and flew him to exile in Costa Rica, ending 27 years of uninterrupted democratic, constitutional governance. The move was backed by the Honduran Supreme Court and National Congress, which selected Roberto Micheletti, the head of Congress, to fulfill the rest of Zelaya's term. Zelaya's removal was brought on by the ousted president's insistence in pushing ahead with a referendum that was ruled illegal and eventually could have led to changes to the Honduran constitution. The United States and international community have universally condemned the events in Honduras and called for a restoration of Zelaya and the rule of law. Those involved in the ouster and some sectors of Honduran society have rejected the international response, and maintain that Zelaya's removal was an internal matter that was necessary to protect the country's constitution. The political instability brought about by the removal of President Zelaya has created yet another challenge for Honduras, one of the hemisphere's poorest countries. In addition to significant challenges in the areas of crime, human rights, and improving overall economic and living conditions, the country faces a poverty rate of nearly 70%, high infant mortality, and a significant HIV/AIDS epidemic. While traditional agricultural exports of coffee and bananas are still important for the economy, nontraditional sectors, especially the maquiladora, or export-processing industry, have grown significantly over the past decade. The economy, which grew by 6.3% in 2007 and 4% in 2008, has benefitted from significant debt reduction by international financial institutions that have freed government resources to finance poverty-reduction programs. The global financial crisis and current political crisis, however, are expected to slow economic growth sharply in 2009.
ADA403988	Epidemics Don't Cause Wars, But They Can End 'Em	MARINE CORPS COMMAND AND STAFF COLL QUANTICO VA	Carlberg, Matthew A.	7/1/2002	51	Not available	USMC/CSC	U	A - 01	Approved for public release; distribution is unlimited.	Student research paper	Epidemics are a recognized threat to national security. It is assumed that an epidemic can spark a war. The causes of war are complex. There is little evidence to support the concept of disease being a direct cause. History suggests that wars cause epidemics. War cause theorists propose numerous social, political, and economic causes for war, without postulating that epidemics lead to war. Epidemics do cause MOOTW. In an era of concern over biological and chemical weapons, naturally occurring diseases remain a serious threat to deployed military forces. Epidemics threaten national security by impacting the economic, political, and social aspects of national power. The AIDS epidemic in Sub-Saharan Africa bears stark witness to the magnitude of this threat. It also offers the opportunity for prospective study of the relationship between epidemics, state failures, and wars. There are roughly 54 million deaths annually worldwide from infectious diseases. Half of these deaths occur in Sub-Saharan Africa. The litany of resurgent and emerging infectious diseases, coupled with the phenomenon of antibiotic resistance, bring to light the magnitude of the threat both to national security and deployed forces.



ADA247673	Report on Lyme disease Prepared for U.S. Army Corps of Engineers Field Personnel	ARMY ENGINEER WATERWAYS EXPERIMENT STATION VICKSBURG MS ENVIRONMENTAL LAB	Johnson, William A.	1/1/1992	35	WES/MP/R-92-1	USACE	U	A - 01	Approved for public release; distribution is unlimited.	Final rept.,	Lyme disease is an arthropod-borne, bacterial, multisystemic disease. It has assumed importance as an epidemic disease in parts of the United States and in a number of other countries as well. The primary vector of Lyme disease, Ixodes dammini, has a widespread distribution in the heavily populated Midwest, Northwest, and Atlantic states, where the tick utilizes small mammals (during the nymphal stage) and deer and other larger mammals, including man (during the adult stage), as food sources. The trend toward rural living among many Americans has further placed humans at risk to attack by the tick and infection with Lyme disease. Initial symptoms of Lyme disease include erythema migraines and arthritis-like pain in the large joints. Serological techniques exist that allow fairly reliable diagnosis, and the bacterium is susceptible to a limited number of antibiotic therapies. Untreated individuals may face severe, chronic, multisystemic involvement, which may, in a few cases, terminate in death. However, most patients recover eventually, whether treated or untreated, with no permanent loss of function. The most effective preventative measures that may be taken by individuals at risk include appropriate attire while moving through wooded areas potentially infested with ticks that might carry Lyme disease and examination of the body (especially hair-covered areas) and clothing upon return from the field. Treatment with an acaricide in areas around homes and work sites provides some reduction in local tick populations.
ADA543641	PEPFAR/DOD/Pharmaccess/T anzania Peoples Defence Forces HIV/AIDS Program	STICHTING PHARMACCESS INTERNATIONAL INTERNATIONAL AMSTERDAM (NETHERLANDS)	Haverkamp, Geert	9/1/2009	29	W81XWH-06-1- 0351	USAMRMC	U	A - 01	Approved for public release; distribution is unlimited.	Final rept. 1 Sep 2007-31 Aug 2009	The Tanzania Peoples Defense Forces (TPDF) like any other institution in Tanzania has been experiencing an increase in the burden caused by HIV/ AIDS pandemic. Like all uniformed services in the world, the incidence and prevalence of HIV/AIDS is expected to be higher in this institution compared to that in the civilian population. The TPDF medical services support a total of over 30,000 enlisted personnel and their dependents and civilians living in the communities around the military health facilities. TPDF hospitals do not only service military personnel and their dependents, but also civilians living in the vicinity of the health facilities. In March 2002, Lugalo, the National Military Referral Hospital in Dar es Salaam started one of the first ART programs in Tanzania, with support of PharmAccess. Care and treatment services at Lugalo have expanded with EP funds since 2004. With FY05 and FY06 funds PAI and TPDF have managed to organize a comprehensive HIV/AIDS prevention program, counseling and testing, PMTCT and care and treatment services in eight military hospitals (Lugalo, Mbalizi, Mwanza, Mzinga, Monduli, Ruvuma, Mirambo, Bububu) and additional six health centers. All military hospitals and health centers, except Lugalo, Mwanza and Mbalizi, where the Program has been initiated were in a more or less dilapidated state and medical and administrative staff was not prepared for HIV/AIDS services. Renovation of rooms for VCT, PMTCT, Care and Treatment and HIV/TB services, laboratory and pharmacy space and waiting areas was and is sine-qua-non for every new facility in the Program.
ADA543820	Project BioShield: Authorities, Appropriations, Acquisitions, and Issues for Congress	LIBRARY OF CONGRESS WASHINGTON DC CONGRESSIONAL RESEARCH SERVICE	Gottron, Frank	3/3/2011	22	CRS-R41033	CRS/DC	U	A - 01	Approved for public release; distribution is unlimited.	Congressional rept.	In 2004, Congress passed the Project BioShield Act (P.L. 108-276) to encourage the private sector to develop medical countermeasures to chemical, biological, radiological, and nuclear (CBRN) terrorism agents and to provide a novel mechanism for federal acquisition of those newly developed countermeasures. Although some countermeasures have been acquired through this law, Congress continues to address several Project BioShield-related policy issues. These include whether to continue diverting Project BioShield acquisition funding to other purposes; whether to change the countermeasure development and acquisition process; how to replace stockpiled countermeasures as they expire; and whether to alter federal efforts to encourage the development of broad-spectrum countermeasures. This law provides three main authorities: (1) relaxing regulatory requirements for some CBRN terrorism-related spending, including hiring personnel and awarding research grants; (2) guaranteeing a federal market for new CBRN medical countermeasures; and (3) permitting emergency use of unapproved countermeasures. The Department of Health and Human Services (HHS) has used each of these authorities. The HHS used expedited review authorities to approve contracts and grants related to CBRN countermeasure research and development. The HHS used the authority to guarantee a government market to obligate approximately \$2 billion to acquire countermeasures against anthrax, botulism, radiation, and smallpox. The HHS has also employed the emergency use authority several times, including during the 2009 H1N1 influenza pandemic.

ADA433574	Global Influenza Surveillance in the U.S. Military	INSTITUTE FOR ENVIRONMENT SAFETY AND OCCUPATIONAL HEALTH RISK ANALYSIS BROOKSAFB TX RISK ANALYSIS DIRECTORA	Cox, Kenneth L.	6/1/2004	11	Not available	IERA-RS-BR	U	A - 01	Approved for public release; distribution is unlimited., Availability: This document is not available from DTIC in microfiche., NATO	Conference paper	The 1918 influenza pandemic serves as a poignant reminder of how devastating influenza can be. Its ability to generate enormous numbers of casualties, probable travel restrictions, and effects on civilian support infrastructure poses a serious threat to military operations. More recently, in 1996, a United States ship of the line was taken out of service and forced into a foreign port for 2 days while waiting for enough crew members to recover before resuming normal operations. In light of this threat, the U.S. Department of Defense (DoD) maintains a globe-girdling influenza surveillance system, seeking to identify antigenic shifts and drifts at the earliest possible moment. Frighteningly, the threat is not limited to influenza. Emerging infectious diseases such as the Severe Acute Respiratory Syndrome (SARS) coronavirus and, possibly, biological warfare agents loom ahead. The early stages of many of these infections resemble influenza and are often categorized as influenza-like illnesses (ILI). Given these threats, there has been a concerted effort to adapt existing surveillance systems to provide near-real-time surveillance that could identify covert attacks involving biological agents or the emergence of new respiratory pathogens as well as improve the DoD's capabilities to monitor naturally occurring influenza.
AD1011100	Interactions of Rodent Coronaviruses with Cellular Receptors	Uniformed Services University Of The Health Sciences Bethesda United States	Gagneten,Sara E.	5/8/2016	199	Not available	Not available	U	A - 01	Approved for public release; distribution is unlimited.	Technical Report	Coronaviruses express a spike glycoprotein (S) on the viral envelope and a subset of coronaviruses expresses an additional glycoprotein (HE), that binds to a sugar moiety and has hemagglutinating and acetylsterase activities. This dissertation focuses on how interactions of these membrane glycoproteins with cell surface molecules affects virus species specificity and tissue tropism. To study the role of the HE glycoprotein in MHV infection we used the anti-receptor MAD-eel to block binding of S to its receptor on various mouse cell lines and then challenged these cells with an HE expressing strain of MEV to determine whether this virus could use the HE alone to initiate viral infection . When the S glycoprotein was prevented from binding to its receptor by MAb-CCI an MEV strain expressing, HE could not infect mouse fibroblast cell lines or primary brain cells. Although murine coronavirus (MHV) and rat coronavirus both cause common infections in colonies of laboratory rodents and are related antigenically, each virus is restricted to a single host species and the target organs for the mouse and rat viruses are different. A solid phase virus-binding assay was used to investigate the tissue specificity of binding of rat coronavirus. Rat coronavirus bound to membranes isolated from rat parotid and lacrimal glands, correlating well with the natural target tissues of this virus. Both rat coronavirus and MHV can infect the same murine cell line. The hypothesis that rat homologs of the MHV receptor (MHVR) serve as receptors for rat coronavirus was tested. Antibodies to the MHV receptor that protected these cells against MHV infection, did not protect them against infection with rat coronavirus suggesting that the rat virus does not use MHVR to infect these cells. Rat ecto-ATPase, a glycoprotein homologous to MHVR was expressed in nonpermissive hamster cells, but the cells remained resistant to infection with rat coronavirus.

ADA484794	Insurrection Act Restored: States Likely to Maintain Authority over National Guard in Domestic Emergencies	ARMY COMMAND AND GENERAL STAFF COLL FORT LEAVENWORTH KS SCHOOL OF ADVANCED MILITARY STUDIES	Beckler, Mark M.	5/22/2008	78	Not available	USACGSC/SAMS	U	A - 01	Approved for public release; distribution is unlimited.	Monograph	Before 2006, the President had multiple legal bases available to authorize his use of federal military forces in a variety of law enforcement and natural disaster circumstances. Nevertheless, Congress amended the Insurrection Act in 2006 to create the Enforcement of the Laws to Restore Public Order. This statute stirred controversy as it arguably represented an unwarranted expansion of Presidential power. Additionally, while the statute attempted to address the kind of lawlessness seen in New Orleans immediately following Hurricane Katrina in 2005, the provision arguably offered no improvement over the Insurrection Act in instances of lawlessness or the Stafford Act in instances of disaster. Without ever having been invoked, and in the face of strong opposition, the Enforcement of the Laws to Restore Public Order was repealed on January 28, 2008 and the previous Insurrection Act was restored. This monograph reviews the Enforcement of the Laws to Restore Public Order statute and concludes that it was prudent to repeal this legislation. Moreover, author recommends that future laws and policies to improve disaster response across the whole-of-government and the private sector should be consistent with the principles in the 2008 National Response Framework, which advocates tiered response rather than a primarily federal response in most instances. The rare instances of catastrophic disaster that might require the President to shortcut tiered response and assume federal control at the outset of the situation should be clearly defined in law.
ADA202062	AIDS (Acquired Immunodeficiency Syndrome) Education: Activities Aimed at the General Public Implemented Slowly	GENERAL ACCOUNTING OFFICE WASHINGTON DC HUMAN RESOURCES DIV	Not available	12/1/1988	23	GAO/HRD-89-21	GAO	U	A - 01	Approved for public release; distribution is unlimited.	Not available	The Centers for Disease Control's (CDC's) under the Department of Health and Human Services (HHS), is the principal federal agency responsible for preventing Acquired Immunodeficiency Syndrome (AIDS) through education. CDC's AIDS activities include education programs aimed at curtailing the spread of the epidemic and epidemiology and surveillance programs. Through these activities, CDC tracks the spread of AIDS and can better target AIDS education efforts. Between fiscal years 1984 and 1988, CDC's total AIDS budget grew more 100 percent each year on average, from about \$14 million to over \$300 million. Several organizations within CDC share responsibility for AIDS education. Two- the Center for Health Promotion and Education and the Center for Prevention Services-have responsibility for targeting specific groups, including school and college-aged youth, health care workers, and persons at increased risk of infection. In addition, the Office of Deputy Director for AIDS coordinates CDC's overall AIDS program and administers CDC's education efforts aimed at the general public. (SDW)
ADA501730	The 2009 Influenza A(H1N1) 'Swine Flu' Outbreak: An Overview	LIBRARY OF CONGRESS WASHINGTON DC CONGRESSIONAL RESEARCH SERVICE	Lister, Sarah A., Redhead, C. S.	5/20/2009	27	CRS-R40554	CRS/DC	U	A - 01	Approved for public release; distribution is unlimited.	Congressional Report	
ADA336066	JPRS Report, Science & Technology, China	JOINT PUBLICATIONS RESEARCH SERVICE ARLINGTON VA	Not available	1/16/1991	52	JPRS-CST-91-002	XI	U	A - 01	Approved for public release; distribution is unlimited.	Not available	The information of this contents include Intellectual Rights Must Be Protected, Soviet Link to Aid Ocean Studies, Tank Simulator Offers High-Tech Target Practice, World-Record Magnetic Energy Product for Nd-Fe-B Magnet Material, Studies on the Synthetic Method of 2'3'-Dideoxynucleosides, Comparison of Three Methods for Screening Aflatoxin-Producing Strains, The Natural Infection Rate of Mosquitoes by Japanese Encephalitis B Virus in Yunnan Province, Study on Natural Infection of Epidemic Haemorrhagic Fever Virus in <i>Leptotrombidium scutellare</i> .

ADA455008	Comparative Genomics of Rickettsia prowazekii Madrid E and Breinl Strains	NAVAL MEDICAL RESEARCH CENTER SILVER SPRING MD	Ge, Hong,Chang, Yao-Yu E.,Zhao, Shuping,Tong, Min,Tsai, Mong-Hsun,Temenak, Joseph J.,Richards, Allen L.,Ching, Wei-Mei	1/1/2004	11	Not available	NMRC/MD	U	A - 01	Approved for public release; distribution is unlimited. This document is not available from DTIC in microfiche.	Not available	Rickettsia prowazekii, the causative agent of epidemic typhus, has been responsible for millions of human deaths. Madrid E is attenuated strain of R. prowazekii, while Breinl is a virulent strain. The genomic DNA sequence of Madrid E has recently been published. To study the genomic variations between Madrid E (reference) and Breinl (test) DNAs, cohybridization experiments were performed on a DNA microarray containing all 834 protein-coding genes of Madrid E. Of the 834 genes assessed, 24 genes showed 1.5-to 2.0-fold increases in hybridization signals in Breinl DNA compared to Madrid E DNA, indicating the presence of genomic variations in ~3% of the total genes. Eighteen of these 24 genes are predicted to be involved in different functions. Southern blot analysis of five genes, virB4, ftsK, rfbE, lpxA, and rpoH, suggested the presence of an additional paralog(s) in Breinl, which might be related to the observed increase in hybridization signals. Studies by real-time reverse transcription-PCR revealed an increase in expression of the above-mentioned five genes and five other genes. In addition to the elevated hybridization signals of 24 genes observed in the Breinl strain, one gene (rp084) showed only 1/10 the hybridization signal of Madrid E. Further analysis of this gene by PCR and sequencing revealed a large deletion flanking the whole rp084 gene and part of the rp083 gene in the virulent Breinl strain. The results of this first rickettsial DNA microarray may provide some important information for the elucidation of pathogenic mechanisms of R. prowazekii.
ADA457443	AIDS in Africa	LIBRARY OF CONGRESS WASHINGTON DC CONGRESSIONAL RESEARCH SERVICE	Cook, Nicolas	3/9/2006	20	CRS-IB10050	CRS/DC	U	A - 01	Approved for public release; distribution is unlimited.	Congressional Report	
ADA052458	Prophylactic Methods in Prevention of Disease Among Army Personnel	LETTERMAN ARMY MEDICAL CENTER SAN FRANCISCO CA	Smith, Creed D.,Stewart, Robert S.,Shiromoto, Ronald S.,Hull, Angus C.	12/1/1977	50	Not available	LAIR	U	A - 01	Approved for public release; distribution is unlimited.	Annual progress rept.	Surveillance studies to determine the etiologic agents of acute respiratory disease (ARD) in basic combat trainees (BCT's) were accomplished during FY 77. A special influenza surveillance program was also conducted at Forts Wood, Jackson and Bliss, to signal an early warning of a probable A/Swine flu epidemic. Virus isolations and Serological Studies indicated that 19.9% of ARD hospitalizations were caused by Adenoviruses, 4.5% by Influenza A and B, Mycoplasma, Coxsackie A 21 and Polio; and 74.7% by agents that were not determined. Field studies to determine the immunogenicity of Adenovirus Vaccines were conducted utilizing 360 serum pairs collected from 6 Training Forts. Accumulative results indicated the type 4 vaccine to be 69% immunogenic, and the type 7 was 63.6% immunogenic. A preliminary study to determine the effectiveness of Charcoal Viral Transport Media (CVTM), and bentonite media for transporting virus specimens was conducted using Tryptose Phosphate Broth (TPB) as a control. The recovery of Vaccinia, ECHO 9, Coxsackievirus, Polio, Adenovirus, Herpes, Mumps, and Influenza were similar, but neither media maintained virus titers as adequately as TPB. Studies to determine whether Coxsackievirus is a significant cause of upper-respiratory infections revealed that this agent represented 25%, 36/144, of the total number of viruses isolated during the period July thru December. Serological data confirms Coxsackievirus A21 as a significant cause of ARD.

ADA477127	Understanding Public Responses to Domestic Threats	CARNEGIE-MELLON UNIV PITTSBURGH PA	Bruine de Bruin, Wandi,Florig, H. K.,Fischhoff, Baruch,Downs, Julie S.,Stone, Eric	9/1/2007	102	DRDC-T-CR-2007- 111	CR-2007- 111,DRDC-T	U	A - 01	Approved for public release; distribution is unlimited.	Contract rept.	The overall goal of this report is to improve understanding of public responses to domestic threats. Project 1 focuses on pandemic influenza and dirty bomb threats, aiming to understand the role of emotions in anticipated behavioral responses. Project 2 examines a situation in which people are evacuated from a community to avoid exposure to radioactive fallout from an upwind nuclear explosion. This project aims to understand the factors that affect people's decisions about how long to wait until returning to their homes, given the gradual decline in radiation levels resulting from radioactive decay. First, the authors present an overview of each problem using models that summarize scientific knowledge. The models use logic of influence diagrams with nodes that reflect relevant variables affecting risk, and mitigating it, and links showing how they are connected. The models differ from traditional risk models because they include emotional and behavioral components that affect how a risk event unfolds. The Project 1 models focus on the interplay between emotional and behavioral responses to domestic threats, particularly fear and anger. The model for Project 2 focuses on the health, social, and economic factors that may affect people's decision to return to a community with residual radiation levels that elevate cancer risk. Second, they report on surveys of Canadian and U.S. participants based on these models. For Project 1, they found that, independent of anger and trait emotions, fear was related to seeing more risk of morbidity and mortality, and predicting less resilience, more compliance with mitigation strategies, and higher likelihood of being absent from work in the case of pandemic influenza. For Project 2, they found that people's decision to return were affected by the cancer risk of radioactive fallout as well as the availability of free housing in the evacuation zone.
AD1066823	Walter Reed, Yellow Fever, and Informed Consent	AMERICAN REGISTRY OF PATHOLOGY ROCKVILLE MD ROCKVILLE United States	Cutter,Laura	1/1/2016	2	Not available	Not available	U	A - 01	Approved for public release; distribution is unlimited.	Journal Article - Open Access	
ADA496334	Medical Surveillance Monthly Report (MSMR). Volume 11, Number 5, December 2005	Not available	Not available	12/1/2005	25	USACHPPM	Not available	U	A - 01	Approved for public release; distribution is unlimited.	Monthly rept.	The influenza pandemic of 1918-1919 accounted for an estimated 40 to 100 million deaths worldwide. The concentration of deaths among previously healthy young adults in both military and general populations was an unusual and concerning characteristic of the pandemic. In September-October 1918, every major military installation in the United States was attacked by influenza. The epidemics that affected the widely dispersed camps were remarkably similar. In general, they had sudden onsets, sharp increases in case rates, nearly as rapid declines, and overall durations of 3 to 6 weeks. Secondary bacterial infections were common and had unusually fulminant clinical expressions. Epidemic curves of secondary pneumonias and deaths lagged those of influenza by 5-10 days. Overall attack rates of clinically significant influenza among soldiers was approximately 23%- of these, approximately one-sixth developed pneumonias of which approximately one-third were fatal. The recent emergence and international spread of coronavirus-associated SARS, of H5N1 influenza among domestic and migratory avian species, and of highly virulent avian influenza among humans have heightened awareness of the potential effects of and stimulated plans to counter the next influenza pandemic. The timely detection and characterization of initial (herald") attacks of the next influenza pandemic is an important part of pandemic influenza preparedness. To detect significant perturbations from baseline rates and/or clinical severities of "pneumonia and influenza" in military populations

ADA461978	Medical Vanguard Diabetes Management Project	GEORGETOWN UNIV WASHINGTON DC	Mun, Seong K.	10/1/2005	24	Not available	USAMRMC	U	A - 01	Approved for public release; distribution is unlimited.	Annual rept. 1 Sep 2004-31 Aug 2005	The objective of this research is to exploit the findings of Project Vanguard Phase I and II to produce more robust scientific tools for graded alerting of transnational biological threats using Venezuelan Equine Encephalitis (VEE), a mosquito borne viral disease, as a case study. These new tools will play an essential role in future research and contribute to advancing TATRC's mission in the use of Indications and Warnings (I&Ws) biosurveillance for biodefense. Indications and Warnings (I&Ws) potentially alert U.S. responders of an imminent foreign bioevent weeks to months in advance. I&Ws are markers occurring globally, outside of U.S. borders, before an outbreak can affect U.S. interests, forces or domestic territory, thus allowing the U.S. time to respond. In effect, I&Ws can prime the national response infrastructure by alerting agencies of an evolving threat that could ultimately be highly disruptive or catastrophic. Venezuelan equine encephalitis (VEE) virus is a zoonotic, mosquito-borne, viral disease affecting humans and equines where equines serve as amplifying hosts. It is an RNA alphavirus of the Togaviridae genus that is serologically classified into six antigenic subtypes: I-VI and six varieties: A, AB, C, D, E, F (1). Epizootic/epidemic type IAB and IC are the only subtypes associated with significant human and equine outbreaks (1,2). VEE has caused periodic outbreaks in humans and equines in Latin America since the early 1920s. Considering that epizootic VEE has not been diagnosed or isolated in the United States since 1971, there are concerns that VEE would make an effective bioterrorist agent (1,3,4). VEE is considered an incapacitating agent rather than a lethal agent such as anthrax or plague. Past outbreaks have suggested that a low infective dose is necessary for transmission (4,5).
ADA511659	SARS: Down But Still a Threat	NATIONAL INTELLIGENCE COUNCIL WASHINGTON DC	Monaghan, Karen	8/1/2003	35	ICA-2003-09	NIC/WDC	U	A - 01	Approved for public release; distribution is unlimited.	Research rept.	This Intelligence Community Assessment (ICA) highlights the evolution of Severe Acute Respiratory Syndrome (SARS) and the potential implications of the disease for the United States under future scenarios. Even though SARS has infected and killed far fewer people than other common infectious diseases, it has had a disproportionately large economic and political impact because it spread in areas with broad international commercial links and received intense media attention as a mysterious new illness that seemed able to go anywhere and hit anyone. As the first infectious disease to emerge as a new cause of human illness in the 21st century, SARS underscores the growing importance of health issues in a globalized world. The future course of SARS will depend on a host of complex variables, making forecasting difficult. We constructed three scenarios to highlight various challenges that SARS might pose in the future. Scenario 1: SARS could resurface this fall but be limited to random outbreaks in a few countries, rendering it more of a public health nuisance than a crisis. Rapid activation of local and international surveillance systems would be key to containing the spread. Scenario 2: SARS could spread to poor countries in Africa or Asia, potentially generating more infections and deaths than before, but with relatively little international economic impact. The risk of spread would continue, however, even if SARS emerged in poor countries or isolated regions of Russia and China with weak health care systems. Scenario 3: SARS could come back this fall in the places it hit before -- such as China, Taiwan, Canada, and Singapore -- or hit harder in other well-connected places like the United States, Japan, Europe, India, or Brazil. Even if the number of infected persons were not significantly greater, the resurgence of the disease in globally linked countries probably would generate a significant impact again.

AD0617822	BIOCHEMICAL CHARACTERISTICS OF RECENT CHOLERA ISOLATES IN THE FAR EAST.	NAVAL MEDICAL RESEARCH UNIT NO 2 TAIPEI (TAIWAN)	Swanson,R. W.,Gillmore,J. D.	1/1/1964	5	NAVMED-MR005.09-1040.2.4	MR005.09-1040.2.4	U	A - 01	Approved for public release; distribution is unlimited.	Research rept.,	The pronounced change in haemolytic activities observed on examining cholera isolates from different geographical areas in the Far East during 1961-64 makes it apparent that this single biochemical activity is not a reliable criterion for the separation of a biotype or subspecies of vibrio. Furthermore, the measurement of haemolytic activity is a problem of degree and may vary with different laboratories depending upon the availability or selection of media and adherence to the physical requirements of the test procedures employed. Also, it appears doubtful that any reliable epidemiological data can be derived because of the variable results obtained from serial cholera admissions occurring in the same epidemic area. The complete agreement obtained throughout the past three years with the haemagglutination and phage sensitivity tests provides two excellent methods for the rapid differentiation between the classic cholera vibrios and the vibrios isolated recently in the Far East. The rapidity and simplicity of the chicken cell agglutination test make it suitable for field work or for use by laboratories with limited facilities.
ADA423930	The Future Geo-Strategic Implications of the HIV/AIDS Crisis in South Africa	ARMY WAR COLL CARLISLE BARRACKS PA	Miller, Lucy D.	3/19/2004	45	Not available	USAWC	U	A - 01	Approved for public release; distribution is unlimited.	Strategy research project	South Africa is identified by the United States as an anchor country and a benchmark example of democratic reform and economic success. However while serving as an example for regional countries on progressive success towards economic political and democratic reform South Africa is struggling with a significant underlying problem that if not resolved could result in the country becoming a failed state: the HIV/AIDS epidemic. The purpose of this paper is to evaluate United States policy and interests towards South Africa and determine its relevance in preventing the regionally destabilizing humanitarian crisis threatened by the pervasive effects of the HIV/AIDS epidemic on the country. This paper additionally examines the costs risks and future geo-strategic implications of the HIV/AIDS crisis on South Africa if adequate resources are not programmed and initiatives are not implemented to immediately resolve the crisis.
ADA442166	Molecular Pathogenesis of Rickettsioses and Development of Novel Anti-Rickettsia Treatment by Combinatorial Peptide-Based Libraries	TEXAS UNIV MEDICAL SCHOOL AT GALVESTON	Walker, David H.,Olano, Juan P.	2/1/2005	28	USAMRMC	Not available	U	A - 01	Approved for public release; distribution is unlimited.	Annual rept. 1 Feb 2004-31 Jan 2005	The purpose of this study is to utilize adaptein libraries coded within pantropic retroviral vectors that confer protection against rickettsial pathogens and to study the molecular pathogenesis of rickettsioses. The following specific aims were proposed: 1) To establish heterogeneous cell populations, with each cell expressing a unique member of a complex combinatorial peptide-based (e.g., adaptein) library and challenge with R. prowazekii, R. rickettsii, and O. tsutsugamushi; 2) To determine the role of NF-KB, cytokines, ROS and NO in intracellular killing of rickettsia-infected monolayers containing adapteins and 3) To characterize signal transduction pathways modulating the cytoskeletal events responsible for the increased vascular permeability. During the third year of the project, rickettsial challenges performed with the transfected rat derived microvascular endothelial cells and the human brain primary microvascular endothelial cells were somewhat disappointing. Expansion of the resistant colonies" was not possible. Two other human microvascular endothelial cell lines were acquired (cerebral and dermal). These cell lines are far more susceptible to rickettsial infection than their predecessors. We have transfected successfully both cell lines with the adaptein-containing retroviral vectors and "resistant colonies" were obtained after three consecutive challenges. However

ADA605614	Worldwide Emerging Environmental Issues Affecting the U.S. Military. Summarizing Environmental Security Monthly Scanning, July 2006-June 2007	FEDERATION OF UN ASSOCIATIONS WASHINGTON DC MILLENNIUM PROJECT	Not available	6/1/2007	183	Not available	AEPI	U	A - 01	Approved for public release; distribution is unlimited.	Not available	The purpose of the monthly scanning reports is to assess worldwide environment-related events in order to identify and analyze issues that might trigger future international environmental regulations and/or modifications to the existing ones with potential implications for the military. Environmental security continues to move up on national, regional, and international agendas due to increasing scientific evidence of climate change, extreme weather events, the number and intensity of natural disasters, pollution, potentials for pandemics, and nuclear-biological-chemical threats. The Army Strategy on the Environment reflects this new direction. Calls for improving international environmental governance are increasing. The technological ability to identify environmental threats and crimes is becoming cost-effective through new sensors and communications. The UN Security Council and other international bodies are expected to pay more attention to problems of environmental security. Environmental damages that people and organizations got away with in the past are less likely to escape detection and punishment in the future. Environmental diplomacy is increasingly being used to support conflict prevention efforts and to build international confidence, while human security is gaining recognition in both military and diplomatic circles. Environmental security is a link between the two.
ADA493923	Regional Mass Fatality Management in Pandemic Surge	NAVAL POSTGRADUATE SCHOOL MONTEREY CA	Stanley, Sharon A.	12/1/2008	210	Not available	NPS	U	A - 01	Approved for public release; distribution is unlimited.	Master's thesis	National and state planning documents designate public health as the lead for mass fatality management (MFM). MFM planning, however, demands multiagency participation and full public-business-government leverage. This thesis explores pathways to reach operational regional MFM capability in Ohio, but also has implications for MFM planning across the nation. Survey research was conducted with three key MFM stakeholder groups: county coroners, emergency management directors, and health commissioners. The survey addressed realistic and actionable MFM planning by: 1) identifying state guidance gaps; 2) identifying local/regional operational gaps; 3) assessing regional resource capabilities; 4) categorizing proposed solutions to address identified gaps; and 5) listing legal, financial, and organizational barriers to the solutions. Findings show that the key stakeholder communities are confused, with a willingness to build MFM capacity that is accompanied by worries about who should lead and how to coordinate efforts. Research recommendations include a three-sector collaboration (government-business-citizens) operating at the regional level and public engagement. Another recommendation calls for alignment of state guidance and regional operations with The Joint Task Force Civil Support Working Group MFM areas: command and control; body identification; medico-legal investigation; morgue operations; funeral services; final disposition; and family assistance and behavioral health services.
AD0843597	Stem Rust Infection and Development in Artificially Inoculated Fields of Wheat at Hays, Kansas, and its Effect on Yield, 1960 to 1965	FORT DETRICK FREDERICK MD FREDERICK United States	Line,Roland F.,Peet,Clyde E.,Kingsolver,Charles H.	8/1/1968	11	SMUFD technical manuscript-468,TR-468	TR-468	U	A - 01	Approved for public release; distribution is unlimited.	Technical Report	Most wheat varieties growing in the vicinity of Hays, Kansas, are susceptible to races of Puccinia graminis f. sp. tritici that are common in central United States. However, they are seldom severely damaged by stem rust. It is commonly thought that weather in that area is not favorable for establishment and development of stem rust. In 1960 to 1965 the epidemiology of stem rust was studied at Hays in fields of Cheyenne wheat inoculated with urediospores of race 56 when the plants were in tillering to boot stages of growth. Infection occurred in all 6 years. Rust increase was related to the frequency of days when conditions were favorable for infection. Plots with initial intensities of 2.5 to 20 pustules per 100 culms were compared. In the 6 consecutive years (1960 to 1965) severities at soft dough stage were about 30, 25, 7, 2, 2, and 20%; yields for rusted plots were 20, 19, 25, 34, 22, and 18 bu/acre; and yields for adjacent control areas were 46, 29, 45, 35, 29, and 62 bu/acre, respectively. In 1965, a natural epidemic of stem rust caused severe damage to wheat in Kansas and Nebraska. In 1965, the crop ripened late in the season. In 5 of the 6 years, weather was favorable for rust epidemics. Late natural infection appeared to be the primary factor limiting severity of the rust epidemics.



AD0839384	OBSERVATIONS ON THE SUSCEPTIBILITY OF SOME WILD SPECIES OF THE GENUS NICOTINA AND OF SOME VARIETIES OF NICOTIANA TABACUM L. AND N. RUSTICA L. TO BLUE MOULD (PERONOSPORA TABACINA ADAM) -- PULAWY 1962	ARMY BIOLOGICAL LABS FREDERICK MD	Bawolska, Maria	5/4/1964	16	TRANS-1076	SMUFD	U	A - 01	Approved for public release; distribution is unlimited., Availability: Document partially illegible.	Not available	The course of the blue mould epidemic is affected by atmospheric conditions, as was established in 1961. It was established, on the basis of the observations in 1962 (and previously in 1961) that, under the same conditions, not all of the species and varieties of the studied material were equally susceptible to blue mould, as witnessed by the differences in the degree of infection and percentage of diseased plants. Among the wild species of Nicotiana, no manifestations of the mould were observed on the species of N. debneyi and N. exigua. Very weak symptoms appeared in N. paniculata and N. plumbaginifolia. In the group of cigarette-tobacco varieties only the Hicks Resistant and Hicks fixed A2 (varieties of Australian origin, obtained by the cross-breeding of N. tabacum and N. debneyi -- 19) proved free of the mould. Like in 1961, the group of oriental tobaccos appeared less susceptible, and most strongly infected were the varieties of the 'Aurea' type.
ADA452919	Influenza Surveillance in Indonesia: 1999-2003	NAVAL SUBMARINE MEDICAL RESEARCH LAB GROTON CT	Beckett, Charmagne G.,Kosasih, Herman,Ma'roef, Chairin,Listiyarningsih, Erlin,Elyazar, Iqbal R. F.,Wuryadi, Suharyono,Yuwono, Djoko,McArdle, James L.,Corwin, Andrew L.,Porter, Kevin R.	1/1/2004	8	Not available	NMRC/MD	U	A - 01	Approved for public release; distribution is unlimited.	Journal article	Although influenza is recognized for its worldwide importance, little is known about the disease from tropical countries like Indonesia. From August 1999 through January 2003, a surveillance study was conducted in clinics at 6 sentinel locations. Adults (age, 114 years) and children (age, 4 14 years) presenting with respiratory symptoms suggestive of influenza were asked to enroll in the study. Nasal and pharyngeal swabs were examined by virus isolation, polymerase chain reaction, and rapid immunochromatographic tests. A total of 3079 specimens were collected from 1544 participants. Influenza infection was confirmed in 172 volunteers (11.1%) presenting with influenza-like illness. Influenza A (H1N1 and H3N2) and B viruses were detected at all sites. Peak prevalence tended to coincide with the respective rainy seasons, regardless of location. In light of the recent epidemic of severe acute respiratory syndrome, continued influenza surveillance would be useful in strengthening the infrastructure of the Indonesian public health system.
AD0759691	The First Year's Experience at Miramar Drug Rehabilitation Center,	NAVY MEDICAL NEUROPSYCHIATRIC RESEARCH UNIT SAN DIEGO CALIF	Drake,A. M.,Kolb,Douglas	3/1/1972	13	NMNRU-72-12	Not available	U	A - 01	Approved for public release; distribution is unlimited.	Not available	The Drug Rehabilitation Center at Miramar, California, was established in June 1971 in response to acute concern with the epidemic of drug abuse, including heroin use, that developed in Southeast Asia during 1970-1971. The population received during the first year included many men who had become addicted to heroin and large numbers of polydrug users. A large proportion of this Miramar population had records of delinquency and anti-social behavior before and during their military service. Five distinct therapy programs were established in order to meet the needs of this heterogeneous population. These programs are described, and the problems encountered and progress achieved during the first year of operation are described. (Author Modified Abstract)
ADA472679	Risk, Psychiatry and the Modern Military	KING'S COLL LONDON (UNITED KINGDOM)	Wessely, Simon	4/1/2006	17	Not available	X5	U	A - 01	Approved for public release; distribution is unlimited. NATO.	Conference paper	
ADA480150	Targeted Information Dissemination	QUANTUM LEAP INNOVATIONS INC NEWARK DE	Kallurkar, Srikanth	3/1/2008	50	AFRL-RI-RS-TR-2008-74	TR-2008-74,AFRL-RI-RS	U	A - 01	Approved for public release; distribution is unlimited.	Final technical rept. Mar 2005-Dec 2007	Quantum Leap Innovations (QLI) developed a Targeted Information Dissemination (TID) system for rapid gathering and dissemination of the right information to the right people at the right time. The TID user interface shows tasks of an analyst. A hierarchical view of interests learned over a period of time is shown for each task. A table displays documents filtered-in by the user agent. The filtering is based on an interest profile that the agent manages on behalf of the user. The user can view and change the degree of filtering, document relevance and the interests related to task at any time. QLI focused their system to derive an early warning system (EWS) posed by a potential pandemic influenza (PI) episode, but the technology will be broadly applicable and configurable as an EWS for any future biological incident.

ADA225843	Evidence for the Spread of the Human Immunodeficiency Virus Epidemic into Low Prevalence Areas of the United States	WALTER REED ARMY INST OF RESEARCH WASHINGTON DC	Gardner, Jr., Lytt I., Brundage, John F., Burke, Donald S., McNeil, John G., Visintine, Robert, Miller, Richard N.	1/1/1989	13	Not available	WRAIR	U	A - 01	Approved for public release; distribution is unlimited.	Final rept.	Reports of an increased proportion of AIDS cases occurring in small medium-sized cities suggest that the HIV epidemic may be spreading into locations that were previously characterized by their low HIV antibody prevalences. Studying the question of the geographic spread of the HIV infection epidemic (rather than the AIDS epidemic) has been difficult largely because most serial seroprevalence data have been gathered from cohorts of high risk individuals (e.g., homosexual, bisexual cohorts) in New York City, San Francisco, and other geographically circumscribed areas. The U.S. military applicant HIV screening data were used in the current report to examine rates and 24 month temporal trends in geographic areas characterized by their HIV endemicities. The data examined concern the seven most populous states and four hyperendemic metropolitan areas located with those states (New York City, Miami, Houston, and San Francisco). In the nonepidemic regions, seroprevalence rates increased among black and white applicants. Reprints.
ADA520721	Extending the Phase Zero Campaign Mindset	UNITED STATES EUROPEAN COMMAND APO NEW YORK 09128	Galvin, Thomas P.	1/1/2007	7	Not available	USEUCOM	U	A - 01	Approved for public release; distribution is unlimited.	Journal article	The above statement succinctly explains the central purpose behind Theater Security Cooperation (TSC) programs. In the U.S. European Command (USEUCOM) area of responsibility (AOR) alone, there reside dozens of nations whose stability is in serious question and whose problems affect not only surrounding nations but also the AOR as a whole. For example, ungoverned and misgoverned areas in Africa are providing safe havens for transnational terrorists and organized criminal elements seeking to attack U.S. properties and interests. Armed conflict is severely destabilizing, and often it arises from factors such as poor governance and struggles for power, endemic corruption, limited economic opportunities, long standing practices and traditions that violate human dignity, and humanitarian problems such as drugs, pandemic disease, HIV/AIDS, severe drought, or famine.
AD0718082	User's and Operator's Manual for the Local and Aggregate Total Emergency Health Care System Models. Volume II.	RESEARCH TRIANGLE INST DURHAM N C OPERATIONS RESEARCH AND ECONOMICS DIV	Pyecha, John N., Lyday, Russell O. , Jr., Botkin, Gerald M., Anderson, Helen S.	10/1/1970	179	RTI-R-OU-407-Vol-2	Not available	U	A - 01	Approved for public release; distribution is unlimited.	Final rept. Jun 68-Oct 70,	The purpose of this volume, is to provide the detailed instructions required to use the eight computer programs developed under this study. As reported in Volume I, two models were designed to assist medical preparedness planners in analyzing postattack health consequences. One of these models, the Aggregate Total Emergency Health Care System Model (the Aggregate Model), can be applied in the study of health related problems at the OCD area, state, OCD regional, or national levels. The other model, the Local Total Emergency Health Care System Model (the Local Model), is designed for single locality studies; i.e., any geographic area in which detailed results are desired for each Standard Location Area (SLA). The Local and Aggregate Models, although differing considerably in logic flow, are of similar design in that each consists of two submodels or programs that provide essentially the same type of output for their respective geographic areas: (1) an Immediate Effects Submodel that covers the period (days 0 through 30) during which the medical effort is directed toward improving the prognosis of the immediate weapon effects injuries, and (b) a Communicable Disease Submodel that covers days 31 through 365 and is directed toward prevention and cure of disease epidemics. These programs were designed as separate modules in order to save computer time while providing flexibility with regard to varying option parameters within each program without having to rerun all four programs. (Author)
ADA324313	NHRC Update. Issue Number 1-5.	NAVAL HEALTH RESEARCH CENTER SAN DIEGO CA	Not available	4/1/1997	21	Not available	NHRC	U	A - 01	Approved for public release; distribution is unlimited.	Bulletins for Mar 96-Apr 97.	CAPT Stephanie Brodine and her colleagues, including Dr. Frank Garland and Stan Ito from NHRC, and researchers from Walter Reed Army Institute of Research Retrovirology Lab, identified the first cases of U.S. natives infected with the HIV-1 strains causing the African and Asian epidemics. This study, published in the November 5, 1995 issue of Lancet, used new state-of-the-art laboratory techniques to identify the specific strains or subtypes of HIV. In the U.S. and Europe, nearly all of the HIV viruses are subtype B, whereas the predominant subtypes in Africa are A, C, and D. Subtype E predominates in Thailand. Differentiating HIV subtypes may have important implications in vaccine development, HIV diagnosis, and the epidemiology of the epidemic. Given the wide dispersal of HIV-1 subtypes internationally and the routine occurrence of international travel, it seems inevitable that strains other than subtype B eventually will spread in the USA. NHRC is in a unique position to address the question of the introduction of these divergent HIV subtypes into the U.S. as our HIV Central Registry allows identification of recently acquired HIV infections and our powerful databases enable tracking of personnel and their ships' movements.

ADA555216	Anticipating Viral Species Jumps: Bioinformatics and Data Needs	PENNSYLVANIA STATE UNIV STATE COLLEGE	Flanagan, Meg L.,Leighton, Terrance J.,Dudley, Joseph P.	6/1/2011	29	OSRD 2011 020	DTRA/FB	U	A - 01	Approved for public release; distribution is unlimited.	Not available	Viral species jumps (also called host jumps) occur when a virus acquires the ability to infect and spread among individuals of a new host species. Historical examples of animal viruses that jumped into human hosts include HIV, SARS coronavirus and influenza A virus. Globally, these viruses have exacted high socioeconomic and health costs. The ability to predict viral species jumps can reduce such costs by enabling swifter outbreak mitigation strategies and prevention of initial or secondary human infection. Currently, most emerging infectious disease surveillance efforts seek the ecological drivers behind spillover events - factors like climate, land use and population migrations driving infections that do not spread between humans. By contrast, we focus here on the evolutionary drivers behind species jumps - the genetic changes over time driving infections that spread efficiently among humans. We see an opportunity to apply field surveillance and laboratory data to better understand how viral species jumps occur. There are publicly available extant data that can be marshaled. To build a mechanistic framework of understanding, data must be integrated and accessible to users for analysis and modeling, as well as formulation and testing of hypotheses. In short, bioinformatics must be applied. To that end, the Defense Threat Reduction Agency's Advanced Systems and Concepts Office hosted a workshop that gathered computational biologists and information scientists to explore the types of data needed, the computational methods required, and suitable platforms to share information among interdisciplinary stakeholders.
ADA458930	Human Immunodeficiency Virus Type 1 (HIV-1) Viral Protein R (Vpr)-Mediated Cell Cycle Arrest: An Analysis of Current Mechanistic Models	UNIFORMED SERVICES UNIV OF THE HEALTH SCIENCES BETHESDA MD F EDWARD HEBERT SCHOOL OF MEDICINE	Sercovich, Mark J.	6/8/2006	90	Not available	USUHS	U	A - 01	Approved for public release; distribution is unlimited.	Master's thesis	Human immunodeficiency virus type I (HIV-1) infection causes acquired immunodeficiency syndrome (AIDS), the most globally devastating viral disease of the past 25 years. Development of effective HIV-1 preventative and therapeutic regimens have proven exceedingly difficult, as the virus has evolved sophisticated mechanisms for thwarting control efforts. A detailed understanding of HIV-1 molecular biology is therefore necessary in order to generate the effective and inexpensive prevention and treatment strategies required for AIDS pandemic curtailment. HIV-1 optimizes its transmissibility and propagation through continual change and coordination of its components' functions and life cycle processes with one another and with those of cellular components and processes. Comprehending the molecular bases for HIV-1's abilities to manipulate host cell components and processes is key to the identification of the virus's vulnerabilities. This thesis focuses on one identified effect, G2/M cell cycle arrest induction (1-5), of one highly conserved HIV-1 component, viral protein R (Vpr) (6, 7). A mechanistic understanding of this function is important because arrest at this cell cycle stage provides a selective advantage for the virus: transcription from the viral promoter more active during G2, allowing for increased viral replication (8- 14). Other reasons for the selective advantage of G2/M arrest, e.g. prevention or delay of cell death by mitotic catastrophe or apoptosis, are also possible (3, 15-23). Covering scientific publications through November 2005, this thesis explores the state of knowledge of the mechanism(s) underlying Vpr's ability to induce G2/M cell cycle arrest. The author's goal is to provide a disinterested analysis of the available mechanistic models and their supporting data with the hope of being helpful to the reader in some manner.

ADA579587	A High Explanatory Power Model of Foot and Mouth Disease Spread in Central California	NAVAL POSTGRADUATE SCHOOL MONTEREY CA	Alok, Diwya	3/1/2013	107	Not available	NPS	U	A - 01	Approved for public release; distribution is unlimited.	Master's thesis	A study conducted by Carpenter, O Brien, Hagerman and McCarl in 2011 estimates the economic impact of a foot and mouth disease (FMD) epidemic in the United States to be \$2.3 \$69.0 billion. We simulate an outbreak of FMD across central California using the InterSpread Plus simulation package. We use an experimental design that produces 102,400 epidemic simulation runs. Using the data from the simulations, we identify 16 critical disease and control parameters that have the greatest effect on the spread of FMD. A statistical model based on these 16 parameters and their interactions captures approximately 85% of the variability of the simulation model. The main takeaways of our analysis of FMD spread are as follows. The two most critical disease parameters are initial condition and local spread. The most critical disease control parameters are market movement and surveillance. Our experimental results indicate that if a typical premise sends an animal to market every 2.2 days instead of every day, we will see a 25% reduction in the mean number of cattle infected. Similarly, if there is less than a three day delay in between suspecting an FMD outbreak and declaring an FMD outbreak at dairy-like facilities, we see a 50% reduction in the number of infected cattle. Control measures cannot be taken in isolation. Our models show significant interaction effects between the most effective control measures market movement, and surveillance and other control measures such as tracing, vaccination and depopulation.
AD0700068	POSSIBLE RESERVOIRS OF RICKETTSIA PROWAZEKI IN NATURE,	NAVAL MEDICAL RESEARCH UNIT NO 3 CAIRO (EGYPT) DEPT OF MEDICAL ZOOLOGY	Dolgov,G. F.,Dutova,G. M.,Balaeva,N. M.,Vyukov,V. N.,Zhameva,Z. M.	1/1/1969	1	NAMRU-3-Trans-325	Trans-325	U	A - 01	Approved for public release; distribution is unlimited.	Not available	In recent years the appearance of many works has raised the question of revision of the anthroponotic concept of epidemic typhus fever. By complement-fixation reactions, we tested about 1600 head of cattle, horses, and sheep. Some sera were examined parallel with the Weil-Felix reaction and by neutralization of rickettsial toxic substances. Over 400 ticks (Hyalomma asiaticum P. and E. Schl., H. plumbeum Panz., Rhipicephalus turanicus B. Pom., and Dermacentor nuttalli O1.) were also collected and tested virologically. Results of serum analyses and tick examination in Khakass were negative. We also failed to isolate Rickettsia prowazeki from ticks in Kirgizia. Analysis of animal sera gave weak positive results in dilutions of 1:10 in 0.5-3% of cases. Thus, no data were obtained for the presence of natural foci of typhus fever in Khakass and Kirgizia. (Author)
AD1038059	COVERING THE SEAMS IN U.S. NATIONAL SECURITY BY APPLYING NETWORK AND TEAM ATTRIBUTES	AIR WAR COLLEGE MAXWELL AFB United States	LUDINGTON,JOHN III R	4/6/2017	35	Not available	Not available	U	A - 01	Approved for public release; distribution is unlimited.	Technical Report	Since its establishment by the National Security Act of 1947, the modern U.S. national security system has evolved as a result of legislation, presidential preference, and because of changes in the U.S. and international security environments. With each evolution, the system has found ways to function in dealing with a wide range of threats facing the country. At the same time, each evolution has created unintended consequences and even some weaknesses. Today, one such weakness is the seams that exist in the system. Organizational criteria like geography, functions, and responsibilities often create these seams. These seams are exactly the kinds of weaknesses that are exploited by modern transnational and transregional threats, such as terrorists, criminals, and peer military competitors. Even, non-traditional threats like pandemics and environmental challenges are often made worse because of seams in the U.S. national security system. Simple reorganization or restructuring of the system is unlikely to achieve a more optimum outcome, and would likely just create different seams. However, considering that the U.S. national security system is itself a network, focusing on improving on attributes advantageous to networks and teams has the potential to reduce the seams, enable the U.S. to seize and retain initiative, and make the U.S. system--the U.S. network--stronger, more responsive, and more adaptable as the security challenges of the modern environment continue to evolve and adapt.

ADA503228	Divorce and the Military	MARINE CORPS COMMAND AND STAFF COLL QUANTICO VA	Gordon, John T.	2/7/2006	14	Not available	USMC/CSC	U	A - 01	Approved for public release; distribution is unlimited.	Research paper	With increasing frequency, more service members deployed to combat zones are encountering ambushes on their flanks and rear by their closest allies: their spouses. Imagine the plight of a member of the United States military serving abroad in a combat zone: while deployed, his spouse leaves him, files for divorce, moves his children, and sells his possessions. During his deployment, he is frozen in a state of legal stasis, unable to defend himself. The convergence of no-fault divorce, imputed valuation of child support and adjustments, deployments, and the Uniformed Services Former Spouses Protection Act (USFSPA) has created a lucrative opportunity for civilian spouses. Existing laws and increased deployments are creating epidemic divorce rates and disparate impacts among the military. Immediate reform of existing divorce laws is required to reduce the inequality existent in military divorces today. Clearly the United States military needs to address these issues to ensure that military personnel can serve their country without distraction.
ADA492868	Asia and the Science and Politics of Pandemics. 3rd Revision	CENTER FOR NAVAL ANALYSES ALEXANDRIA VA	Bickford, Thomas,DuMont, Malia	4/1/2007	37	MISC- D0016151.A4- REV-3	CNO/DC	U	A - 01	Approved for public release; distribution is unlimited.	Conference rept.	On February 3, 2006, The CNA Corporation's Project Asia held a one-day conference entitled Asia and the Science and Politics of Pandemics. This conference brought together a broad group of policy-makers, health care professionals, and academics to discuss the political and scientific issues of prevention and planning for a possible pandemic in Asia. The goal of the conference was to focus on Asia as a potential epicenter of emerging diseases, discuss the response capacities of various Asian health systems, and explore health crises as political issues for regional governments in Asia.
ADA519129	Maximal Sensitive Dependence and the Optimal Path to Epidemic Extinction	NAVAL RESEARCH LAB WASHINGTON DC PLASMA PHYSICS DIV	Forgoston, Eric,Bianco, Simone,Shaw, Leah B.,Schwartz, Ira B.	1/1/2010	21	Not available	ONR	U	A - 01	Approved for public release; distribution is unlimited.	Not available	Extinction of an epidemic or a species is a rare event that occurs due to a large, rare stochastic fluctuation. Although the extinction process is dynamically unstable, it follows an optimal path that maximizes the probability of extinction. We show that the optimal path is also directly related to the finite-time Lyapunov exponents of the underlying dynamical system in that the optimal path displays maximum sensitivity to initial conditions. We consider several stochastic epidemic models, and examine the extinction process in a dynamical systems framework. Using the dynamics of the finite-time Lyapunov exponents as a constructive tool, we demonstrate that the dynamical systems viewpoint of extinction evolves naturally toward the optimal path.
ADA620603	Optimization of Influenza Antiviral Response in Texas	NAVAL POSTGRADUATE SCHOOL MONTEREY CA	Chambers, Travis L.	3/1/2015	111	Not available	NPS	U	A - 01	Approved for public release; distribution is unlimited.	Master's thesis	Influenza pandemics pose a serious threat to the global population. According to the United States Department of Health and Human Services in 2014, the Spanish flu of 1918 killed almost 100 million people worldwide and Simonsen, Spreeuwenberg, and Lustig in 2013 estimated that the Swine flu more recently killed approximately 180,000 people. Government agencies, from the United States Centers for Disease Control and Prevention down to state and local regions, are prepared to respond to potential influenza pandemics with antiviral, vaccine, and social interventions. Mathematical models can guide policies to saves lives. In this thesis, we create an optimization model, implemented in the online tool Texas Antiviral Release Scheduling (TAVRS) that provides the optimal geo-temporal antiviral release schedule to advise decision makers at the Texas Department of State Health Services. We input the antiviral release schedule into an independent disease-spread simulation model to measure the effectiveness of the optimal release schedule. While the TAVRS optimal antiviral release schedule performs comparably to a simple population-proportionate release schedule during a simulated mild 2009-like influenza pandemic, the TAVRS release schedules saves an additional 10,000 lives three to four times greater than the population-proportionate release schedule when responding to a severe 1918-like influenza pandemic.

ADA470502	Global Surveillance of Emerging Influenza Virus Genotypes by Mass Spectrometry	ARMY MEDICAL RESEARCH INST OF INFECTIOUS DISEASES FORT DETRICK MD	Sampath, Rangarajan,Russell, Kevin L.,Massire, Christian,Eshoo, Mark W.,Harpin, Vanessa,Blyn, Lawrence B.,Melton, Rachael,Ivy, Cristin,Pennella, Thuy,Li, Feng	5/30/2007	11	TR-07-010	USAMRIID	U	A - 01	Approved for public release; distribution is unlimited.	Journal article	Effective influenza surveillance requires new methods capable of rapid and inexpensive genomic analysis of evolving viral species for pandemic preparedness, to understand the evolution of circulating viral species, and for vaccine strain selection. We have developed one such approach based on previously described broad-range reverse transcription PCR/electrospray ionization mass spectrometry (RT -PCR/ESI-MS) technology. Methods and Principal Findings: Analysis of base compositions ofRT-PCR amplicons from influenza core gene segments (PB 1, PB2, P A, M, NS, NP) are used to provide sub-species identification and infer influenza virus Hand N subtypes. Using this approach, we detected and correctly identified 92 mammalian and avian influenza isolates, representing 30 different Hand N types, including 29 avian H5NI isolates.Further, direct analysis of 656 human clinical respiratory specimens collected over a seven-year period (1999-2006) showed correct identification of the viral species andsubtypes (>97% sensitivity and specificity). Base composition derived clusters inferred from this analysis showed 100% concordance to previously established clades. Ongoing surveillance of samples from the recent influenza virus seasons (2005-2006) showedevidence for emergence and establishment of new genotypes of circulating H3N2 strains worldwide. Mixed viral quasispecies were found in approximately 1% of these recentsamples providing a view into viral evolution. Conclusion/Significance: Thus, rapid R T PCR/ESI-MS analysis can be used to simultaneously identify all species of influenza viruses with clade-level resolution, identify mixed viral populations and monitor global spread and emergence of novel viral genotypes. This high throughput method promises to become an integral component of influenza surveillance.
ADA528689	Worldwide Emerging Environmental Issues Affecting the U.S. Military. September 2005 Report	FEDERATION OF UN ASSOCIATIONS WASHINGTON DC MILLENNIUM PROJECT	Not available	9/1/2005	17	Not available	AEPI/VA	U	A - 01	Approved for public release; distribution is unlimited.	Not available	Environment and global warming issues were mentioned in several speeches delivered by Heads of State and Governments at the UN Summit, however it was not a dominant theme. There were calls to ratify international treaties designed to tackle environmental and global warming problems, and agreement was reached to create a worldwide early warning system for all natural hazards and improve the Central Emergency Revolving Fund to ensure timely relief. Leaders of small island states warned that unless aggressive action is taken to deal with climate change to protect small island states, their people will become environmental refugees due to rising ocean levels. The Guiding Principles on Internal Displacement were recognized as an important international framework for the protection of internally displaced persons. Environment was listed along with the International Criminal Court, human rights, and disarmament as an issue that was not addressed strongly enough in the 2005 World Summit Outcome. It could be a mistake to interpret this as a decrease in environmental interest. Much political energy was dedicated to UN Security Council reform and international lobbying to reverse the US initial position to delete the Millennium Development Goals. Although environmental issues were relatively less prominent in this final UN Summit document than in the previous one, it is likely that environment-related actions and regulations will go beyond the agreed document due to momentum of improving international environmental agreements documented previously in these reports.

AD1009750	A 21st Century Science, Technology, and Innovation Strategy for Americas National Security	National Science and Technology Council (NSTC) Committee on Homeland and National Security Washington United States	Not available	5/1/2016	18	Not available	Not available	U	A - 01	Approved for public release; distribution is unlimited.	Technical Report	I am pleased to transmit to you A 21st Century Science, Technology, and Innovation Strategy for Americas National Security (the Strategy). Led by the National Science and Technology Council (NSTC) Committee on Homeland and National Security, in coordination with the Office of Science and Technology Policy, this Strategy reflects input from and deliberation among the science, technology, and innovation components of the Departments and Agencies responsible for carrying out the Nations national security mission. This Strategy sets forth how the U.S. national security science, technology, and innovation enterprise should evolve to address the challenges and opportunities imposed by a new landscape of national security technology concerns in the 21st century. The Strategy is informed by the central premise of the Presidents 2015 National Security Strategy: national security involves much more than military power and homeland defense. The Strategy recognizes that the national security science, technology, and innovation enterprise includes not just the scientists and engineers working in Federal and national laboratories, but also a much larger ecosystem of academic and industry stakeholders. The Strategy acknowledges that the enterprise must continue to drive advances in science, technology, and innovation to assure that the Nations military and homeland defense remains without peer. But the enterprise also must be able to respond effectively to new challenges, such as asymmetric threats enabled by the globalization of science and technology; threats to stability, such as natural disasters and the effects of climate change; and other humanitarian and security crises, such as epidemic disease.
ADA627947	Decreased Serologic Response in Vaccinated Military Recruits during 2011 Correspond to Genetic Drift in Concurrent Circulating Pandemic A/H1N1 Viruses	NAVAL HEALTH RESEARCH CENTER SAN DIEGO CA	Faix, Dennis J.,Hawksworth, Anthony W.,Myers, Christopher A.,Hansen, Christian J.,Ortiguerra, Ryan G.,Halpin, Rebecca,Wentworth, David,Pacha, Laura A.,Schwartz, Erica G.,Garcia, Shawn M.	4/13/2012	12	NHRC-12-09	NMRC/MD	U	A - 01	Approved for public release; distribution is unlimited.	Journal article	Background: Population-based febrile respiratory illness surveillance conducted by the Department of Defense contributes to an estimate of vaccine effectiveness. Between January and March 2011, 64 cases of 2009 A/H1N1 (pH1N1), including one fatality, were confirmed in immunized recruits at Fort Jackson, South Carolina, suggesting insufficient efficacy for the pH1N1 component of the live attenuated influenza vaccine (LAIV). Methodology/Principal Findings: To test serologic protection, serum samples were collected at least 30 days postvaccination from recruits at Fort Jackson (LAIV), Parris Island (LAIV and trivalent inactivated vaccine [TIV]) at Cape May, New Jersey (TIV) and responses measured against pre-vaccination sera. A subset of 78 LAIV and 64 TIV sera pairs from recruits who reported neither influenza vaccination in the prior year nor fever during training were tested by microneutralization (MN) and hemagglutination inhibition (HI) assays. MN results demonstrated that seroconversion in paired sera was greater in those who received TIV versus LAIV (74% and 37%). Additionally, the fold change associated with TIV vaccination was significantly different between circulating (2011) versus the vaccine strain (2009) of pH1N1 viruses (ANOVA p value = 0.0006). HI analyses revealed similar trends. Surface plasmon resonance (SPR) analysis revealed that the quantity, IgG/IgM ratios, and affinity of anti-HA antibodies were significantly greater in TIV vaccinees. Finally, sequence analysis of the HA1 gene in concurrent circulating 2011 pH1N1 isolates from Fort Jackson exhibited modest amino acid divergence from the vaccine strain. Conclusions/Significance: Among military recruits in 2011, serum antibody response differed by vaccine type (LAIV vs. TIV) and pH1N1 virus year (2009 vs. 2011). We hypothesize that antigen drift in circulating pH1N1 viruses contributed to reduce vaccine effectiveness at Fort Jackson.
AD0648103	HISTORY AND GEOGRAPHY OF PLAGUE IN CHINA	ARMY BIOLOGICAL DEFENSE RESEARCH CENTERFREDERICK MD	Kraminskii, V. A.	12/1/1964	28	TRANS-1257	ABL/MD	U	A - 01	Approved for public release; distribution is unlimited. Availability: Document partially illegible.	Journal article	Study of Chinese manuscripts and classic works of Chinese medicine shows that plague as a pestilential disease has been known in China since antiquity. During the intensive development of trade routes by means of sailing (wooden fleets, and also unsanitarly maintained steam fleets) numerous cases of ship-borne infected rats from plague foci of the southern seas occurred, leading to outbreaks and epidemics of port plague. Progress in ship-building, and also in the system of rat extermination and quarantine measures sharply remedied the situation. At present, the entry of plagues by sea is extremely rare (only 2% of ocean-going ships are infested with rats). As a result, port plague in China during the last several decades has essentially disappeared. This permits a better understanding of the structure of foci which have retained their activity until recent times.

ADA367779	Interactions of HIV-1 and HIV-2 in West Africa.	HARVARD UNIV CAMBRIDGE MA	Kanki, Phyllis	7/1/1999	31	Not available	USAMRMC	U	A - 01	Approved for public release; distribution is unlimited.	Annual rept.	Human immunodeficiency virus type 1 (HIV-1) and type 2 (HIV-2) are genetically and antigenically related viruses with distinct epidemiologic and biologic properties. Since its discovery in West Africa in 1985, various studies have suggested differences between HIV-2 and HIV-1 in geographic distribution, distinct temporal trends in the epidemic spread, and dramatic differences in perinatal and sexual transmission. Studies of HIV-2 infected individuals have shown a significantly slower progression to AIDS. This dramatic difference in pathogenicity provides a unique opportunity to identify viral and host immune mechanisms involved in a closely related virus system that is predicted to have an attenuated phenotype in vivo. This view gave rise to the hypothesis that infection with HIV-2 might provide protection against subsequent infection with the more pathogenic HIV-1. The striking conclusion was that HIV-2 did provide approx. 60% protection against subsequent infection with HIV-1, now evaluated for over 13 years of study. The natural experiment" of HIV-2's observed protection against HIV-1 infection represents an invaluable model in which important correlates of HIV-1 protection can be identified and characterized. We are hopeful that further comparative studies of these related immunodeficiency viruses will yield important information on the pathogenic mechanisms employed by HIV viruses and lead the way to the development of effective interventions for the prevention and control of the AIDS pandemic."
AD0810278	COMMISSION ON EPIDEMIOLOGICAL SURVEY	ARMED FORCES EPIDEMIOLOGICAL BOARD WASHINGTON DC	Alevizatos, A. C.,McKinney, R. W.,Felgin, R.. D.,McGann, V. G.,Carozza, F. A.	3/1/1967	23	Not available	USAMRDC	U	A - 01,23	Approved for public release; distribution is unlimited. Document partially illegible.	Summary of the annual rept. for fiscal year 1966	Contents: Clinical Studies of Venezuelan Equine Encephalomyelitis Vaccine Studies in Man; Venezuelan Equine Encephalomyelitis Vaccine Viremia Studies in Man; Changes in Whole Blood Amino Acids during Infection; Serological Studies on Staphylococcal Enterotoxin B; Mechanisms of Pyrogenicity of Staphylococcal Enterotoxin B; Recent Studies on Anthrax Toxin; Influence of Pneumococcal Infection on a Host Enzyme System; Alterations of Host Cellular Ribonucleic Acid Metabolism during Infection; Mechanisms of Endotoxin Tolerance; Typhoid Fever: Pathogenesis and Prevention; Studies on Rocky Mountain Spotted Fever: Serologic Response in Man to Vaccination with Combined Epidemic Typhus, Rocky Mountain Spotted Fever and Q Fever Vaccine; and Influence of Tularemia on Tularemia on Insulin Secretion.
AD0650888	RESULTS OF SMALLPOX REVACCINATION IN ADULTS IN 1957, 1960 AND 1962	ARMY BIOLOGICAL LABS FREDERICK MD	Smaga, M. F.	8/10/1964	8	TRANS-1186,TT67 61622	ABL/MD	U	A - 01	Approved for public release; distribution is unlimited.	Not available	Positive results from revaccinating adult persons using smallpox detritus in 1957, 1960, and 1962 were obtained from, respectively, 78, 46, and 84% of those inoculated. The influenza epidemic evidently cannot be the reason for the high inoculability upon the last revaccination, since in the same epidemiological situation inoculability was half as high before the preceding revaccination. The high inoculability upon revaccination in 1962 can be explained by the higher virulence of the vaccine. The inoculability of the vaccine depended also on the results of the preceding revaccination: the smallest number of positive skin reactions (8%) on repeated reimmunization was observed for inoculated persons who had evidenced strongly positive postvaccinal reaction the last time.
ADA467769	The Demise of Russian Health Capital: The Continuity of Ineffective Government Policy	NAVAL POSTGRADUATE SCHOOL MONTEREY CA	Van Wagoner, Jarad L.	3/1/2007	111	Not available	NPS	U	A - 01	Approved for public release; distribution is unlimited.	Master's thesis	Health capital in Russia is in steep decline. Today the Russian population is decreasing by more than 700,000 per annum. Life expectancy has decreased significantly since it peaked in the mid-1960s. Infectious diseases, including an emerging HIV/AIDS epidemic, are threatening to worsen Russia's health crisis and further overwhelm a dilapidated health care system. Both Soviet and Russian government policies aimed at preserving health capital have consistently failed. Government policies and intervention have contributed to the crisis. The purpose of this research is to find a possible explanation for the continuity in ineffective government policy regarding health care. The analysis indicates that a paternalistic political culture permeates the political process. As a result, the government is free to pursue its own agenda without a significant degree of accountability to the population. Issues affecting health capital are not a priority of the Russian government, which has resulted in short-sighted and uncoordinated government policy and programs that are under-funded. Long-term improvements to Russia's health capital will require a shift in the Russian political culture. State-society relations must evolve to allow and encourage greater interaction between state officials and the general population. Without government accountability or individual responsibility, health capital in Russia will continue to decline.



ADA450527	Vulnerability of Concentrated Critical Infrastructure: Background and Policy Options	LIBRARY OF CONGRESS WASHINGTON DC CONGRESSIONAL RESEARCH SERVICE	Parfomak, Paul W.	12/21/2005	25	CRS-RL33206	CRS/DC	U	A - 01	Approved for public release; distribution is unlimited.	Congressional rept.	Critical infrastructure consists of systems and assets so vital to the United States that their incapacity would harm the nation's physical security, economic security, or public health. Critical infrastructure is often geographically concentrated, so it may be distinctly vulnerable to events like natural disasters, epidemics, and certain kinds of terrorist attacks. Disruption of concentrated infrastructure could have greatly disproportionate effects, with costs potentially running into billions of dollars and spreading far beyond the immediate area of disturbance. Hurricanes Katrina and Rita demonstrated this kind of geographic vulnerability by disrupting a substantial part of the U.S. energy and chemical sectors in 2005. As the nation's response to recent hurricanes and other disasters continues, and as its homeland security activities evolve, Congress is examining federal policies affecting the geographic concentration and vulnerability of critical infrastructure, including prescriptive siting, economic incentives, environmental regulation, and economic regulation. Some analysts may argue that little government intervention is necessary to alleviate geographic vulnerabilities of critical infrastructure because the private sector will adjust its practices out of its own financial interest. However, if Congress concludes that federal intervention is needed, it may employ a number of policy options to encourage geographic dispersion, ensure survivability, or ensure that effective infrastructure recovery capabilities are in place to mitigate impacts of concentrated infrastructure disruption. Addressing geographic vulnerabilities may call for a combination of options. Congress may also consider whether other legislative proposals with the potential to affect critical infrastructure development are likely to relieve or exacerbate geographic vulnerability.
AD1085527	The Spanish Flu in US Forces and the Modern Response to Surveillance	59th Medical Wing San Antonio United States	Barsoumian,Alice E.	11/29/2019	75	20019	20019	U	A - 01	Approved for public release; distribution is unlimited.	Conference Paper	The influenza pandemic of 1918 killed more people than died in World War I. True. WWI casualties estimated at 16 million. 1918 influenza epidemic casualties estimated at 50 million (some estimate 100 million). Army: > 1 million hospitalized, > 44,000 deaths. Navy: approximately 5,000 deaths. Death rate was 25% higher in Army population than civilian population of the US.
ADA499360	Russia's Demographic Trend: A Population in Steady Decline	ARMY WAR COLL CARLISLE BARRACKS PA	Wedding, Thomas E.	3/26/2009	34	Not available	USAWC	U	A - 01	Approved for public release; distribution is unlimited.	Research paper	The Russian Federation is experiencing a population decline unprecedented in modern human history. This decline is not due to war or a single epidemic, but a combination of demographic factors that are irreversible in the short term: birth rates well below replacement level, abnormally high death rates, and lowered life expectancies. Exacerbating the trend in the future will be the high rate of HIV/AIDS infection Russia is experiencing. This population decline will impact three factors that are inherent in Great Power status: societal stability, economic strength, and military effectiveness. Russia's ability to project power, even within its historical sphere of influence, may come under strain because of this population decline. Long-term population decline may force Russia to focus internally, potentially affecting its ability to remain a significant influence in the global arena. The population decline has the potential to adversely impact Russia's military manpower levels, its ability to effectively police its borders, and ensure future military force capabilities sufficient to maintain its status as a Great Power.
ADA611759	The Failure of Success: How the Bathsheba Syndrome and Emotional Intelligence Contribute to the Downfall of Army Organizational-Level Leaders	ARMY COMMAND AND GENERAL STAFF COLLEGE FORT LEAVENWORTH KS	Minear, Matthew R.	6/13/2014	85	Not available	USACGSC	U	A - 01	Approved for public release; distribution is unlimited.	Master's thesis	In the last decade of military conflict, the United States Army has dealt with an epidemic of organizational-level leaders committing moral and ethical violations. Many of these leaders were commissioned officers serving at the highest ranks of the military. They did not display any previous indications of this behavior and the military classified their service as exemplary. This thesis examined four case studies to determine if there was a possibility that the success of these leaders, the Emotional Intelligence that each of them seemed to possess, and the factors of the Bathsheba Syndrome contributed to their downfall. The failures of these leaders ranged from adulterous behavior in the case of General David H. Petraeus and General Kevin P. Byrnes, to abuse of government funds and privileges by General William E. Kip Ward, to finally the fostering of inappropriate command climates and abuse of subordinates with Lieutenant General Patrick J. O Reilly. The four case studies demonstrated that each of these leaders was susceptible or displayed the conditions of the Bathsheba Syndrome and that the Emotional Intelligence that each of them possessed was a factor in their failures.

ADA559691	Dynamic Resource Allocation in Disaster Response: Tradeoffs in Wildfire Suppression	NAVAL POSTGRADUATE SCHOOL MONTEREY CA DEPT OF OPERATIONS RESEARCH	Petrovic, Nada,Alderson, David L.,Carlson, Jean M.	4/13/2012	10	Not available	ONR	U	A - 01	Approved for public release; distribution is unlimited.	Journal article	Challenges associated with the allocation of limited resources to mitigate the impact of natural disasters inspire fundamentally new theoretical questions for dynamic decision making in coupled human and natural systems. Wildfires are one of several types of disaster phenomena, including oil spills and disease epidemics, where (1) the disaster evolves on the same timescale as the response effort, and (2) delays in response can lead to increased disaster severity and thus greater demand for resources. We introduce a minimal stochastic process to represent wildfire progression that nonetheless accurately captures the heavy tailed statistical distribution of fire sizes observed in nature. We then couple this model for fire spread to a series of response models that isolate fundamental tradeoffs both in the strength and timing of response and also in division of limited resources across multiple competing suppression efforts. Using this framework, we compute optimal strategies for decision making scenarios that arise in fire response policy.
ADA434741	National Defense University Symposium, Prospects for Security in the Middle East, Panel 3 - Proliferation and Arms Control - Regional Reactions	WOODROW WILSON INTERNATIONAL CENTER FOR SCHOLARS WASHINGTON DC ASIA PROGRAM	Litwak, Robert S.	4/20/2005	10	NDU	Not available	U	A - 01	Approved for public release; distribution is unlimited.	Not available	Two alternative nonproliferation precedents were set in 2003: in Iraq, a change of regime; in Libya, a change in a regime. In March, U.S. and British military forces invaded Iraq to coercively disarm that country of its presumed weapons of mass destruction (WMD) stockpiles. In December, only eight months after the fall of Baghdad, the British and U.S. governments jointly announced the startling revelation that secret negotiations had yielded a commitment by Libyan leader Mohammad Qaddafi to verifiably relinquish his country's covert WMD capabilities. President Bush stated that by this commitment to conform to international nonproliferation norms, Libya had begun the process of rejoining the community of nations." Administration officials were quick to link the Libyan development to the Iraq war
ADA449552	A System Overview of the Electronic Surveillance System for the Early Notification of Community-based Epidemics	JOHNS HOPKINS UNIV LAUREL MD APPLIED PHYSICS LAB	Lombardo, Joe,Wojcik, Rich,Loschen, Wayne,Mansfield, Jay	11/15/2004	26	Not available	WRAIR/MD	U	A - 01	Approved for public release; distribution is unlimited.	Briefing charts	SUMMARY & CONCLUSIONS: (1) ESSENCE is the first system to integrate both military and civilian health indicator data for early notification of health events. (2) ESSENCE versions are being used for public health surveillance of naturally occurring diseases as well as bioterrorist events. (3) Public health surveillance has been around since the 14th century. Recent advances in information technology and outbreak detection algorithms have advanced disease surveillance to become an important factor in identification and management of major health events.
AD0287069	A CLINICAL CLASSIFICATION OF VERTIGO	SCHOOL OF AEROSPACE MEDICINE BROOKS AFB TEX	FUREY,JOSEPH A.,KRAUS,RALPH N.	4/1/1962	1	Not available	Not available	U	A - 01	Approved for public release; distribution is unlimited.	Not available	A comprehensive survey of the literature on the clinical entities epidemic vertigo, acute toxic labyrinthitis, atypical Meniere's disease, and pseudo-Meniere's syndrome was made. Although these 5 syndromes have more similar than dissimilar characteristics, slight differences are pointed out. A review of 25 consultation patients for single or recurrent episodes of vertigo without significant cochlear involvement is presented. Finally, a clinical classification which offers promise is suggested. This classification system is based on anatomic location, not etiology, and is similar to Lederer's localization of facial nerve lesions by presenting symptoms. It classifies vertigo as that produced by: (1) peripheral vestibulopathy, a term devised for involvement of the peripheral anatomic portions of the vestibular system; (2) central vestibulopathy, an involvement of the retrolabyrinthine central anatomic areas of the vestibular system; (3) idiopathic vestibulopathy, in which vertigo is produced by either an unknown cause or, in the case of postural vertigo, by involvement of either the central or peripheral regions. As a catchall term, the use of idiopathic vestibulopathy or idiopathic vertigo is recommended. (Author)
ADA387184	Testimony on Drug Treatment Alternatives to Incarceration	RAND CORP SANTA MONICA CA	Iguchi, Martin Y.	4/1/2000	6	RAND/CT-169	XD	U	A - 01	Approved for public release; distribution is unlimited.	Not available	Over the past several decades, lawmakers in the United States have responded to the drug epidemic with tougher laws and longer sentences in an attempt to deter drug use. The resulting increase in drug cases has seriously overloaded judicial dockets creating a need for reasoned alternatives. In 1992, the Drug Policy Research Center conducted a drug policy seminar game involving Florida public officials that anticipated this increase in cases as well as the need to provide drug abuse treatment within the criminal justice system. Players in that policy game focused, as we are doing today, on the need to provide criminal offenders with drug abuse treatment as an alternative to incarceration. This emphasis was consistent with our drug policy modeling work that indicated treatment may well be a more cost-effective way to spend additional funds intended to reduce cocaine use than other options, such as domestic enforcement, interdiction, or source country control.

AD1088156	Development of a New, More Effective Live-Attenuated Influenza Vaccine: An Essential Platform for Future Pandemic Protection	University of Rochester Rochester United States	Dewhurst,Stephen	9/1/2019	26	Not available	Not available	U	A - 01	Approved for public release; distribution is unlimited.	Technical Report,01 Sep 2018,31 Aug 2019	Vaccination is the most cost-effective approach by which the spread of a pandemic influenza virus could be prevented, and severe disease reduced. However, current influenza vaccines have had poor efficacy. Thus, it is very important to develop a new and more effective live-attenuated influenza vaccine (LAIV). We hypothesize that by understanding the molecular basis for the temperature sensitive (ts) and attenuated (att) phenotypes of LAIV, it will be possible to develop a new, more effective live-attenuated influenza vaccine that leverages LAIVs superior ability to protect against infection by diverse influenza viruses. Our goal is to develop a new and improved LAIV that has enhanced safety and efficacy, due to (1) a greater temperature sensitivity than current LAIVs, resulting in viral replication only in the lower temperatures of the nasal cavity and extreme upper airway and (2) high levels of virus gene expression but poor replication resulting in abundant protein expression (and immunogenicity) but minimal production of infectious progeny virus.
ADA502105	The Dry Aerosol Deposition Device (DADD): An Instrument for Depositing Microbial Aerosols onto Surfaces	APPLIED RESEARCH ASSOCIATES INC TYNDALL AFB FL	Heimbuch, Brian K.,Kinney, Kimberly R.,Nichols, Robert K.,Wander, Joseph D.	12/1/2008	17	AFRL-RX-TY-TR-2008-4592	TR-2008-4592,AFRL-RX-TY	U	A - 01	Approved for public release; distribution is unlimited.	Final rept. 1 Oct 2004-2 Oct 2008	The advent -- 60 years after the concept was first proposed -- of practical self-decontaminating materials coincides with international efforts to prepare for global viral epidemics to highlight a need for a method to rapidly and reproducibly contaminate surfaces with pathogenic bioaerosol particles and representative surrogates. Slow rotation of a single collection stage in a cascade impactor downstream of a Collision nebulizer is demonstrated to deposit by impaction a rotationally symmetric distribution of particles containing a single spore of Bacillus globigii or vegetative Staphylococcus aureus bacterium. The coefficient of variation observed for deposition on glass plates was approx. 14%, significantly less than the acceptance criterion of 20%, and deposition time is approx. 20 min. Particle size distribution can be manipulated -- by changing the nozzle in the Collision, by changing the concentration of inert organics added to the atomization mixture, or both -- suggesting a possibility of selectively depositing larger particles containing multiple organisms.
ADA519351	Insect Outbreaks, Host-Pathogen Interactions, and Induced Plant Defenses	NAVAL ACADEMY ANNAPOLIS MD DEPT OF CHEMISTRY	Elder, Bret D.,Rehill, Brian J.,Dwyer, Greg	9/30/2009	13	Not available	USNA-DOC	U	A - 01	Approved for public release; distribution is unlimited.	Research rept.	
ADA429398	Airborne Transmission of Communicable Infection - The Elusive Pathway	ARMY MEDICAL RESEARCH INST OF INFECTIOUS DISEASES FORT DETRICK MD AEROBIOLOGY DIV	Roy, Chad J.,Milton, Donald K.	4/22/2004	4	RPP-04-254	USAMRIID	U	A - 01	Approved for public release; distribution is unlimited.	Journal article	
ADA592646	Obesity: A United States Strategic Imperative	DEPARTMENT OF VETERANS AFFAIRS WASHINGTON DC	Appenzeller, George N.	4/1/2013	72	Not available	USAWC	U	A - 01	Approved for public release; distribution is unlimited.	Civilian research project	The prevalence of obesity within the United States is widely recognized as a leading cause of death, chronic disease and health care costs. In 2010, 35.7% of adults and 16.9% of children were obese, approximately 90 million Americans. The American Heart Association estimates medical costs from obesity in 2030 will be 861-957 billion dollars, or 16-18% of the United States health budget. However, this only scratches the surface of the total economic and strategic impact. The military, while predominantly affected in recruitment and retention, sees clear impacts on readiness, power projection, manpower utilization and resource allocation that will become increasingly important as budgets continue to decline. This manuscript reviews the effects of the growing problem of obesity in the United States and its impact on the military, Veteran and civilian populations, as well as, obesity s effect on the military, economic and diplomatic elements of national power. The imperative for and the benefits of addressing this epidemic are discussed, along with current programs and planning efforts. It concludes with recommendations for military, Veterans Affairs and civilian policy makers.

AD1027830	Evaluation of a National Call Center and a Local Alerts System for Detection of New Cases of Ebola Virus Disease - Guinea, 2014-2015	NAVAL HEALTH RESEARCH CENTER SAN DIEGO CA SAN DIEGO United States	Lee,Christopher T,Bulterys,Marc,Martel ,Lise D,Dahl,Benjamin A	3/11/2016	5	16-11,NMRC,BUMED	Not available	U	A - 01	Approved for public release; distribution is unlimited.	Journal Article	The epidemic of Ebola virus disease (Ebola) in West Africa began in Guinea in late 2013, and on August 8, 2014, the World Health Organization (WHO) declared the epidemic a Public Health Emergency of International Concern. Guinea was declared Ebola-free on December 29, 2015, and is under a 90 day period of enhanced surveillance, following 3,351 confirmed and 453 probable cases of Ebola and 2,536 deaths. Passive surveillance for Ebola in Guinea has been conducted principally through the use of a telephone alert system. Community members and health facilities report deaths and suspected Ebola cases to local alert numbers operated by prefecture health departments or to a national toll-free call center. The national call center additionally functions as a source of public health information by responding to questions from the public about Ebola. To evaluate the sensitivity of the two systems and compare the sensitivity of the national call center with the local alerts system, the CDC country team performed probabilistic record linkage of the combined prefecture alerts database, as well as the national call center database, with the national viral hemorrhagic fever (VHF) database; the VHF database contains records of all known confirmed Ebola cases. Among 17,309 alert calls analyzed from the national call center, 71 were linked to 1,838 confirmed Ebola cases in the VHF database, yielding a sensitivity of 3.9%. The sensitivity of the national call center was highest in the capital city of Conakry (11.4% ) and lower in other prefectures. In comparison, the local alerts system had a sensitivity of 51.1%. Local public health infrastructure plays an important role in surveillance in an epidemic setting.
ADA495568	Use of an Electronic Monitoring System for Self-Reporting Smallpox Vaccine Reactions	RAND CORP PITTSBURGH PA	Olmsted, Stuart S.,Grabenstein, John D.,Jain, Arvind K.,Comerford, William,Giambo, Pamela,Johnson, Pamela,Mopsik, Judie,Zimmerman, S. R.,Lurie, Nicole	1/1/2005	10	Not available	OSG	U	A - 01	Approved for public release; distribution is unlimited.	Journal article	Tracking vaccine reactions and adverse events during a large-scale vaccination program such as the recent smallpox program or a pandemic flu outbreak will be a challenge. We report on vaccine reaction data collected using a novel telephone- and web-based electronic reporting system. The system was used to monitor vaccinees during the U.S. Army's smallpox vaccination campaign, which was part of the national program to prepare against biological attack. In addition, we report on the time course of events after smallpox vaccination based on the self-reported data and evaluate the validity and reliability of self-reported take information after smallpox vaccination.
ADA345094	JPRS Report. Science & Technology: China.	JOINT PUBLICATIONS RESEARCH SERVICE ARLINGTON VA	Not available	5/16/1989	182	JPRS-CST-89-010	XD	U	A - 01	Approved for public release; distribution is unlimited.	Not available	This report contains translations/transcriptions of articles and/or broadcasts on science and technology from China. Titles include: State of Science, Technology Legislation Reviewed; Kind of Predictive Intercept for Terminal Guidance; Conductive Polyacene-Carbon Fiber Composites; Edulinine Analgesia, Its Mechanism of Action; Preliminary Study of Epidemic Hemorrhagic Fever (EHF) in Guizhou Province; Study of Hepatitis Delta Virus Infection in China; Overall Situation Described for Computer Industry Planning; Guided Missile Storage/Transport System; Dynamic Error Analysis of Radar Antenna Axial Angle Encoder; Military Telephone Exchange Completed; Beijing Electron-Positron Collider; and others.
ADA589523	Obesity: A Strategic and Leadership Challenge for the Chilean Army	Not available	Iribarra Flores, Jean P.	3/1/2013	48	Not available	USAWC	U	A - 01	Approved for public release; distribution is unlimited.	Research paper	Obesity has been declared a pandemic" of the 21st Century.
AD0737323	Soviet Cybernetics Review. Volume 1, Number 6,	RAND CORP SANTA MONICA CALIF	Holland,Wade B.	11/1/1971	68	R-700/6-PR	Not available	U	A - 01	Approved for public release; distribution is unlimited.	Not available	Noteworthy among many articles on implementing the Party Congress directives to push automation is a Science and Technology editorial warning against a narrow, production-oriented approach--a broad, socio-economic approach is needed. A Pravda editorial recounts barriers to automated production control; a Socialist Industry article specifies them with unusual directness--lack of authority to match responsibility for automation, unrealistic training, little help from some advisory institutes, nondissemination of successful methods. Other articles discuss specific problems. Irkutsk is experimenting with a regionwide control/management system. Centralized territorial servicing of Minsk computers is highly successful in Riga but has not been adopted elsewhere or for other makes. The goal of 12-15,000 Ryad computers, publicized abroad, has yet to see print at home; the internal version is given. Other articles discuss information retrieval; tracking the Salyut orbital station; computer grading of written examinations and prediction of epidemics; establishment of an Administration of Scientific Instrument Construction. (Author)

AD0609752	HISTORICAL INCIDENTS OF EXTREME OVERCROWDING	BUREAU OF SOCIAL SCIENCE RESEARCH INC WASHINGTON DC	Biderman, Albert D., Louria, Margot, Bacchus, Joan	3/1/1963	201	BSSR-354-5	OCD	U	A - 01	Approved for public release; distribution is unlimited.	Final rept.	The primary orientation of the review was to gain knowledge of possible hazards to life and health under conditions of overcrowding that might occur in civil defense shelters. Various types of historical incidents have produced degrees of crowding--along with associated noxious and deprivational circumstances--far more severe and of longer duration than has been or can be subject to experimental test. Conditions beyond those ordinarily accepted as the limits of human tolerance have been withstood on many occasions by large proportions of the victims of certain catastrophic occurrences. In a number of other circumstances, including some involving only moderately intense crowding, very high death and impairment rates have been present. Physical crowding, per se, is not regarded as a fruitful unitary concept for examining the differences between high and low casualty events. For most of the range of densities, physical crowding has significance only in interdependent relationship with many other variable features of the entire situation, including environmental, structural, temporal, psychological, and social features. The acts of oppressive captors and epidemic disease were the most frequent direct causes of high fatality in the incidents reviewed.
ADA528226	Seasonal Influenza Vaccine and Protection against Pandemic (H1N1) 2009-Associated Illness Among US Military Personnel	ARMED FORCES HEALTH SURVEILLANCE CENTER SILVER SPRING MD	Johns, Matthew C., Eick, Angelia A., Blazes, David L., Lee, Seung-eun, Perdue, Christopher L., Lipnick, Robert, Vest, Kelly G., Russell, Kevin L., DeFraitess, Robert F., Sanchez, Jose L.	5/1/2010	9	Not available	AFHSC	U	A - 01	Approved for public release; distribution is unlimited.	Journal article	A novel A/H1N1 virus is the cause of the present influenza pandemic; vaccination is a key countermeasure however, few data assessing prior seasonal vaccine effectiveness (VE) against the pandemic strain of H1N1 (pH1N1) virus are available. Materials and Methods: Surveillance of influenza-related medical encounter data of active duty military service members stationed in the United States during the period of April-October 2009 with comparison of pH1N1-confirmed cases and location and date-matched controls. Crude odds ratios (OR) and VE estimates for immunized versus non-immunized were calculated as well as adjusted OR (AOR) controlling for sex, age group, and history of prior influenza vaccination. Separate stratified VE analyses by vaccine type (trivalent inactivated [TIV] or live attenuated [LAIV]), age groups and hospitalization status were also performed. For the period of April 20 to October 15, 2009, a total of 1,205 cases of pH1N1-confirmed cases were reported, 966 (80%) among males and over one-half (58%) under 25 years of age. Overall VE for service members was found to be 45% (95% CI, 33 to 55%). Immunization with prior season's TIV (VE = 44%, 95% CI, 32 to 54%) as well as LAIV (VE = 24%, 95% CI, 6 to 38%) were both found to be associated with protection. Of significance, VE against a severe disease outcome was higher (VE = 62%, 95% CI, 14 to 84%) than against milder outcomes (VE = 42%, 95% CI, 29 to 53%). Conclusion: A moderate association with protection against clinically apparent, laboratory-confirmed Pandemic (H1N1) 2009-associated illness was found for immunization with either TIV or LAIV 2008-09 seasonal influenza vaccines. This association with protection was found to be especially apparent for severe disease as compared to milder outcome, as well as in the youngest and older populations.
ADA501337	Honduran-U.S. Relations	LIBRARY OF CONGRESS WASHINGTON DC CONGRESSIONAL RESEARCH SERVICE	Meyer, Peter J., Sullivan, Mark P.	6/8/2009	19	CRS-RL34027	CRS/DC	U	A - 01	Approved for public release; distribution is unlimited.	Congressional rept.	The Central American nation of Honduras, one of the hemisphere's poorest countries, faces significant challenges in the areas of crime, human rights, and improving overall economic and living conditions. While traditional agricultural exports of coffee and bananas are still important for the economy, nontraditional sectors, especially the maquiladora, or export-processing industry, have grown significantly over the past decade. Among the country's development challenges are a poverty rate over 60%, high infant mortality, and a significant HIV/AIDS epidemic. Despite these challenges, increased public spending on health and education have reaped significant improvements in development indicators over the past decade. Current President Manuel Zelaya of the Liberal Party won a four-year term in the November 2005 elections. The country has enjoyed 27 years of uninterrupted elected civilian democratic rule. The economy, which grew 6.3% in 2007 and is expected to have grown 4% in 2008, has benefitted from significant debt reduction by the international financial institutions that is freeing government resources to finance poverty-reduction programs. The U.S. recession and global financial crisis, however, are expected to slow Honduran economic growth sharply in 2009.

AD1034171	Defense Health Board Recommendations Pertaining to Pandemic Influenza Preparedness and Response	DEFENSE HEALTH BOARD FALLS CHURCH VA FALLS CHURCH United States	Not available	9/11/2009	9	Not available	Not available	U	A - 01	Approved for public release; distribution is unlimited.	Technical Report	At the request of Dr. Winkenwerder in a memorandum dated 1 December 2005, the Select Subcommittee on Pandemic Influenza Response and Preparedness was established in order to advise the Surgeons General and Assistant Secretary of Defense for Health Affairs on matters related to Department of Defense (DoD) pandemic influenza preparedness and response. The charge of the Subcommittee included but was not limited to providing recommendations for optimizing influenza surveillance processes and preparations for a pandemic. The Select Subcommittee on Pandemic Influenza Response and Preparedness was renamed the Pandemic Influenza Preparedness Subpanel following the transition of the Armed Forces Epidemiological Board to the Defense Health Board (DHB).
ADA282710	Biological Characterization of HIV-2	HARVARD SCHOOL OF PUBLIC HEALTH BOSTON MA	Kanki, Phyllis J.	4/3/1994	46	Not available	USAMRDALC	U	A - 01	Approved for public release; distribution is unlimited.	Final rept. 28 Sep 1990- 27 Sep 1993	Our data on the biology of HIV-2 suggest that this virus has a distinct biology from that of its closest relative HIV-1. It was therefore relevant to assess these differences in populations infected with significant rates of both HIV-2 and HIV-1. Senegal is such a West African country, and the studies established there have provided important new information on the natural history and epidemiology of HIV-2. The prolonged incubation period for HIVs in general suggest that much can be learned from the evaluation of infected individuals over time. In this contract we have described differences in the heterosexual transmission, incubation period to disease and epidemic curves of HIV-2 compared to HIV-1. A number of virologic and immunologic differences between these viral infections have been described which may play a role in these different pathogenic potentials and biologics. Our studies conducted to date, have already indicated differences in the above virus-host interactions between HIV-2 and HIV-1. Continued comparative studies contribute to our overall understanding of HIV pathogenesis. Human retroviruses, AIDS, HIV-1, HIV-2, SIV, West Africa, Vaccines, Biology, Biotechnology, RAD I
ADA485674	The National Security Strategy of the United Kingdom: Security in an Interdependent World	MINISTRY OF DEFENCE LONDON (UNITED KINGDOM)	Not available	3/1/2008	65	Not available	MIN-DEF	U	A - 01	Approved for public release; distribution is unlimited.	Not available	Providing security for the nation and for its citizens remains the most important responsibility of government. Since the end of the Cold War, the international landscape has been transformed. The opposition between two power blocs has been replaced by a more complex and unpredictable set of relationships. Economic trends, including more open global markets, and technological trends, particularly in communications, have strengthened the connections between individuals, businesses, societies and economies. Travel is faster and cheaper than ever, the flow of ideas and capital around the world can be almost instantaneous, and distances between people and events are becoming less relevant. All those are positive changes, empowering individuals and creating new opportunities for businesses, organisations and whole nations. But they also create new challenges. If the international landscape as a whole is increasingly complex and unpredictable, so too is the security landscape. No state threatens the United Kingdom directly. The Cold War threat has been replaced by a diverse but interconnected set of threats and risks, which affect the United Kingdom directly and also have the potential to undermine wider international stability. They include international terrorism, weapons of mass destruction, conflicts and failed states, pandemics, and transnational crime. These and other threats and risks are driven by a diverse and interconnected set of underlying factors, including climate change, competition for energy, poverty and poor governance, demographic changes and globalisation.
ADA956022	Maridi Haemorrhagic Fever,	ARMY MEDICAL RESEARCH INST OF INFECTIOUS DISEASES FORT DETRICK MD	Knobloch, J.,Dietrich, M.,Peters, D.,Nielsen, G.,Schumacher, H. H.	1/1/1977	21	USAMRIID-MUL- 824	Not available	U	A - 01	Approved for public release; distribution is unlimited.	Not available	In the period from June to November 1976, there occurred in the Sudan and in Zaire - at first isolated, and then in epidemic form - cases of a disease with a high mortality rate that, according to its symptomatic, could have been yellow fever or Lassa fever. This report contains our observations of the course of this disease and the findings of hematological, virological, histological and immuno-diagnostic analyses that show that this was a disease similar to the Marburg virus disease that first appeared in 1967. We obtained blood samples from acutely ill patients at the hospital in Maridi as well as liver tissue from one deceased patient; these samples were given to an official of the WHO, packed in dry ice, for isolation of the virus at the Microbiological Research Establishment (MRE) in Porton Down, England.

AD0699684	ON THE QUESTION OF EPIDEMIOLOGY AND INCIDENCE OF TICKBORNE ENCEPHALITIS BY UNKNOWN MEANS OF INFECTION,	NAVAL MEDICAL RESEARCH UNIT NO 3 CAIRO (EGYPT) DEPT OF MEDICAL ZOOLOGY	Yagodinskii,V. N.,Skvortsov,B. I.	1/1/1969	2	NAMRU-3-Trans-338	Trans-338	U	A - 01	Approved for public release; distribution is unlimited. PORTIONS OF THIS DOCUMENT ARE NOT FULLY LEGIBLE.	Not available	At present, the infection mechanism of tickborne encephalitis cannot be established in 15-20% of cases. Until now there are no indications of the epidemiologic role played by Ixodes persulcatus P. Sch. males. Special tests have shown that I. persulcatus males attack warmblooded animals and man. The duration of their feeding depends on the proximity of the blood vessels and lasts from 5 minutes to 1-1/2 hours. Males begin to attach on the back surface of a human forearm 10-12 minutes after being placed there and feed for 15-30 minutes. Upon being disturbed, they rapidly withdraw their hypostome and can reattach after 3-7 minutes. Tickborne encephalitis virus is isolated from suspensions of males with the same frequency as from females. In 1958 and 1961, the infection was induced in white mice from bites of male ticks. It is obvious that certain cases of encephalitis can be associated with ixodid males, the bites of which are of short duration and painless. It is also possible, that the epidemic occurrence among the population depends precisely on male tick bites.
ADA239391	Molecular Characterization of Attenuated Junin Virus Variants	LA PLATA UNIV (ARGENTINA) FACULTAD DE CIENCIAS EXACTAS	Romanowski, Victor,Ghiringhelli, Pablo D.,Piboul, Mariel,Albarino, Cesar G.	12/15/1990	36	Not available	Not available	U	A - 01	Approved for public release; distribution is unlimited.	Midterm rept. 15 May 89-14 Nov 90,	Junin virus, one of the few human pathogenic arenaviruses, is the etiologic agent of Argentine hemorrhagic fever (AHF). The clinical symptoms of AHF include hematologic, neurologic, cardiovascular, renal and immunologic alterations. The mortality rate may be as high as 30%, but early treatment with immune plasma reduces the fatal cases to less than 2%. In order to control the endemo-epidemics in the richest farming land in Argentina a collaborative effort conducted by US and Argentine Governments led to the production of a live, attenuated Junin virus vaccine. After rigorous biological testing in rhesus monkeys, the highly attenuated Junin virus variant named Candid 1 was used in human volunteers, followed by an extensive clinical trial in the AHF endemic area. In order to characterize the vaccine strain Candid 1 at the molecular level and initiate studies on the biochemical basis of attenuation of virulence, the glycoprotein precursor (GPC) gene of this attenuated virus was cloned and sequenced. The flanking 5' and 3' untranslated regions of the GPC gene do not differ significantly from the homologous regions in the S RNA of the wild type MC2 strain. However, major changes in the amino acid sequence occur in the amino terminal region of GPC as a result of several insertions and deletions in the nucleotide sequence.
AD1009068	GAPR2: A DTN Routing Protocol for Communications in Challenged, Degraded, and Denied Environments	Naval Postgraduate School Monterey United States	Killeen,Kevin Jr M.	9/1/2015	139	Not available	Not available	U	A - 01	Approved for public release; distribution is unlimited.	Technical Report	This thesis explores the foundation of modern Disruption Tolerant Protocols. It introduces a previously unpublished protocol with high probability of delivery called the Geolocation Assisted Predictive Routing (GAPR) Protocol and implements Vector Routing for The ONE Simulator. GAPR and Vector are then combined and implemented as GAPR2, a new protocol that provides delivery ratio near the best in the field while incurring a quarter of the overhead. GAPR2, GAPR, and Vector, along with the most widely referenced DTN routing protocols (Epidemic, MaxProp, and PRoPHETv2) are extensively simulated and their performance evaluated using three mobility models: the Helsinki scenario, a random mobility model, and a military scenario based on a real-world annual exercise. The custom-built military mobility model uses GIS topographical data and custom GIS overlays to implement a realistic scenario terrain. The performance of each protocol is evaluated. This thesis shows through simulation that DTN networks can be employed to enhance communications capabilities without expensive infrastructure or significant platform upgrades. Further, this thesis shows through large-scale simulations that such a network is capable of operating over hundreds of square kilometers and provides the simulation framework to test future routing protocols or equipment configurations.
AD1011463	Characterization of the Virus and Monoclonal Antibody Binding Sites of the Mouse Hepatitis Virus Receptor	Uniformed Services University Of The Health Sciences Bethesda United States	Shick,Paul C.	10/16/1995	106	Not available	Not available	U	A - 01	Approved for public release; distribution is unlimited.	Technical Report	The attachment of Mouse Hepatitis Virus (MHV), a coronavirus, to its cellular receptor on the host cell membrane is the first step leading to viral infection. The best characterized receptor for MHV is a 120 kDa glycoprotein encoded by the biliary glycoprotein (Bgp) Ia gene. Other murine Bgp glycoproteins also serve as receptors for MHV but with less efficiency. Bgps belong to the carcinoembryonic antigen family which, in turn, belongs to the immunoglobulin superfamily. Chimeric glycoproteins and recombinant mutated receptor proteins were generated to identify the sites on the receptor that binds to the Mouse Hepatitis Virus strain AS9 (MHV-AS9).

ADA510467	An All-Hazards Training Center for a Catastrophic Emergency	ARMY WAR COLL STRATEGIC STUDIES INST CARLISLE BARRACKS PA	Stewart, Xavier	12/1/2009	36	Not available	AWC/SSI	U	A - 01	Approved for public release; distribution is unlimited.	Monograph	Since assuming command in 1998 of the first Civil Support Team (CST) Weapons of Mass Destruction (WMD), Colonel Stewart witnessed and experienced dramatic changes in homeland security theory, policy, and practice. Understandably, the most significant changes have occurred since the horrific attacks on September 11, 2001, which violently demonstrated how turbulent today's world strategic environment is. Widely available chemical, biological, radiological, nuclear, high yield explosive, and cyberspace security (CBRNE-C) materials, technologies, and equipment often have dual uses. Preventing rogue states and terrorist organizations from acquiring these materials is a necessary but formidable challenge. Additionally, the cyber domain has grown tremendously and may be used to target key infrastructure and resources. In addition to these threats, dramatic weather changes have caused unusual and devastating shifts in weather patterns, which in turn have triggered catastrophic events. This paper proposes the establishment of All-Hazard Training Centers (AHTC) in the 10 Federal Emergency Management Agency (FEMA) regions to train CST WMD and emergency responders for CBRNE-C events or natural catastrophes.
AD0294882	BIBLIOGRAPHY ON THE ROCKY MOUNTAIN SPOTTED FEVER GROUP OF RICKETTSIOSSES (SUPPLEMENT)	TECHNICAL LIBRARY CAMP DETRICK FREDERICK MD	Not available	11/27/1956	1	Not available	Not available	U	A - 01	Approved for public release; distribution is unlimited.	Not available	Contents: Culture and morphology Clinical picture Chemotherpy Viability Serology Virulence Human pathology Effect of physical agents Effect of chemical agents Immunization and prophylaxes - vaccines Animal sources and animal pathogenicityAnimal pathology Insect vectors Tissue culture Epidemiology General epidemiology Laboratory infections Epidemic countries
AD1028633	A Logistic Regression and Markov Chain Model for the Prediction of Nation-state Violent Conflicts and Transitions	Not available	Shallcross,Nicholas J.	3/24/2016		AFIT-ENS-MS-16-M-128	Not available	U	A - 01	Approved for public release; distribution is unlimited.	Technical Report	Using open source data, this research formulates and constructs a suite of statistical models that predict future transitions into and out of violent conflict and forecasts the regional and global incidences of violent conflict over a ten-year time horizon. A total of thirty predictor variables are tested and evaluated for inclusion in twelve conditional logistic regression models, which calculate the probability that a nation will transition from its current conflict state, either In Conflict" or "Not in Conflict"
AD0835280	IN HONOR OF THE 20TH ANNIVERSARY OF THE VICTORY OVER FASCIST GERMANY	ARMY BIOLOGICAL LABS FREDERICK MD	Rogozin, I. I.	11/18/1965	8	TRANS-1558	SMUFD	U	A - 01	Approved for public release; distribution is unlimited.	Not available	Not available
ADA460105	Epidemic Outbreak Surveillance (EOS)	HENRY M JACKSON FOUNDATION FOR THE ADVANCEMENT OF MILITARY MEDICINE ROCKVILLE MD	Scofield, Thomas C.	7/1/2005	5	Not available	USAMRMC	U	A - 01	Approved for public release; distribution is unlimited.	Annual rept. 1 Jul 2004-30 Jun 2005	This funding was granted to The Henry M. Jackson Foundation for the Advancement of Military Medicine, Inc. (HJF) to provide the administrative, management, logistical, and programmatic services in collaboration with HQ, USAF/SGR in accordance with the statement of work and with tasks developed by the research. The goal of this project is to develop and test new technologies for the diagnosis and surveillance of respiratory tract pathogens. The funding supported the hiring of technical and administrative personnel necessary to carry out protocols to standardize methods of specimen collection and to optimize the processing of these specimens. After these processes were established, initial enrollment of healthy, ill, and recovered Basic Military Trainees (BMTs) began. In accordance with the statement of work, HJF successfully established administrative and programmatic support services to support the operations and management of the Epidemic Outbreak Surveillance (EOS) project. HJF continues to provide administrative, management, and programmatic support services as deemed necessary for implementation and as requested by HQ, USAF/SGR for the development of an integrated health surveillance venue focused upon epidemic outbreaks of acute respiratory disease (ARD) and other endemic and seasonal respiratory infections.



ADA543502	Project BioShield: Authorities, Appropriations, Acquisitions, and Issues for Congress	LIBRARY OF CONGRESS WASHINGTON DC CONGRESSIONAL RESEARCH SERVICE	Gottron, Frank	4/22/2011	21	CRS-7-5700,CRS-R41033	CRS/DC	U	A - 01	Approved for public release; distribution is unlimited.	Congressional research rept.	In 2004, Congress passed the Project BioShield Act (P.L. 108-276) to encourage the private sector to develop medical countermeasures against chemical, biological, radiological, and nuclear (CBRN) terrorism agents and to provide a novel mechanism for federal acquisition of those newly developed countermeasures. Although some countermeasures have been acquired through this law, Congress continues to address several Project BioShield-related policy issues. These include whether to continue diverting Project BioShield acquisition funding to other purposes; whether to change the countermeasure development and acquisition process; how to replace stockpiled countermeasures as they expire; and whether to alter federal efforts to encourage the development of broad-spectrum countermeasures. This law provides three main authorities: (1) relaxing regulatory requirements for some CBRN terrorism-related spending, including hiring personnel and awarding research grants; (2) guaranteeing a federal market for new CBRN medical countermeasures; and (3) permitting emergency use of unapproved countermeasures. The Department of Health and Human Services (HHS) has used each of these authorities. The HHS used expedited review authorities to approve contracts and grants related to CBRN countermeasure research and development. The HHS used the authority to guarantee a government market to obligate approximately \$2 billion to acquire countermeasures against anthrax, botulism, radiation, and smallpox. The HHS has also employed the emergency use authority several times, including during the 2009 H1N1 influenza pandemic. The Department of Homeland Security (DHS) Appropriations Act, 2004 (P.L. 108-90) advance appropriated \$5.593 billion for FY2004 to FY2013 for CBRN countermeasures acquisition through Project BioShield. Through FY2011, subsequent Congresses have removed \$1.461 billion from this account through rescissions and transfers, more than 25% of the advance appropriation.
ADA549147	A Novel Malware Target Recognition Architecture for Enhanced Cyberspace Situation Awareness	AIR FORCE INST OF TECH WRIGHT- PATTERSON AFB OH SCHOOL OF ENGINEERING AND MANAGEMENT	Dube, Thomas E.	9/1/2011	180	AFIT/DCE/ENG/1 1-07	AFIT	U	A - 01	Approved for public release; distribution is unlimited.	Doctoral thesis	The rapid transition of critical business processes to computer networks potentially exposes organizations to digital theft or corruption by advanced competitors. One tool used for these tasks is malware, because it circumvents legitimate authentication mechanisms. Malware is an epidemic problem for organizations of all types. This research proposes and evaluates a novel Malware Target Recognition (MaTR) architecture for malware detection and identification of propagation methods and payloads to enhance situation awareness in tactical scenarios using non-instruction-based, static heuristic features. MaTR achieves a 99.92% detection accuracy on known malware with false positive and false negative rates of 8.73e-4 and 8.03e-4 respectively. MaTR outperforms leading static heuristic methods with a statistically significant 1% improvement in detection accuracy and 85% and 94% reductions in false positive and false negative rates respectively. Against a set of publicly unknown malware, MaTR detection accuracy is 98.56%, a 65% performance improvement over the combined effectiveness of three commercial antivirus products.
AD1026954	Defense Civil Support: DOD, HHS, and DHS Should Use Existing Coordination Mechanisms to Improve Their Pandemic Preparedness	GOVERNMENT ACCOUNTABILITY OFFICE WASHINGTON DC WASHINGTON DC United States	Kirschbaum,Joseph W.	2/1/2017	55	GAO-17-150	Not available	U	A - 01	Approved for public release; distribution is unlimited.	Technical Report	The U.S. Army estimates that if a severe infectious disease pandemic were to occur today, the number of U.S. fatalities could be almost twice the total number of battlefield fatalities in all of Americas wars since the American Revolution in 1776. A pandemic occurs when an infectious agent emerges that can be efficiently transmitted between humans and has crossed international borders. DODs day-to-day functioning and the militarys readiness and operations abroad could be impaired if a large percentage of its personnel are sick or absent, and DODs assistance to civil authorities might be limited. House Report 114-102 included a provision for GAO to assess DODs planning and coordination to support civil authorities during a pandemic. This report assesses the extent to which (1) DOD has guidance and plans for supporting civil authorities in the event of a domestic outbreak of a pandemic disease and (2) HHS and DHS have plans to respond to a pandemic if DOD support capabilities are limited, and they have mechanisms to coordinate their pandemic preparedness and response. GAO reviewed agency pandemic guidance and plans, interagency coordination mechanisms, and pandemic-related exercises and after-action reports.

ADA011606	Treadmill Exercise Testing at the USAF School of Aerospace Medicine: Physiological Response in Aircrewmen and the Detection of Latent Coronary Artery Disease,	ADVISORY GROUP FOR AEROSPACE RESEARCH AND DEVELOPMENT PARIS (FRANCE)	Froelicher,V. F.,Yanowitz,F.,Thomps on,A. J.,Lancaster,M. C.	5/1/1975	65	AGARD-ograph- 210	Not available	U	A - 01	Approved for public release; distribution is unlimited.	Not available	Coronary heart disease (CHD) has reached epidemic proportions in all developed countries; it accounts for over 1,000,000 deaths in the United States each year, which is more than all other diseases combined. Over half of these deaths are unexpected in that they occur without preceding symptoms of CHD. Despite the selective nature of the USAF flying population, CHD is the leading disease cause of death, disability and removal from flying duties. It appears that USAF aircrewmen very well fit the national statistics. Because of the critical nature of flying duties and the pertinence of flying safety, the early detection of CHD is essential in the USAF flying population. The AGARDograph presents the experience of the United States Air Force School of Aerospace Medicine (USAFSAM) in the use of treadmill exercises for evaluating asymptomatic aircrewmen; it consists of separate studies involving different aspects of treadmill testing experience at the USAFSAM, including descriptions of techniques used at the USAFSAM.
ADA568354	Summary of the Infectious Diseases and Disaster Response Conference in Abu Dhabi	ARMED FORCES HEALTH SURVEILLANCE CENTER SILVER SPRING MD	Baliga, Priya,Tang-Sundquist, Brittany J.,Hajjar, David R.,Cooper, Faith A.,Von Thun, Annette	1/1/2012	10	Not available	AFHSC	U	A - 01	Approved for public release; distribution is unlimited.	Journal article	Due to the interconnectedness of the world today and the ease with which infectious diseases can spread globally collaboration within and among countries around the world on pandemic planning and response is immensely important. One of the first steps for pandemic planning involves identifying existing gaps in a nation's current plans, and examining previous outbreaks for lessons learned. To identify such gaps, the World Health Organization (WHO) created a framework with 5 main components for assessing disaster and pandemic planning and response: surveillance, healthcare response, public health intervention, communication, and command.
ADB081473	Prevention of Influenza and other Respiratory Diseases.	COLORADO UNIV AT DENVER MEDICAL CENTER	Meiklejohn, G.,Eickhoff, T. C.,Mostow, S. R.	2/1/1979	45	Not available	Not available	U	A - 01	Approved for public release, distribution unlimited.	Annual progress rept. 1 Feb 78-30 Jan 79,	An explosive epidemic of H1N1 influenza occurred at Lowry AFB during February 1978. No H1N1 vaccine had been available and personnel under 25 were almost uniformly seronegative. Influenza (febrile) attack rates were estimated to be about 30% in students, who ranged in age from 17 to 23. An additional 20% were probably infected during the epidemic. The permanent party, most of which is over 25 years of age had far lower attack rates than the students. A small number of cases of H3N2 influenza occurred between 30 November 1977 and 30 January 1978, but the spread of this disease was very limited in this vaccinated population. The H1N1 virus strains differed from H3N2 strains in many ways. Isolation and identification were more difficult and lack of avidity of the prototype A/USSR/90/77 strain created difficulty in serodiagnosis. The most useful antigen for HI tests was an ether-split vaccine concentrate (PD) prepared from A/USSR/92/78 Surveys of HI antibody levels of military and civilian populations between 17 and 24 years of age indicated that approximately one half had been infected during or following the February 1978 epidemic. Studies of experimental H1N1 vaccines of 60 microgram and 20 microgram potencies showed that the former, whether split or whole virus, produced seroconversion in a very high proportion of persons.
ADA528619	Worldwide Emerging Environmental Issues Affecting the U.S. Military. April 2006 Report	FEDERATION OF UN ASSOCIATIONS WASHINGTON DC MILLENNIUM PROJECT	Not available	4/1/2006	18	Not available	AEPI/VA	U	A - 01	Approved for public release; distribution is unlimited.	Not available	The People's Liberation Army of China has been directed by President Hu Jintao to submit its construction and training plans, as well as materiel transfer, weapon purchases, repair, and disposal to local authorities for approval regarding environmental impacts. The President also issued new regulations that specify assessment procedures and penalties for infractions. Construction of military bases, ports, logistics centers and exercise fields is to be approved only after the project passes environmental evaluation, including approval by local environment authorities.
ADP010941	Battle Trauma and DNBI	GENERALARZT DER LUFTWAFFE LOMAR-HEIDE (GERMANY)	Roedig, Erich	5/1/2001	4	Not available	NATO	U	A - 01	Approved for public release; distribution is unlimited. NATO.	Not available	New NATO force structures and strategic concepts emphasise Mobility Interoperability Sustainability Jointnes and Multinationality; i.e. deployment of multinational forces to any are for any mission. The very nature of those operations calls for the likelihood of missions in locations far from those of the sending nations, areas that may have challenging factors of geographical conditions, lack of infrastructure, or indigenous populations suffering from hunger, thirst, epidemic and endemic diseases , trauma or disability. Special environmental and occupational hazards, given in the mission areas have to be considered. Therefore appropriate Force health protection is a core competency. It must ensure a full spectrum health services that: -emphasise fitness, preparedness and preventive measures - improve the monitoring and surveillance of forces engaged in military operations - enhance service members' and commanders awareness of health threats before they can effect the force and - support the health needs of the military forces and their families across the continuum of medical services.

ADA581446	Modeling Human Behavior at a Large Scale	ROCHESTER UNIV NY DEPT OF COMPUTER SCIENCE	Sadilek, Adam	1/1/2012	197	Not available	ARO	U	A - 01	Approved for public release; distribution is unlimited.	Doctoral thesis	Until recently, complex phenomena such as human behavior and disease epidemics have been modeled primarily at an aggregate level. Detailed studies have been limited to small domains encompassing only a few subjects, as scaling the methods involved poses considerable challenges in terms of cost, human effort required, computational bottlenecks, and data sources available. With the surge of online social media and sensor networks, the abundance of interesting and publicly accessible data is beginning to increase. However, we also need the ability to reason about it efficiently. The underlying theme of this thesis is the unification and data mining of diverse, noisy, and incomplete sensory data over large numbers of individuals. We show that the mined patterns can be leveraged in predictive models of human behavior and other phenomena at a large scale. We find that raw sensory data linked with the content of users' online communication, the explicit as well as the implicit online social interactions, and interpersonal relationships are rich information sources upon which strong machine learning models can be built. Example domains where such models apply include understanding human activities, predicting people's location and social ties from their online behavior, and predicting the emergence of global epidemics from day-to-day interpersonal interactions.
ADA470468	Mitigation of Threats to the Continuation of Marine Recruit Training Posed by a Category 4/5 Influenza Pandemic	DEFENSE THREAT REDUCTION AGENCY FORT BELVOIR VA	DiGiovanni, Clete, Monto, Arnold S., Malone, John D.	1/29/2007	21	Not available	DTRA/FB	U	A - 01	Approved for public release; distribution is unlimited.	Final rept.	The challenges to continuity of recruit training during a Category 4/5 influenza pandemic are so formidable, and the non- pharmaceutical interventions to counter them so limited, complicated, and prone to error in implementation that we reluctantly conclude that the most sensible course, in the absence of an effective vaccine or reliable and safe antiviral prophylaxis, may be to rely on personnel actions other than recruit input to maintain force levels during a pandemic this severe.
ADA583268	Integrated Social and QoS Trust-Based Routing in Delay Tolerant Networks	VIRGINIA POLYTECHNIC INST AND STATE UNIV BLACKSBURG DEPT OF COMPUTER SCIENCE	Chen, Ing-Ray, Bao, Fenye, Chang, MoonJeong, Cho, Jin-Hee	1/1/2012	20	ARO-61420-NS-II-1	61420-NS-II-1, ARO	U	A - 01	Approved for public release; distribution is unlimited.	Journal article	We propose and analyze a class of integrated social and quality of service (QoS) trust-based routing protocols in mobile ad-hoc delay tolerant networks. The underlying idea is to incorporate trust evaluation in the routing protocol, considering not only QoS trust properties but also social trust properties to evaluate other nodes encountered. We prove that our protocol is resilient against bad-mouthing, good-mouthing and whitewashing attacks performed by malicious nodes. By utilizing a stochastic Petri net model describing a delay tolerant network consisting of heterogeneous mobile nodes with vastly different social and networking behaviors, we analyze the performance characteristics of trust-based routing protocols in terms of message delivery ratio, message delay, and message overhead against connectivity-based, epidemic and PROPHET routing protocols. The results indicate that our trust-based routing protocols outperform PROPHET and can approach the ideal performance obtainable by epidemic routing in delivery ratio and message delay, without incurring high message overhead. Further, integrated social and QoS trust-based protocols can effectively trade off message delay for a significant gain in message delivery ratio and message overhead over traditional connectivity-based routing protocols.
ADA955898	An Annotated Bibliography on Computational Probability.	PURDUE UNIV LAFAYETTE IN DEPT OF STATISTICS	Neuts, Marcel F.	1/1/1976	75	AFOSR-TR-90-0020	TR-90-0020	U	A - 01	Approved for public release; distribution is unlimited.	Interim rept.,	Not available
AD0729035	On the Simple Stochastic Epidemic,	PRINCETON UNIV N J DEPT OF STATISTICS	McNeil, Donald R.	8/1/1971	13	TR-8-Ser-2	Not available	U	A - 01	Approved for public release; distribution is unlimited.	Not available	In the mathematical model for the simple epidemic, it is assumed that the population at time t consists of X(t) infectives and N-X(t) susceptibles, and the X(t) is a pure birth process with transition probabilities. There is quite an extensive literature devoted to the analysis of the process X(t). In this paper a valid asymptotic distribution theory for large values of N is developed and a simple efficient estimator of the infection rate lambda is derived. The author concluded with the analysis of a more general model for the simple epidemic in which the population is divided into a number of homogeneous groups. (Author)
AD1072114	Evaluating an Upper Respiratory Disease Panel on the Portable MinION Sequencer	711th Human Performance Wing Wright Patterson Air Force Base United States	Lyon, Wanda J., Smith, Zachary K., Geier, Brian, Baldwin, James, Starr, Clarise R.	4/24/2019	31	AFRL-RH-WP-TR-2019-0018	AFRL-RH-WP-TR-2019-0018	U	A - 01	Approved for public release; distribution is unlimited.	Technical Report, 01 Jan 2018, 24 Apr 2019	The MinION nanopore sequencer was released to community testers for evaluation using a variety of sequencing applications. The MinION was used to evaluate upper respiratory disease infections and was found to have tremendous potential for field use. In this study, we tested the ability of the MinION to accurately identify and differentiate clinical bacterial and viral samples via targeted sequencing and whole genome sequencing. The current nanopore technology has limitations with respect to error rate but has steadily improved with development of new flow cells and library kits.

AD1032809	Targeting the Adipocyte-Tumor Cell Interaction in Prostate Cancer Treatment	Sanford-Burnham Medical Research Institute La Jolla United States	Moscat,Jorge	12/1/2016	90	Not available	Not available	U	A - 01	Approved for public release; distribution is unlimited.	Technical Report,30 Sep 2013,29 Sep 2016	Prostate cancer (PCa) is one of the leading causes of death among men in the United States. Obesity is another growing epidemic health problem in Western societies and in developing nations, and represents one of the greatest threats to global human health. Several epidemiological studies during the last decade have pointed to an association between obesity and increased risk factor for PCa progression and aggressiveness. However, despite the relatively high amount of epidemiological data available, little is known about the molecular basis underlying the association between PCa progression, obesity and inflammation, and the role of the adipocyte-cancer cell interaction in this process. The goal of this project is to test the hypothesis that p62 is a molecular link in the cross-talk between obesity, inflammation and prostate cancer progression. Here, we have generated a new mouse model to address this question. Unveiling the molecular mechanisms governing obesity induced prostate cancer progression will have a great impact in our understanding of this process, and its relevance for potential more targeted and efficacious therapies in PCa.
ADA126303	Study of African Trypanosomiasis and Leishmaniasis.	ARMY MEDICAL RESEARCH UNIT NAIROBI (KENYA)	Muriithi,I. E.,Reardon,M. J.,Welde,B. T.,Roberts,L. W.,Chulay,J. D.	9/1/1981	30	Not available	Not available	U	A - 01	Approved for public release; distribution is unlimited.	Final rept. 1 Oct 80-30 Sep 81,	An outbreak of human sleeping sickness was investigated in the Lambwe Valley, Kenya. A total of 358 cattle and 500 people from the epidemic area were examined. Of 15 cattle showing central nervous system dysfunction, 13 were positive for Trypanosome brucei sp., and all of these 13 had typical Trypanosome rhodesiense - type brain lesions. Isolates collected from humans and cattle were cryopreserved for comparison with previous isolates from the area. Isolates from humans and cattle are being compared using neutralization techniques. (Author)
ADA560922	A Pandemic Influenza Preparedness Study: Use of Energetic Methods to Decontaminate Filtering Facepiece Respirators Contaminated with H1N1 Aerosols and Droplets (POSTPRINT)	APPLIED RESEARCH ASSOCIATES INC TYNDALL AFB FL	Heimbuch, Brian K.,Wallace, William H.,Kinney, Kimberly R.,Lumley, April E.,Wu, Chang-Yu,Woo, Myung-Heiu,Wander, Joseph D.	6/1/2012	11	AFRL-RX-TY-TP-2009-4594	TP-2009-4594,AFRL-RX-TY	U	A - 01	Approved for public release; distribution is unlimited.	Journal article	A major concern among healthcare experts is a projected shortage of N95 filtering facepiece respirators (FFRs) during an influenza pandemic. One option for mitigating an FFR shortage is to decontaminate and reuse the devices. Many parameters must be evaluated to verify the effectiveness of this strategy: biocidal efficacy, filtration performance, pressure drop, fit, and residual toxicity. The focus of this research effort was to evaluate the ability of microwave/steam energy, low-temperature moist heat, and ultraviolet germicidal irradiation at 254 nm to decontaminate H1N1 influenza virus loaded onto FFRs as either aerosols or droplets. Our data indicate that all three decontamination technologies provide > 4-log reduction of viable H1N1 virus --in 93% of our experiments, the virus was removed to levels below the method detection limit. These data are encouraging and may contribute to the evolution of effective strategies for decontamination and reuse of FFRs.
ADA359820	Worldwide Report: Epidemiology.	JOINT PUBLICATIONS RESEARCH SERVICE ARLINGTON VA	Not available	2/15/1983	51	JPRS-82859	FBIS	U	A - 01	Approved for public release; distribution is unlimited.	Not available	JPRS publications contain information primarily from foreign newspapers, periodicals and books, but also from news agency transmissions and broadcasts. Materials from foreign-language sources are translated; those from English-language sources are transcribed or reprinted, with the original phrasing and other characteristics retained. This report contains articles on epidemics throughout the world.
ADA231242	Diagnosis of AIDS-Related Intestinal Parasites	UNIFORMED SERVICES UNIV OF THE HEALTH SCIENCES BETHESDA MD	Ungar, Beth L.	6/20/1990	25	Not available	USAMRDC	U	A - 01	Approved for public release; distribution is unlimited.	Annual rept. (Final) 26 Sep 1986-31 Dec 1989,	During the past decade, Cryptosporidium has become acknowledged as an important human pathogen. Although the first two human cases were only described in 1976 with a half dozen more reported during the next six years, the onset of the acquired immunodeficiency syndrome (AIDS) pandemic led to recognition of Cryptosporidium as an agent of fulminant and potentially life-threatening diarrhea (1-6). Now, there are over 300 scientific publications on human cryptosporidiosis many of which focus on areas of current research: refining diagnostic techniques, understanding pathogenesis and evaluating promising therapies.
ADA543107	H1N1: An Overview	MITRE CORP BEDFORD MA	Neal, Thomas	8/7/2009	41	Not available	DOD	U	A - 01	Approved for public release; distribution is unlimited.	Briefing charts	Not available

ADA134522	Biochemical Basis of Virulence in Epidemic Typhus	UNIVERSITY OF SOUTH ALABAMA MOBILE DEPT OF MICROBIOLOGY AND IMMUNOLOGY	Winkler, Herbert H.	8/1/1979	39	Not available	USAMRDC	U	A - 01	Approved for public release; distribution is unlimited.	Annual progress rept.	Rickettsia prowazeki were assessed for their in vitro susceptibility to phagocytosis by rabbit polymorphonuclear leukocytes (PMN). ATP labeling was used to quantitatively determine phagocytosis and adsorption. Rickettsiae were less susceptible to phagocytosis than were Escherichia coli and Neisseria gonorrhoeae. Although rickettsiae were similar to E. coli in susceptibility to superoxide and activated halide, few phagocytized rickettsiae were inactivated 45 min after being ingested by PMN and some rickettsiae were observed free in the PMN cytoplasm. At low rickettsia: PMN multiplicities, phagocytosis increased as a linear function of time, but at high multiplicities (MOI=50) rickettsiae were phagocytized during only the first 10 min of incubation. PMN were damaged in the presence of high rickettsial multiplicities such that they released lactate dehydrogenase into the medium and lost the ability to phagocytize both rickettsiae and E. coli. This rickettsial leukotoxic activity was associated with phospholipase activity which was similar to the phospholipase activity associated with rickettsial hemolysis, and the amount of leukotoxic activity in a given rickettsial sample correlated with the relative hemolytic activity of that sample.
AD1034205	Convalescent Plasma Therapy	DEFENSE HEALTH BOARD FALLS CHURCH VA FALLS CHURCH United States	Not available	5/14/2008	6	Not available	Not available	U	A - 01	Approved for public release; distribution is unlimited.	Technical Report	In 1997, a novel influenza A/H5NI virus strain infected Hong Kong residents exposed to poultry. In 2003, a closely related influenza AIH5N1 strain, also derived from poultry, infected residents of Hong Kong. As of March 2008, the World Health Organization reported 357 cases and 235 deaths in humans across 14 countries. More importantly, the virus in poultry and wild birds has continued to mutate and evolve such that several diverse clades are now apparent. In past influenza virus threats (eg: 1957, 1968, and 1976) the Department of Defense (DOD) was directly involved with the Centers for Disease Control and Prevention (CDC), the National Institutes of Health and the Food and Drug Administration (FDA) in developing and evaluating surveillance and epidemiologic data, vaccine selection, evaluating vaccine immunogenicity and reactogenicity, as well as performing vaccine efficacy studies. In the 1980s, the DoD began to play a less active role in national influenza vaccine research and development. In 2005, prompted by Secretary Winkenwerder, a subcommittee was formed under the previous Armed Forces Epidemiological Board (AFEB) to advise Surgeons Generals and other DoD members on matters relating to pandemic influenza (PI), including providing recommendations for optimizing surveillance and preparation.
ADA484264	Physiologic and Endocrine Correlates of Overweightness in African Americans and Caucasians	HENRY M JACKSON FOUNDATION FOR THE ADVANCEMENT OF MILITARY MEDICINE ROCKVILLE MD	Deuster, Patricia A.	3/1/2008	14	Not available	USAMRMC	U	A - 01	Approved for public release; distribution is unlimited.	Annual summary, 1 Mar 2007-28 Feb 2008	Obesity has reached epidemic levels and yet the incidence continues to rise. This study examines the hypothesis that obesity may reflect a dysfunction of the hypothalamic-pituitary-adrenal (HPA) axis in response to stressors. African American persons are at greatest risk, but reasons for this difference are unknown. The authors will study 127 men and women of Caucasian and African American ethnicity to examine their responses to physiologic stressors: exercise and ingestion of a meal. The HPA axis will be studied in some detail by using two stressor paradigms and two steroid regimens. They expect to be able to detect subtle differences in HPA axis reactivity in obese individuals that might contribute to morbidity and perhaps even make individuals resistant to therapeutic interventions. So far they have enrolled 160 participants. Of those, 123 subjects have completed the study and 4 are in progress; 33 subjects have dropped out. Data collection and analyses are proceeding on schedule. Two abstracts were presented in 2006, one was presented in 2007, and one was submitted and accepted for presentation in the Summer of 2008. The authors are on schedule for all study milestones and look forward to being able to answer the important questions regarding the potential role of the HPA axis in obesity.

ADA526657	Center for the Study of Traumatic Stress. Annual Report 2009	UNIFORMED SERVICES UNIV OF THE HEALTH SCIENCES BETHESDA MD CENTER FOR THE STUDY OF TRAUMATIC STRESS	Not available	1/1/2009	29	Not available	USUHS	U	A - 01	Approved for public release; distribution is unlimited.	Not available	2009 has been a year of extraordinary growth for the Center for the Study of Traumatic Stress (CSTS). In recognition of the rise in suicide and behavioral health problems among service members who have served in Iraq and Afghanistan, the National Institute of Mental Health (NIMH) awarded CSTS an unprecedented grant of \$50 million to assess and develop scientific approaches to reverse this trend. In coordination with the Secretary of the Army, the Vice Chief of Staff of the Army, the Surgeon General of the Army, and NIMH, CSTS is positioned to lead an interdisciplinary team including prominent researchers from Harvard, Columbia and the University of Michigan to support the U.S. Army's advancement of trauma knowledge and trauma informed care for our nation. Since the Center's establishment in 1987, CSTS has shaped the landscape of disaster and military psychiatry and bridged these disciplines to inform planning, response and recovery of public health threats or recovery from pandemic and H1N1 outbreaks. As part of the Department of Psychiatry of Uniformed Services University (USU), CSTS also has examined traumatic stress through laboratory research on animals and humans. This pioneering work in neuroscience and the neurobiology of traumatic stress resulted in the Center's recent identification of a potential biomarker for post traumatic stress disorder (PTSD), a protein and its associated gene known as p11. These findings have important implications for prevention and treatment of PTSD and other trauma-related disorders that face our service members and nation. CSTS's approach - to integrate trauma research across genes, brain, individual, family, community and policy, and our strong collaborative networks will assist us in helping find and apply evidence-based approaches and treatments to prevent and minimize the impact of traumatic disorder from depression, PTSD, substance abuse, family violence and traumatic brain injury (TBI).
ADA574790	Department of Defense Biological Threat Responses to the 2009-2010 H1N1 Influenza Outbreak: A Real World Exercise (Counterproliferation Paper Number 51, April 2011)	AIR FORCE COUNTERPROLIFERATION CENTER MAXWELL AFB AL	Not available	4/1/2011	41	CPC/AL	Not available	U	A - 01	Approved for public release; distribution is unlimited.	Not available	Beginning in April 2009 with the outbreak and rapid spread of the H1N1 swine flu.
ADA227351	The Role of Special Operations Forces in Counter-Narcotic Operations	ARMY COMMAND AND GENERAL STAFF COLL FORT LEAVENWORTH KS	Haselton, Mark A.	6/1/1990	143	Not available	USACGSC	U	A - 01	Approved for public release; distribution is unlimited.	Master's thesis Aug 1989-Jun 1990	This thesis deals with the suitability of using Army Special Operations Forces in a counter-narcotics role. It describes briefly, the legislative reforms which have authorized increased US military involvement in a law enforcement role. It also describes the present drug epidemic in the US and in the area referred to as the Andean Ridge. A presentation of information is provided as to the social, political, and economic, both positive and negative, that the cultivation of coca and cocaine production has had in the countries of Peru, Bolivia and Colombia. The thesis describes the present structure of US army Special Operations Forces and their capabilities. It recommends missions for each member of the SOF community to perform. Using the CARVER Target Analysis system, the thesis presents the drug trafficking organizations in terms of vulnerabilities that can be exploited by SOF. The thesis concludes that the present missions of SOF are compatible with the increased military counter-narcotic missions. The unique capabilities of SOF, when combined with present law enforcement assets will greatly enhance the US capability to interdict illegal narcotics. Keywords: Special Operations Forces; Counter-narcotics; Drug interdiction; Drug enforcement; Andean Ridge; Cocaine.
ADA281009	Retrospective Study of HIV Infection in Human Tissues. Computer Survey of the AFIP Repository for Cases of Acquired Immunodeficiency Preceding the HIV Pandemic	ARMED FORCES INST OF PATHOLOGY WASHINGTON DC	Nelson, Ann M.,Moroz, Albin,Mullick, Florabel G.,Rohland, William R.,Manus, Joyce C.	5/20/1994	12	Not available	USAMRDC	U	A - 01	Approved for public release; distribution is unlimited.	Annual rept.	To seek, review, identify, and retrieve repository materials (slides, blocks, wet tissues, and information) of cases fulfilling the CDC definition of AIDS in the absence of demonstrable HIV infection. Identify cases for potential use in basic research on the chronology of HIV retroviral infection in human tissues

ADA510899	Comparison of an Agent-based Model of Disease Propagation with the Generalised SIR Epidemic Model	DEFENCE SCIENCE AND TECHNOLOGY ORGANISATION VICTORIA (AUSTRALIA) AIR OPERATIONS DIV	Connell, Russell,Dawson, Peter,Skvortsov, Alex	8/1/2009	31	DSTO-TR-2342,DODA-AR-014-617	AR-014-617,DSTO/VIC	U	A - 01	Approved for public release; distribution is unlimited.	Technical rept	Social contacts are an important channel for the propagation of disease through a population and should be considered in conjunction with traditional epidemic diffusion. Such channels should always be taken into account for a realistic estimation of a long-term impact of a disease outbreak (natural or malicious) and for the best response options. This paper describes our recent experience in developing a simple agent-based model to simulate disease propagation through a social network and validating the results of the agent-based simulation by reconciling it with a well-known mathematical model.
ADA421292	Induction and Characterization of Immune Responses in Small Animals Using a Venezuelan Equine Encephalitis Virus (VEE) Replicon System, Expressing Human Immunodeficiency Virus Type 1 (HIV-1) Envelope Genes	UNIFORMED SERVICES UNIV OF THE HEALTH SCIENCES BETHESDA MD	DeVol, Jennifer M.	1/1/2003	89	Not available	USUHS	U	A - 01	Availability: This document is not available from DTIC in microfiche.	Doctoral's thesis	Human immunodeficiency virus type 1 (HIV-1) is the lentivirus responsible for the Acquired Immunodeficiency Syndrome (AIDS) pandemic. Currently, no approved vaccine exists to combat this global human health threat. One approach is to develop a vaccine that induces neutralizing antibodies. To date, the most promising platforms used for induction of neutralizing antibodies against HIV-1 is the Venezuelan equine encephalitis virus (VEE) replicon system. The studies detailed herein have characterized certain aspects of the immune responses induced by the in vivo VEE expression system. Following HIV-1 Env-encoding replicon preparation and immunization of mice, the analysis of those immune responses were carried out using enzyme immunoassays (EIAs) and virus neutralization assays. The data revealed significant anti-HIV-1 Env antibody induction, with intra-clade and to a lesser extent inter-clade neutralizing antibody reactivity. The data obtained from these studies will contribute to the goal of inducing broadly cross-reactive neutralizing antibodies and aid in the development of an effective vaccine for HIV-1.
ADA621630	Surviving the Storm : Expanding Public Health's Capabilities in Response to the Increasing Threats Posed by Novel Viruses	NAVAL POSTGRADUATE SCHOOL MONTEREY CA	Mackie, Daniel P.	12/1/2013	101	Not available	NPS	U	A - 01	Approved for public release; distribution is unlimited.	Master's thesis	As the planet s population continues to grow at rate that will see a global population of nine billion people by the year 2050, is an era being entered into which pandemics involving novel viruses are the new norm? If that idea is possible, then are drug therapies (approved by the FDA or in the pipeline for its approval) available that either limit virus replication within a host cell, or reduce the body s hyper-immune response (also known as cytokine storm ) to novel or pandemic strain viruses with which states could supplement their existing stockpiles? This research explores six classes of medications that could potentially assist state-level governments in expanding their state-level stockpiles, to include more treatment and prophylaxis options, in the face of pandemics involving novel viruses. The results of this research were filtered through three criteria (medical efficacy, cost, logistical considerations) that narrow the field of candidate therapies down to four specific findings: one generic version of the antiviral called Ribavirin, and generic versions of the statins called Lipitor, Zocor and Gemfibrozil. This research may be applied to state and local-level public health agencies interested in bolstering their existing stockpiles for pandemic preparedness.
ADA282676	Controlling Cocaine. Supply Versus Demand Programs	RAND CORP SANTA MONICA CA	Rydell, C. P.,Everingham, Susan S.	1/1/1994	138	Not available	DA	U	A - 01	Approved for public release; distribution is unlimited.	Not available	The current cocaine epidemic in the United States started in the late 1960s, picked up momentum during the 1970s, and is still going strong in the 1990s. The number of cocaine users peaked in the early 1980s at about 9 million, and has gradually decreased to a little more than 7 million today. However, that downward trend in the total number of users is misleading, because a decline in the number of light users has masked an increase in the number of heavy users. Heavy users consume cocaine at a rate approximately eight times that of light users, so the upward trend in consumption by heavy users roughly cancels the downward trend in consumption by light users. The result is that total consumption of cocaine in the United States has remained at its mid-1980s peak for almost a decade
AD0672116	PRINCIPAL RESULTS OF THE STUDY OF A LIVING VACCINE AGAINST INFLUENZA	ARMY BIOLOGICAL LABS FREDERICK MD	Smorodintsev, A. A.	7/1/1962	15	TRANS-974	ABL/MD	U	A - 01	Approved for public release; distribution is unlimited.	Not available	The marketing of a living vaccine with guaranteed specificity, harmlessness and efficacy will provide a sound basis for the successful control of influenza. Vaccination against influenza must become a mass procedure to be carried out on the entire population of the country. This will not only substantially decrease the incidence of the disease, but also gradually eradicate the reservoir of influenza virus.

ADA603298	Medical Countermeasure Product Development - Alternatives Paper	DEFENCE SCIENCE AND TECHNOLOGY ORGANISATION VICTORIA (AUSTRALIA)	Pradera, Felicia,Alderton, Malcolm	4/1/2014	25	DSTO-GD-0812,DODA-AR-015-919	AR-015-919,DSTO	U	A - 01	Approved for public release; distribution is unlimited.	General document	Chemical Biological and Radiological (CBR) threats, emerging infectious diseases and pandemics pose an imminent, real and serious danger to Australia's healthcare, economy and national security. In order to respond and have an all-hazard preparedness approach to these threats, Medical Countermeasures (MedCMs) are required. MedCMs can include drugs, vaccines and diagnostics (devices and materials). Currently, there exists a dependence on non-Australian sources for MedCM products however there is no assurance that these products will be available in a time of need. Alternative solutions must be considered and developed. This paper provides a strategy focused on exploring affordable and integrated capability to acquire (by development or purchase) MedCM products for Australia.
AD1018132	Mission Assurance: An Operating Construct for the Department of Defense	Air War College Maxwell AFB United States	Wooden,Jeffrey R.	2/14/2012	29	Not available	Not available	U	A - 01	Approved for public release; distribution is unlimited.	Technical Report	There have been a significant amount of studies and papers written on the individual yet interrelated disciplines of Continuity, Crisis Management, Emergency Management, Critical Infrastructure Protection and Pandemic Planning. However, to date none of them have taken a holistic look at covering those critical areas under a single unifying management and organizational construct. The proposed construct; Mission Assurance, would allow for comprehensive and integrative planning, to ensure both mission and personnel are taken care of in the event of natural or man-made catastrophe. This qualitative study utilized a mix-methodology of case study and ground theory to determine if the Mission Assurance construct could provide for better utilization of resources as well as enhancing disaster and emergency response programs. The results showed that while there are significant cultural, organizational and in some cases individual biases to overcome, Mission Assurance is a construct that could allow for enhanced resource utilization and provide for integrative planning in developing a coordinated all-hazards response.
AD0836694	LABORATORY INFECTIONS WITH Q FEVER	ARMY BIOLOGICAL LABS FREDERICK MD	Nauck, E. G.,Weyer, F.	10/1/1963	17	TRANS-957	SMUFD	U	A - 01	Approved for public release; distribution is unlimited.	Not available	A laboratory epidemic of Q fever appeared in the Hamburg Tropical Institute at the end of 1947 and beginning of 1948. The diagnosis was confirmed clinically or etiologically in seven persons. In four other cases there was merely a suspicion that it was also a question of Q fever. The cases ran their course clinically in the same manner as is known to have occurred in other laboratory epidemics. In four cases the diagnosis was based on the microscopic detection of the agent. A successful verification of the agent was made after transferring whole blood to mice and guinea-pigs, after transferring sputum to mice, after feeding lice and ticks on the patient with subsequent inoculation of organ trituration in mice. The agent also still circulates in the blood for rather a long time, but was not detected in all cases studied in this way. The disease appeared only when the strain kept in mouse lungs and mouse spleen had undergone a tick passage. The real source of the infection is not known. An infection probably occurs due to dust containing the agent. The peculiarities of the epidemiology of Q fever may find an explanation in variations in the agent's virulence.
ADA274174	Rape Awareness and Prevention Training	NAVAL TRAINING SYSTEMS CENTER ORLANDO FL	Bailey, Sandra S.,Gonos, Gregory H.,Healey, Janet W.	12/1/1991	59	NTSC-SR-92-003	NTSC	U	A - 01	Approved for public release; distribution is unlimited.	Final rept.	The incidents of rape have reached epidemic proportions in the United States. The U.S. Department of Justice reports that a woman in the United States is 20 times more likely to be raped than in Japan; 13 times higher than Great Britain; and 4 times higher than Germany. It is estimated that a woman is raped every 6 minutes and young males, ages 12-16, are becoming the fastest growing population to become victims of sexual assault. In response to this growing national epidemic, the Commanding Officer of the Naval Training Systems Center requested a study to assess the parameters and dynamics involved in rape prevention and awareness training. Through education the number of rapes can be reduced. Rape prevention and awareness training increases the male's sensitivity to the issues of rape, their understanding of the role they play in society, and what can be done to stop the crime. Date rape, Rape, Assertiveness training, Rape prevention, Anger rape, Sex, Traumatic stress. Sadistic rape, Self-defense,



AD0255280	SELECTED ABSTRACTS FROM SOVIET BIOMEDICAL JOURNALS NO. 5	FORDHAM UNIV BRONX NY	Pollitzer, Robert	3/1/1961	43	Not available	ABL/MD	U	A - 01	Approved for public release; distribution is unlimited.	Journal abstracts, no. 5	(1) Results of tularemia vaccination in the Brest oblast. (2) To the clinique of brucella-caused meningo-encephalitis. (3) On tick-borne two-wave meningo-encephalitis in Transcarpathia. (4) Changes of the electrocardiogram in brucellosis patients under the influence of treatment with vaccine and antibiotics. (5) Study of the immunological pattern of the population in regard to tick-borne encephalitis in the Biriliusk raion of the Krasnoiarisk Krai. (6) Some remarks on the pamphlet Tick encephalitis and measures against it." (7) On the methods of detecting natural tularemia foci. (8) Studies on the natural focality of diseases and development of these studies in Bulgaria. (9) The classification of brucella species. (10) The state of immunity in guinea-pigs immunized with live brucellosis vaccine under conditions of exposure to radiation. (11) The increase of the sensitivity of the aerological agglutination reaction for brucellosis in vitro. (12) A brucellosis epidemic caused by the transition of Br.melitensis into cattle. (13) Length of discharge of anthrax bacilli following various methods of treating the cutaneous form."
ADA033369	Alterations of the Nasal Mucosa of Cadavers of Epidemic Encephalitis,	ARMY MEDICAL RESEARCH INST OF INFECTIOUS DISEASES FREDERICK MD	Watanabe,Yochio	12/13/1976	4	USAMRIID-MUL-0528	Not available	U	A - 01	Approved for public release; distribution is unlimited.	Not available	In the summer of 1938 and 1939 an examination was made of the nasal mucosa of the respiratory and vestibular region in the course of 7 autopsies (3 adults and 4 infants who had been sick for 3-15 days) of cases of Japanese epidemic encephalitis that had broken out in Tokyo. In the respiratory region the main alteration which was encountered was gelatinization of the epithelia and nasal glands and cellular infiltration.
ADA458826	Interrogation of Detainees: Overview of the McCain Amendment	LIBRARY OF CONGRESS WASHINGTON DC CONGRESSIONAL RESEARCH SERVICE	Garcia, Michael J.	10/23/2006	14	CRS-RL33655	CRS/DC	U	A - 01	Approved for public release; distribution is unlimited.	Congressional Report	
ADA469205	Avian Influenza/Pandemic Influenza Program	HENRY M JACKSON FOUNDATION FOR THE ADVANCEMENT OF MILITARY MEDICINE ROCKVILLE MD	Hapner, Ralph W.	9/1/2006	7	Not available	USAMRMC	U	A - 01	Approved for public release; distribution is unlimited.	Final rept. 8 May 2006-30 Sep 2006	The Henry M. Jackson Foundation will provide space, personnel, equipment and to support surveillance and efforts in support of the Department of Defense Global Emerging Infections Surveillance and Response System (DoD-GEIS) research related to avian influenza and pandemic influenza preparedness and response. The Department of Defense Global Emerging Infections Surveillance and Response System (DoD-GEIS) has been charged to manage a \$39M congressional supplement for Avian/Pandemic Influenza. Time is of the essence and Congress expects improved DoD surveillance systems to be in place early. The urgency imposed on us by Congress and the even greater urgency of having an enhanced surveillance system in place before, not after, the pandemic start is critical. The Department of Defense Global Emerging Infections Surveillance and Response System (DoD-GEIS) central hub will initiate a plan to provide funding, personnel resources, the centralized management for coordination and reporting related to the DoD efforts for improving global surveillance and efforts in support of research related to avian influenza/pandemic influenza. The results of these efforts will be coordinated with the Unified Combatant Commands and other military and civilian organizations/agencies.
ADA443661	Asymptotic Behavior of an SI Epidemic Model With Pulse Removal	WISCONSIN UNIV-MILWAUKEE DEPT OF MATHEMATICAL SCIENCES	Fuhrman, K. M.,Lauko, I. G.,Pinter, G. A.	1/1/2006	18	Not available	AFOSR	U	A - 01	Approved for public release; distribution is unlimited. This document is not available from DTIC in microfiche.	Not available	In this paper we discuss an SI epidemic model with pulse removal from the infective class at fixed time intervals with both exponential and logistic type underlying population dynamics. This model has a significance when dealing with animal diseases with no recovery or when we consider isolation in human diseases. We provide a rigorous analysis of the asymptotic behavior of the percentage of infected individuals, the total number of infected individuals, and the total population in our model. We show that periodic removal/isolation is a feasible strategy to control the spread of the disease.

ADA511455	Honduran-U.S. Relations	LIBRARY OF CONGRESS WASHINGTON DC CONGRESSIONAL RESEARCH SERVICE	Meyer, Peter J.	11/23/2009	32	CRS-7-7500,CRS- RL34027	CRS/DC	U	A - 01	Approved for public release; distribution is unlimited.	Congressional rept.	On June 28, 2009, the Honduran military detained President Manuel Zelaya and flew him to exile in Costa Rica, ending 27 years of uninterrupted democratic, constitutional governance. Following the ouster, the Honduran Supreme Court released documents asserting that an arrest warrant had been issued for Zelaya as a result of his noncompliance with previous court orders. Zelaya's forced removal halted the judicial process before a trial could be held, and the Honduran National Congress replaced him with head of Congress Roberto Micheletti. The United States and international community have universally condemned the events in Honduras and called for a restoration of Zelaya and the rule of law. General elections to elect a new president and National Congress are scheduled to be held on November 29, 2009, though questions remain concerning whether Zelaya supporters and the international community will accept the results. The political instability brought about by the removal of President Zelaya has created yet another challenge for Honduras, one of the hemisphere's poorest countries. In addition to significant challenges in the areas of crime, human rights, and improving overall economic and living conditions, the country faces a poverty rate of nearly 70%, high infant mortality, and a significant HIV/AIDS epidemic. While traditional agricultural exports of coffee and bananas are still important for the economy, nontraditional sectors, especially the maquiladora, or export-processing industry, have grown significantly over the past decade. The economy, which grew by 6.3% in 2007 and 4% in 2008, has benefitted from significant debt reduction by international financial institutions that have freed government resources to finance poverty-reduction programs. The global financial crisis and current political crisis, however, are expected to slow economic growth sharply in 2009.
ADA586043	Development and Evaluation of a Pyriproxyfen-treated Device to Control the Dengue Vector, <i>Aedes aegypti</i> (L.) (Diptera: Culicidae)	WALTER REED ARMY INST OF RESEARCH SILVER SPRING MD DEPT OF ENTOMOLOGY	Ponlawat, Alongkot,Fansiri, Thanyalak,Kurusarttra, Somwang,Pongsiri, Arissra,McCardle, Patrick W.,Evans, Brian P.,Richardson, Jason H.	3/1/2013	13	Not available	USAMC	U	A - 01	Approved for public release; distribution is unlimited.	Not available	The resurgence of dengue fever and the chikungunya epidemic make the control of <i>Aedes aegypti</i> mosquitoes, the vectors of these diseases, critically important. We developed and evaluated an <i>Ae. aegypti</i> control device that is visually-attractive to mosquitoes. This pyriproxyfen-treated device was evaluated for its impact on <i>Ae. aegypti</i> egg production and population dynamics in dengueendemic areas in Thailand. The device consists of a ?high rise? shaped ovitrap/ resting station covered with black cotton cloth. The device is easily collapsible and transportable. <i>Ae. aegypti</i> are generally drawn towards darker, shadier areas making this device physically attractive as a resting station to mosquitoes of all physiological stages. The results show this device suppressed <i>Ae. aegypti</i> populations after it was introduced into a village. The observed effect was primarily the result of the <i>Ae. aegypti</i> exposure to pyriproxyfen shortly after adult emergence or after taking a blood meal resulting in decreased egg production. We believe the device may be further improved physically and the formulation should be replaced to provide even better efficacy for controlling <i>Ae. aegypti</i> mosquito populations.
ADA526445	DoD Global Emerging Infections System Annual Report, Fiscal Year 1999	ARMED FORCES HEALTH SURVEILLANCE CENTER SILVER SPRING MD	Not available	1/1/1999	33	Not available	AFHSC	U	A - 01	Approved for public release; distribution is unlimited.	Annual rept.	President Clinton recognized that the United States was inadequately prepared to address the problems of emerging infections and issued Presidential Decision Directive NSTC-7 in June 1996. This directive formally expanded the mission of the DoD to address the global threat of emerging infectious diseases. The Global Emerging Infections Surveillance and Response System (GEIS) was established in 1997 as the DoD focus for responding to the directive. FY99 core Defense Health Program funding to implement the eight presidential actions of the directive was set at \$3.3 million. A strategic plan specifying the DoD approaches and planned activities was published in November 1998. DoD-GEIS operates in three primary realms: the Military Health System (MHS), the DoD Overseas Medical Research Units, and through partnerships with other federal agencies, foreign countries, and international organizations such as the World Health Organization (WHO). The regional Unified Commands (CINCs) are key partners in the third realm. The DoD-GEIS response to the five most relevant directives of the President follows.
ADA559194	PANDEMICS: Recommendations for International Preparedness, Response and Coordination	AIR FORCE ACADEMY COLORADO SPRINGS CO	Brew, Matt,Schmidt, Hal	1/1/2011	12	Not available	USFAA/MSS	U	A - 01	Approved for public release; distribution is unlimited.	Journal article	

AD0836622	TOBACCO DOWNY MILDEW (PERONOSPORA TABACINA ADAM.) IN POLAND IN 1963	ARMY BIOLOGICAL LABS FREDERICK MD	Jankowski, Franciszek	7/24/1964	5	TRANS-1132	SMUFD	U	A - 01	Approved for public release; distribution is unlimited.	Not available	The article includes a temporary evaluation of the meteorological conditions in the summer of 1963 in Poland, the course of the tobacco downy mildew epidemic, the situation on tobacco plantation in vegetation, and a short discussion of the prophylactic measures employed.
ADA570639	Molecular Characterization and Phylogenetic Analysis of the Hemagglutinin 1 Protein of Human Influenza A Virus Subtype H1N1 Circulating in Kenya During 2007-2008	ARMY MEDICAL RESEARCH UNIT-KENYA APO NEW YORK 09675	Bulimo, Wallace D.,Achilla, Rachel A.,Majanja, Janet,Mukunzi, Silvanos,Wadegu, Meshack,Osunna, Finnley,Mwangi, Josephat,Njiri, James,Wangui, Julia,Nyambura, Janet,Obura, Beryl,Mitei, Ken,Omariba, Duke,Segecha, Shirley,Nderitu, Martha,Odindo, Alfred,Adega, Charles,Kiponda, Jeremiah,Mupa, Ruth,Munyazi, Frida	1/1/2012	8	Not available	DOD	U	A - 01	Approved for public release; distribution is unlimited.	Journal article	Among influenza viruses, type A viruses exhibit the greatest genetic diversity, infect the widest range of host species, and cause the vast majority of cases of severe disease in humans, including cases during the great pandemics. The hemagglutinin 1 (HA1) domain of the HA protein contains the highest concentration of epitopes and, correspondingly, experiences the most intense positive selection pressure. We sought to isolate and genetically characterize influenza A virus subtype H1N1 (A[H1N1]) circulating in Kenya during 2007 2008, using the HA1 protein. Nasopharyngeal swab specimens were collected from patients aged 2 months who presented to 8 healthcare facilities in Kenya with influenza-like illness. We tested specimens for seasonal influenza A viruses, using real-time reverse-transcription polymerase chain reaction (RT-PCR). Viruses were subtyped using subtypespecific primers. Specimens positive for seasonal A(H1N1) were inoculated onto Madin-Darby canine kidney cells for virus isolation. Viral RNAs were extracted from isolates, and the HA1 gene was amplified by RT-PCR, followed by nucleotide sequencing. Nucleotide sequences were assembled using BioEdit and translated into amino acid codes, using DS Gene, version 1.5. Multiple sequence alignments were performed using MUSCLE, version 3.6, and phylogenetic analysis was performed using MrBayes software. We found that, similar to A/Brisbane/59/2007 (H1N1) like virus, which was included in the southern hemisphere vaccine for the 2009 influenza season, all 2007 Kenyan viruses had D39N, R77K, T132V, K149R, and E277K amino acid substitutions, compared with A/Solomon Islands/3/2006 (H1N1) like virus, a component of the southern hemisphere vaccine for the 2008 influenza season. However, the majority of 2008 viruses from Kenya also had R192K and R226Q substitutions, compared with A/Solomon Islands/3/2006 (H1N1) like virus.
ADA514120	Analysis of the Distribution of Vaccine Using Department of Defense Assets Versus Contracts with Private-Sector Delivery Companies	Naval Postgraduate School	Latta, Jason E.	12/1/2009	80	Not available	NPS	U	A - 01	Approved for public release; distribution is unlimited.	Master's thesis	It is not a question of if" the next pandemic influenza outbreak will strike
ADA440816	U.S. Drug Control Strategy and Latin America	NATIONAL WAR COLL WASHINGTON DC	Gessner, Andrew M.	1/1/1992	13	Not available	NDU/NWC	U	A - 01	Approved for public release; distribution is unlimited.	Not available	On September 5. 1989 President Bush in a nationally televised address presented his first National Drug Control Strategy to the Congress and American people. From the administration's point of view this was the first time the Federal government had clearly developed and articulated a cohesive plan for combating the epidemic use of illegal drugs in the U.S. The drug war" had officially become a national priority with international implications. Is the production and distribution of ll legal drugs
ADA058941	On the Negative Binomial Convergence in a Class of M-Dimensional Simple Epidemics.	FLORIDA STATE UNIV TALLAHASSEE DEPT OF STATISTICS	Lacayo,H.,Langberg,Na ftali A.	7/1/1978	16	FSU-STATISTICS-M464,TR-84-AFOSR,AFOSR-TR-78-1232	TR-78-1232	U	A - 01	Approved for public release; distribution is unlimited.	Interim technical rept.,	Consider a population which is exposed to m infections, and consist initially of N susceptibles. At each point in time at most one susceptible becomes infective, and only from one cause. This m-dimensional simple epidemic is a stochastic process, (X sub N, 1(t),..., S sub N, m(t), with components counting the number of infectives from the respective causes at time t.

AD1087182	Universal Influenza T Cell-Targeted Mucosal Vaccines	Saint Louis University Saint Louis United States	Hoft,Daniel F.,Eickhoff,Christopher S.	5/1/2019	33	Not available	Not available	U	A - 01	Approved for public release; distribution is unlimited.	Technical Report,01 May 2018,30 Apr 2019	The goals of this work are to design and test novel T cell-targeted adenoviral (Ad)-based influenza vaccines with modified vector tropism [(designed to efficiently transduce dendritic cells (DC)). Drs. Curiel and Dmitriev (WU) generated multiple replication deficient GFP-expressing Ad vectors incorporating came lid nanobodies specific formurine antigen presenting cells (CD40, Clec9a, and others). We tested the efficiencies of each using in vitro transduction assays in both total splenocytes and CD11c+ purified DC. We identified 2 different Ad vectors with enhanced DC transduction efficiencies. Control Ad and DC-targeted Ad vectors engineered to express conserved influenza CD4 and CD8 T cell epitopes are currently being generated and will soon be tested in HLA A2/DR1 transgenic mice. Cloning of the synthetic multi-epitope influenza vaccine genes was straightforward, however, rescue and propagation of recombinant DC-targeted Ad was problematic. Drs. Curiel and Dmitriev have designed a workaround to suppress expression of the multi-epitope influenza vaccine gene during virus rescue and propagation, and we expect to have all novel vaccines ready for study within the next two months. We will determine whether mucosal delivery of these DC-directed T cell-targeted influenza vaccines provide superior immunogenicity and protection against multiple influenza subtypes in the next reporting period.
ADA091041	The Convergence of the State Probabilities in a Class of m-Dimensional Simple Epidemic Models.	FLORIDA STATE UNIV TALLAHASSEE DEPT OF STATISTICS	Lacayo,Herbert,Langberg,Naftali A.	4/1/1980	19	FSU-Statistics--M464R,84-R,AFOSR-TR-80-0996	TR-80-0996	U	A - 01	Approved for public release; distribution is unlimited.	Interim rept.,	A population of susceptible individuals exposed to m contagious diseases is considered. The progress of this epidemic among individuals is modeled by an m-dimesional stochastic progress. The components of this progress represent the number of infective individuals with the respective diseases at time t. A class of m-dimensional stochastic processes is constructed. These processes describe the progress of the epidemic models considered in the sequel. Exact and approximate formulas for the joint and marginal state probabilities of these models are obtained. It is shown that the approximate formulas are very simple functions of time while, the derivation of the exact formulas involve tedious computations. (Author)
ADA215558	The Acquired Immunodeficiency Syndrome. An Air Force Readiness Issue	AIR FORCE INST OF TECH WRIGHT-PATTERSON AFB OH SCHOOL OF SYSTEMS AND LOGISTICS	Stearns, Barbara D.	9/1/1989	77	AFIT/GLM/LSR/89S-58	AFIT	U	A - 01	Approved for public release; distribution is unlimited.	Master's thesis,	The purpose of this study was to examine present Air Force policy on HIV infection and determine its adequacy for the future based on the predicted course of the AIDS epidemic. Information concerning AIDS and HIV infection for both the general population as well as the Air Force population was reviewed and presented to provide an assessment of the AIDS epidemic in the United States and in the Air Force. Based on the examination of Air Force policy on HIV infection and the predicted course of the AIDS epidemic, this study did not conclusively determine the adequacy of the policy for the future. At present, Air Force policy on HIV infection appears to be suitable for the reason that the number of HIV infected individuals in the Air Force is insignificant. Keywords: Personnel management, policies, Air Force personnel, Air Force planning. (UES)
ADA241500	International Symposium on Epidemic Hemorrhagic Fever (Hemorrhagic Fever with Renal Syndrome) Held in Wuhan, Hubei, China on 31 October - 2 November 1988	HUBEI MEDICAL COLL (CHINA) VIRUS RESEARCH INST	Chin-Min, Hsiang,Zhi-Ming, Zheng,Huggins, John W.	10/1/1989	185	Not available	USAMRDC	U	A - 01	Approved for public release; distribution is unlimited.	Rept. for 31 Oct-2 Nov 1988	To hold an International Symposium in HFRS was initially proposed by Dr. Chin-min Hsiang, Professor of Virology of Hubei Medical University and immediately supported by Dr. Jia-qi Yang, president of Hubei Medical University and Dr. David L. Huxsoll, Director of U.S. Army Medical Research Institute of infectious Diseases in 1985, the beginning year of a three-year contract between Hubei medical University and the USAMRIID on a collaboration program of HFRS treatment with ribavirin. This was with an idea of setting up a goal of 'must success' of the Sino-American cooperation study. Due to the painstaking efforts of scientists and officers of both sides, the three years plan was almost finished in two years with harvest of a definite conclusion that ribavirin is effective in the treatment of acute stage HFRS patients.

ADA466937	COHORT: An Integrated Information Approach to Decision Support for Military Subpopulation Health Care	AIR FORCE MEDICAL OPERATIONS AGENCY FALLS CHURCH VA	Reichard, G. D.,Demitry, Peter,Catalino, Joseph	9/1/2004	31	Not available	AFMOA/VA	U	A - 01	Approved for public release; distribution is unlimited.	Conference paper	Delayed recognition and response to health syndromes in the past have highlighted the critical need for real-time surveillance of the health status of forces as an enabling capability for decision makers. Real-time surveillance serves to alert health authorities and make possible rapid, appropriate, and effective responses to limit the adverse impact of occupational and operational threats to health. In support of Force Health Protection, the USAF Surgeon General has recognized a need for early detection of syndromes and epidemics in specific cohorts (subpopulations) over time. Cohort surveillance and monitoring require analytical tools and access to pertinent, timely, and consolidated medical data. The Composite Occupational Health and Operational Risk Tracking system (COHORT) addresses the USAF Surgeon General's need by providing real-time surveillance of the medical care and treatment of specified groups of military personnel across multiple medical health facilities throughout the world. The medical encounter data aggregated by COHORT provide input for timely detection and monitoring of occupational health concerns and disease trends, syndromes, and outbreaks. The early detection made possible by COHORT avails key decision makers the opportunity to formulate appropriate responses in time to make a difference in the outcome.
AD1020383	A Case Study of the United States Military's Response to the 2014 Ebola Epidemic	US Army Command and General Staff College Fort Leavenworth United States	Wiggins,Daniel C.	6/10/2016	85	ATZL-SWD-GD	Not available	U	A - 01	Approved for public release; distribution is unlimited.	Technical Report	The complexity and critical importance of the United States (US) Military's response to the 2014 Ebola epidemic in Western Africa provides a unique case study platform for operational analysis as well as providing an opportunity to assess the US Military's capabilities to provide humanitarian assistance and disaster relief during an emerging infectious disease epidemic. It also provides an exceptional opportunity to study the interactions of inter-governmental agencies, Joint Force procedures in a non-traditional setting, and non-governmental organization (NGO) cooperation. The purpose of this study is to examine the US Military's response to the 2014 Ebola outbreak in West Africa. This study will primarily focus on the US Military's response in conjunction with other Governmental Organizations and NGOs. A case study of the 2014 Ebola outbreak provides a unique perspective on how the military integrates with non-military organizations through combined lines of effort in order to respond to and contain the Ebola outbreak.
ADA427620	Gaps in Public Health Preparedness	RAND HEALTH SANTA MONICA CA	Not available	1/1/2004	4	Not available	XD	U	A - 01	Approved for public release; distribution is unlimited.	Research highlights	
ADA470975	Avian Influenza: Potential Impact on Sub-Saharan Military Populations with High Rates of Human Immunodeficiency Virus/Acquired Immunodeficiency Syndrome	TRADOC ANALYSIS CENTER FORT LEAVENWORTH KS FOREIGN MILITARY STUDIES OFFICE	Not available	7/1/2007	7	FMSO/KS	Not available	U	A - 01	Approved for public release; distribution is unlimited.	Not available	Several sub-Saharan militaries have large percentages of troops with human immunodeficiency virus (HIV)/acquired immunodeficiency syndrome. With the arrival of avian influenza in Africa, the potential exists that some of those soldiers might also become infected with H5N1, the virus responsible for the disease. Two possible scenarios have been postulated regarding how such a coinfection of HIV and H5N1 might present. (1) Soldiers already weakened by HIV/acquired immunodeficiency syndrome rapidly succumb to H5N1. The cause of death is a cytokine storm

AD0825526	STUDY OF RECRUDESCENT TYPHUS IN ISRAEL.	ISRAEL INST FOR BIOLOGICAL RESEARCH NESS ZIONA	Goldwasser, Robert A.,Klinberg, Marcus A.	1/1/1967	44	Not available	Not available	U	A - 01	Approved for public release; distribution is unlimited.	Final rept. 1 Nov 64-31 Jul 67,	The purpose of the study was to determine the occurrence and rate of 'serorelapses' in persons who recovered from epidemic typhus. The study was conducted among immigrants who came to Israel from Eastern Europe after Second World War and suffered in their former residence a primary attack of classical exanthematic typhus. Israel is free of epidemic typhus infection and no human body lice are known to exist. The 294 individuals under study were bled at least three times and from the majority of them (262 persons) six blood samples were obtained. All the individuals enlisted were visited, interviewed, their histories checked and special questionnaires filled out. CF tests were carried out and completed on the serial bleedings of 125 volunteers. The serological results were into five major groups as follows: Group A - 42 persons with titers of <10 and no fluctuations in the antibody level. Group B - 35 persons whose sera throughout all bleedings gave persistent low CF titers, in the range of 1:10 to 1:40 (with a predominance of 1:20). Group C - 16 individuals whose sera throughout five to six bleedings showed persistent CF titers in the range of 1:40 to 1:80. Group E - 21 persons whose sera turned out to be anticomplementary. Outstanding is Group D which is composed of 11 cases, out of the 125 tested, who exhibited frequent variations in CF titer - four to eight-fold. It is a matter of interpretation if these eleven volunteers constitute evidence for what has been termed 'sero-relapses'.
ADA501095	The 2009 Influenza A(H1N1) Outbreak: Selected Legal Issues	LIBRARY OF CONGRESS WASHINGTON DC CONGRESSIONAL RESEARCH SERVICE	Swendiman, Kathleen S.,Jones, Nancy L.	5/6/2009	35	7-5700,R40560	CRS/DC	U	A - 01	Approved for public release; distribution is unlimited.	Not available	Recent human cases of infection with a novel influenza A(H1N1) virus have been identified both internationally and in the United States. Since there has been human to human transmission and the new virus has the potential to become pandemic, it is timely to examine the legal issues surrounding this emerging public health threat. This report provides a brief overview of selected legal issues including emergency measures, civil rights, liability issues, and employment issues. There are a number of emergency measures which may help to contain or ameliorate an infectious disease outbreak. The Public Health Service Act and the Stafford Act contain authorities that allow the Secretary of Health and Human Services and the President, respectively, to take certain actions during emergencies or disasters. While the primary authority for quarantine and isolation in the United States resides at the state level, the federal government has jurisdiction over interstate and border quarantine. Border entry and border closing issues may arise in the context of measures designed to keep individuals who have, or may have, influenza A(H1N1) from crossing U.S. borders. Aliens with the H1N1 virus can be denied entry, but American citizens cannot be excluded from the United States solely because of a communicable disease, although they may be quarantined or isolated at the border for health reasons. Airlines have considerable discretion to implement travel restrictions relating to the safety and/or security of flights and other passengers and crew. In addition, the federal government has broad legal authority to regulate and control the navigable airspace of the United States in dealing with incidents involving communicable diseases. States have authority to initiate other emergency measures such as mandatory vaccination orders and certain nonpharmaceutical interventions such as school closures, which may lessen the spread of an infectious disease. The International Health Regulations adopt
ADA481533	Genotyping of Global Yersinia Pestis Isolates by Using IS285	KENTUCKY UNIV LEXINGTON	Bobrov, A. G.,Huang, X.-Z.,Garcia, E.,Lindler, L. E.,Filippov, A. A.	11/1/2006	6	Not available	WRAIR/MD	U	A - 01	Approved for public release; distribution is unlimited.	Conference paper	Yersinia pestis is the etiologic agent of bubonic and pneumonic plague, one of the most dangerous bacterial infections. Plague is a re-emerging disease displaying current tendency to increasing reports of human cases, including the affliction with multidrug-resistant strains of Y. pestis. The plague bacterium is a potential agent of biowarfare and bioterrorism. Therefore, both military and civilian specialists should have efficient methods of molecular identification of Y. pestis strains and their assignment to certain ecological variants. In this work, we consider literature data, as well as our previous and new results on genotyping of global Y. pestis strains. We come to conclusion that a mobile genetic element, IS285, is one of the most powerful molecular tools allowing to trace the circulation of epidemic clones and to detect their geographical/animal origin.

ADA487787	Three Papers in International Health Policy: Modeling the Links between Economics and Epidemiology	RAND CORP SANTA MONICA CA	Dutta, Arindam	4/1/2008	188	Not available	X5	U	A - 01	Approved for public release; distribution is unlimited.	Doctoral thesis	Paper I establishes the benefits of linking epidemiological modeling with international health resource allocation decisions, reviewing the recent modeling literature on pandemic influenza control. The review indicates that outbreaks in resource poor settings are controllable with moderate resource intensity and complexity of effort for viral strains of moderate infectiousness. However, very high resource allocations for preparedness in industrialized nations -- at low geographic risk for the pandemic -- are predicated on containment failure in countries at higher risk of outbreaks. Without assuming the infectiousness of a future flu virus, a redistribution of resources to the developing countries at primary risk reduces overall systemic risk of containment failure. The payoffs in terms of reduced global mortality and morbidity are higher with increased infectiousness. The two other papers are associated with implementing the experimental desktop models for the context of India. Paper II first constructs a scenario based a nonepidemiological model of pandemic influenza introduction to, and subsequent spread within, India under various assumptions. The model uses published data on attack rates in Asia during previous pandemics as well as seasonal influenza. The model exploits geographical risk variations across provinces of India as well as the provinces' demographics, transport networks, and rural urban settings. Paper III reestimates the estimates of people living with HIV/AIDS (PLWHA) in India by combining the available prevalence data from the latest sero-surveillance data as well as the National Family Health Survey (NFHS-3) of 2005-2006. The paper continues to comprehensively analyze antiretroviral (ARV) policy in India, beginning with the estimation of total costs of utilization under public and private market rates for first line ART. A cohort simulation is conducted using a desktop model of disease progress in the population without access to ARVs.
ADA500900	The 2009 Influenza A(H1N1) Outbreak: Selected Legal Issues	LIBRARY OF CONGRESS WASHINGTON DC CONGRESSIONAL RESEARCH SERVICE	Swendiman, Kathleen S.,Jones, Nancy L.	5/21/2009	36	CRS-R40560	CRS/DC	U	A - 01	Approved for public release; distribution is unlimited.	Congressional rept.	Recent human cases of infection with a novel influenza A(H1N1) virus have been identified both internationally and in the United States. Since there has been human to human transmission and the new virus has the potential to become pandemic, it is timely to examine the legal issues surrounding this emerging public health threat. This report provides a brief overview of selected legal issues including emergency measures, civil rights, liability issues, and employment issues. There are a number of emergency measures which may help to contain or ameliorate an infectious disease outbreak. The Public Health Service Act and the Stafford Act contain authorities that allow the Secretary of Health and Human Services and the President, respectively, to take certain actions during emergencies or disasters. While the primary authority for quarantine and isolation in the United States resides at the state level, the federal government has jurisdiction over interstate and border quarantine. Border entry and border closing issues may arise in the context of measures designed to keep individuals who have, or may have, influenza A(H1N1) from crossing U.S. borders. Aliens with the H1N1 virus can be denied entry, but American citizens cannot be excluded from the United States solely because of a communicable disease, although they may be quarantined or isolated at the border for health reasons. Airlines have considerable discretion to implement travel restrictions relating to the safety and/or security of flights and other passengers and crew. In addition, the federal government has broad legal authority to regulate and control the navigable airspace of the United States in dealing with incidents involving communicable diseases. States have authority to initiate other emergency measures such as mandatory vaccination orders and certain nonpharmaceutical interventions such as school closures, which may lessen the spread of an infectious disease.
ADA060615	On a Characterization of Multivariate Distributions with Applications in Reliability and Epidemiology.	FLORIDA STATE UNIV TALLAHASSEE DEPT OF STATISTICS	Langberg,Naftali A.	8/1/1978	19	FSU-STATISTICS-M478,TR-12-AFOSR,AFOSR-TR-78-1369	TR-78-1369	U	A - 01	Approved for public release; distribution is unlimited.	Interim rept.,	Let $T_{sub 1}, \dots, T_{sub n}$ be positive random variables with finite means. Further let $I$ be the collection of all subsets of $\{1, \dots, n\}$ , and let $x_i$ be a function from the $n$ th Euclidian space to $I$ . It is proved that the minimum of $(a_{sub i}) (T_{sub i})$ over $i$ from 1 to $n$ and $x_i(a_{sub 1}, \dots, a_{sub n})$ are independent random variables for every $n$ real numbers $a_{sub 1}, \dots, a_{sub n}$ iff for every $n$ positive real numbers $b_{sub 1}, \dots, b_{sub n}$ and $r = 1, \dots, n$ the random variables $T_{sub r}/ET_{sub r}$ are identically distributed. Further we provide an explicit formula for the distribution of $x_i(a_{sub 1}, \dots, a_{sub n})$ . Multivariate distributions that possess the independence property are presented. Their use in Reliability growth or decay models as well as in Mathematical Epidemiology are discussed.

ADA326862	Investigation of the Biological Characteristics of Amantadine-Resistant Influenza A Virus.	AIR FORCE INST OF TECH WRIGHT-PATTERSON AFB OH	Walters, Carol C.	6/18/1997	58	AFIT-97-061	AFIT	U	A - 01	Approved for public release; distribution is unlimited.	Master's thesis,	Since the first report of amantadine-resistant strains of influenza in 1981 there has been much speculation about the epidemiological impact of these strains should the use of amantadine and rimantadine become widespread during an influenza pandemic. To date, there have been only two reports of confirmed resistant strains that were isolated from patients with no drug treatment. All other resistant strains have been collected only after therapy with either rimantadine or amantadine. Because naturally-occurring resistant strains are not isolated more often in the absence of drug therapy, it has been suggested that the drug-resistant phenotype does not confer any type of selective or replicative advantage over the sensitive phenotype. As a corollary, the suggestion was made that those viruses with the susceptible phenotype may have a biological advantage over their resistant counterparts. This study was conducted to determine if one phenotype of influenza A virus has an advantage in replication over the other. To accomplish this, 30-hour growth curves were generated for one amantadine-sensitive and two resistant virus isolates. Evaluation of the experimental results included visual comparison and numerical analysis of the data.
ADA556424	Intelligence-Led Risk Management for Homeland Security: A Collaborative Approach for a Common Goal	NAVAL POSTGRADUATE SCHOOL MONTEREY CA DEPT OF NATIONAL SECURITY AFFAIRS	Jackson, David P.	12/1/2011	145	Not available	NPS-NS	U	A - 01	Approved for public release; distribution is unlimited.	Master's thesis	The concept of risk management provides the foundation of the homeland security enterprise. The United States faces numerous complex risks ranging from a series of natural hazards, pandemic disease, technological hazards, transnational criminal enterprises and acts of terrorism perpetrated by intelligent adversaries. The management of these risks requires a strategic collaborative effort from the intelligence and risk analysis communities and many stakeholders at all levels of government, including the private sector. Paradoxically, a decentralized collaborative approach to homeland security risk management may produce better results than a hierarchical central approach driven by the U.S. Department of Security, as this thesis suggests. Intelligence-Led Risk Management represents the fusion of intelligence with risk management in a collaborative framework to promote effective risk management throughout the homeland security enterprise. Concepts from strategic thought and planning, such as the Cynefin Framework, Appreciative Inquiry, and Quantum Planning provide vehicles to promote collaboration and thoroughly explore the spectrum of risk management options available to the homeland security enterprise. Decentralization of homeland security risk management to states with the application of Intelligence-Led Risk Management through the network of fusion centers will promote collaboration and yield a stronger risk management culture within the homeland security enterprise.
ADA199791	History of Rickettsiology. Volume 1,	NAVAL MEDICAL RESEARCH INST BETHESDA MD	Weiss, E.	1/1/1988	20	NMRI-88-18	NMC	U	A - 01	Approved for public release; distribution is unlimited.	Not available	This chapter is devoted to a discussion of three topics: The discovery of the major etiologic agents of rickettsial disease, their vectors, and mechanisms of transmission; The major technological developments that have facilitated the study, control, and treatment of rickettsiae and rickettsial diseases; and the evolution of the concept of rickettsia from a microbial entity which is neither a typical bacterium nor a typical virus to a well-characterized set of bacteria. Contents of Volume I include: Etiology; Rocky Mountain Spotted Fever (RMSF); Epidemic and Endemic Typhus Fevers; Trench Fever; Scrub Typhus; Q Fevers; Rickettsialpox; Staining Rickettsiae; Preantibiotic Chemotherapy; Early Vaccines; The Yolk Sac Revolution; Rickettsiae as Organisms and Rickettsial Physiology. Reprints.
ADA530271	Syndromic Surveillance: Adapting Innovations to Developing Settings	GLOBAL EMERGING INFECTIONS SURVEILLANCE AND RESPONSE SYSTEM SILVER SPRING MD	Chretien, Jean-Paul,Burkom, Howard S.,Sedyaningsih, Endang R.,Larasati, Ria P.,Lescano, Andres G.,Mundaca, Carmen C.,Blazes, David L.,Munayco, Cesar V.,Coberly, Jacqueline S.,Ashar, Raj J.,Lewis, Sheri H.	3/1/2008	7	Not available	GEISRS/MD	U	A - 01	Approved for public release; distribution is unlimited.	Journal artile	



ADA271905	Identification, Purification and Characterization of Major Antigenic Proteins of Campylobacter jejuni	VETERANS ADMINISTRATION MEDICAL CENTER NASHVILLE TN	Pei, Zhiheng, Ellison, Richard T., III, Blaser, Martin J.	1/1/1991	9	Not available	USAMRDC	U	A - 01	Approved for public release; distribution is unlimited.	Not available	Evidence from developing countries and volunteer studies indicates that immunity to Campylobacter jejuni and Campylobacter coli maybe acquired, but the antigenic basis for this protection is poorly defined. We have purified to homogeneity four proteins with molecular weights of 28,000 (PEB1), 29,000 (PEB2) , 30,000 (PEB3), and 31,000 (PEB4) from epidemic C. jejuni strain 81-176 using acid extraction and sequential ion-exchange, hydrophobic interaction, and gel filtration chromatography. The relative amino acid compositions of these four proteins are similar NH2-terminal sequence analysis indicates that all four proteins are different, although the first 35 amino acids of PEB2 and PEB3 are 51.4% homologous.
AD1010990	Cloning and Characterization of the Mouse Hepatitis Virus Receptor	Uniformed Services University Of The Health Sciences Bethesda United States	Dveksler, Gabriela	2/11/1991	213	Not available	Not available	U	A - 01	Approved for public release; distribution is unlimited.	Technical Report	The attachment of mouse hepatitis virus (MHV), a coronavirus, to the host cell membrane is the key first step leading to viral infection. The cellular receptor for MHV has been previously characterized as a 100 -120 kDa membrane glycoprotein, found in colon , small intestine and liver. This receptor has been shown to be the only portal of entry for MHV-A59. Identification of the mouse gene for the MHV receptor is essential in understanding the mechanism of host cell-virus interaction. To this end, a new cloning strategy based on the polymerase chain reaction technology was developed using RNA as starting material (RNAPCR). I employed glyceraldehyde-3-phosphate dehydrogenase as a control gene for the establishment of this cloning strategy. Amino acid homology and antibody reactivity had pointed to the murine carcinoembryonic antigen (CEA) family as a candidate for the cellular receptor for MHV. Using the RNAPCR system with information obtained from the partial N-terminal amino acid sequence for the MHV receptor and a partial murine CEA cDNA sequence, a 710 bp product was obtained. Nucleic acid sequencing confirmed that this clone was a portion of the receptor. This fragment was then used as a probe to screen a BALB/c liver lambda gt11 cDNA library, from which a clone was obtained that begins at amino acid 10 and ends with a poly A tail. Using an alternative PCR technique, the sequence of the first 10 amino acids of the mature receptor protein and part of the leader peptide were then identified. The partial MHV receptor cDNA was transcribed and translated in vitro. The in vitro synthesized protein had the predicted size based on the amino acid sequence, and was immunoprecipitated with polyclonal antibody directed against affinity-purified MHV receptor. This polyclonal antibody has been shown to block MHV infection of murine tissue culture cells to a dilution greater than 1/1,200.
ADA505526	Fuzzy Math: Do Current Relative Values Tell An Accurate Story?	MARINE CORPS COMMAND AND STAFF COLL QUANTICO VA	Hovey, Erik	2/8/2005	11	Not available	USMC/CSC	U	A - 01	Approved for public release; distribution is unlimited.	Research paper	
ADA557836	Self-Exciting Point Process Modeling of Crime	CALIFORNIA UNIV REGENTS LOS ANGELES	Mohler, G. O., Short, M. B., Brantingham, P. J., Schoenberg, F. P., Tita, G. E.	3/1/2011	13	ARO-58344-MA.4	58344-MA.4, ARO	U	A - 01	Approved for public release; distribution is unlimited.	Journal article	Highly clustered event sequences are observed in certain types of crime data, such as burglary and gang violence, due to crime-specific patterns of criminal behavior. Similar clustering patterns are observed by seismologists, as earthquakes are well known to increase the risk of subsequent earthquakes, or aftershocks, near the location of an initial event. Space time clustering is modeled in seismology by self-exciting point processes and the focus of this article is to show that these methods are well suited for criminological applications. We first review self-exciting point processes in the context of seismology. Next, using residential burglary data provided by the Los Angeles Police Department, we illustrate the implementation of self-exciting point process models in the context of urban crime. For this purpose we use a fully nonparametric estimation methodology to gain insight into the form of the space time triggering function and temporal trends in the background rate of burglary.

ADA477785	U.N. Convention Against Torture (CAT): Overview and Applications to Interrogation Techniques	LIBRARY OF CONGRESS WASHINGTON DC CONGRESSIONAL RESEARCH SERVICE	Garcia, Michael J.	1/25/2006	24	CRS-RL32438	CRS/DC	U	A - 01	Approved for public release; distribution is unlimited.	Congressional rept.	The United Nations Convention Against Torture and Other Cruel, Inhuman, or Degrading Treatment or Punishment (CAT) requires signatory parties to take measures to end torture within their territorial jurisdiction and to criminalize all acts of torture. Unlike many other international agreements and declarations prohibiting torture, CAT provides a general definition of the term. CAT generally defines torture as the infliction of severe physical and/or mental suffering committed under the color of law. CAT allows for no circumstances or emergencies where torture could be permitted. The United States ratified CAT, subject to certain declarations, reservations, and understandings, including that the Convention was not self-executing and therefore required domestic implementing legislation to be enforced by U.S. courts. In order to ensure U.S. compliance with CAT obligations to criminalize all acts of torture, the United States enacted sections 2340 and 2340A of the United States Criminal Code, which prohibit torture occurring outside the United States. The applicability and scope of these statutes were the subject of widely-reported memorandums by the Department of Defense and Department of Justice in 2002. In late 2004, the Department of Justice released a memorandum superseding its earlier memo and modifying some of its conclusions. Congress recently approved additional guidelines concerning the treatment of detainees. The Department of Defense, Emergency Supplemental Appropriations to Address Hurricanes in the Gulf of Mexico, and Pandemic Influenza Act, 2006 (P.L. 109-148), and the National Defense Authorization Act for FY2006 (P.L. 109-163) contain identical provisions that prohibit the 'cruel, inhuman and degrading treatment or punishment of persons under the detention, custody, or control of the United States Government.'
ADA345706	Worldwide Report: Epidemiology. No. 326	JOINT PUBLICATIONS RESEARCH SERVICE ARLINGTON VA	Not available	8/2/1983	84	JPRS-84023	XD	U	A - 01	Approved for public release; distribution is unlimited.	Not available	This report contains translations/transcriptions of articles and/or broadcasts from around the world on epidemiology. Some titles include: Chittagong Diarrhea, Dysentery; Infant Mortality Rate Fourth Highest in Latin America (Brazil); Reasons for Continued Incidence of Polio Discussed; Increase in Dengue, Malaria Cases in Sarawak; Enforcement of Food Hygiene Law; Leprosy Cases Estimated at 12,000; Chlorine Typhoid Treatment Proves Fatal; Outbreak of Sheep Pox Near Brindisi Confirmed; Parvovirus Epidemic; Spread of Rinderpest Aggravated by Nomadic Herders; Increase in Cane Smut Disease Causing Concern; and others.
ADA501488	De-Radicalization of Muslim Communities in the UK	hamper Islamists' mobilization mechanisms	and trump their teaching of propagating message based on cultivated familiarity."	6/1/2009	Mushtaq, Rehan	U	131	U	A - 01	Approved for public release; distribution is unlimited.	NPS	This study examines why and how Islamists' message of radicalization spread like a social contagion among UK Muslim communities during the 1990s. The thesis hypothesizes that a small number of Islamists, with smartly contextualized ideas, given a receptive environment, can spread their influence rapidly. Borrowing from Social Movement Theory and other works, this thesis elaborates how, through word-of-mouth and interpersonal communications, a relatively small number of people can successfully initiate a social epidemic of religious extremism. By following simple rules of marketing, Islamists made their message stickier. To counter radicalization, the study suggests a paradigm shift: instead of countering the Islamists on theological grounds, reinvigoration of family" is proposed as an all-in-one counter-radicalization tool that would remove social strains
ADA493650	Public Health Planning for Vulnerable Populations and Pandemic Influenza	NAVAL POSTGRADUATE SCHOOL MONTEREY CA	Cameron, Wendy K.	12/1/2008	79	Not available	NPS	U	A - 01	Approved for public release; distribution is unlimited.	Master's thesis	This thesis addresses planning for vulnerable populations, those segments of each community that are normally independent but that may require special assistance during a health emergency such as an influenza pandemic. Analysis of plans from sixty of Georgia's 159 counties provides insight into the extent to which vulnerable populations are defined and identified; relevant agencies are engaged in planning; and opportunities are identified for improvement. Recommended strategies will enable local jurisdictions to more effectively plan for vulnerable populations. Some strategies have now been implemented and others are in progress.

ADA496737	The Pandemic Pendulum: A Critical Analysis of Federal and State Preparedness for a Pandemic Event	NAVAL POSTGRADUATE SCHOOL MONTEREY CA	Foley, John R.	3/1/2009	89	Not available	NPS	U	A - 01	Approved for public release; distribution is unlimited.	Master's thesis	This paper explores pandemic planning efforts across federal and state jurisdictions and how the absence of collaboration could have major consequences upon the population of the United States. How adequate are state and federal pandemic plans, and what must be done nationally to address common shortfalls? The methodology used a hybrid approach by combining a secondary analysis of available data with a modified case study approach. Analyzing the individual state plans and HHS' Pandemic Influenza Plan revealed common deficiencies, and disclosed distinct functional areas where stringent collaboration across multiple jurisdictions and functional areas would mitigate the deficiencies and provide a blueprint for potential development into an all-hazards national catastrophe plan. This resultant comprehensive plan would provide a solid template for all stakeholders to use in further development of their individual plans, and additionally provide a mechanism to propagate proactive planning efforts among international disaster preparedness partners.
ADA470584	Physiologic and Endocrine Correlates of Overweight and Obesity in African Americans and Caucasians	HENRY M JACKSON FOUNDATION FOR THE ADVANCEMENT OF MILITARY MEDICINE ROCKVILLE MD	Deuster, Patricia A.	3/1/2007	13	Not available	USAMRMC	U	A - 01	Approved for public release; distribution is unlimited.	Annual rept. 1 Mar 2003-28 Feb 2007	Obesity has reached epidemic levels and yet the incidence continues to rise. The current study is seeking to examine the hypothesis that obesity may reflect dysfunctioning of the hypothalamic-pituitary-adrenal (HPA) axis in response to stressors. African American persons are at greatest risk, but reasons for this difference are unknown. We will study 120 men and women of Caucasian and African American ethnicity and examine their responses to physiologic stressors: exercise and ingestion of a meal. Methods: The HPA axis will be studied in some detail by using two stressor paradigms and two steroid regimens. We expect to be able to detect subtle differences in HPA axis reactivity in obese individuals that might contribute to morbidity and perhaps even make individuals resistant to therapeutic interventions. Results: We have enrolled 124 participants, with 93 completed. Data collection and analyses are proceeding on schedule. Two abstracts were presented in 2006 and one is submitted and accepted for presentation in Summer 2007. Conclusions: We are on schedule for all study milestones and look forward to being able to answer the important questions regarding the potential role of the HPA axis in obesity.
AD1015401	Virus Genomes Reveal the Factors that Spread and Sustained the West African Ebola Epidemic	ARMY MEDICAL RESEARCH INST OF INFECTIOUS DISEASES FORT DETRICK MD FORT DETRICK United States	Dudas, Gytis,Ladner,Jason,Carvalho,Luiz M.,Bedford,Trevor,Tatem,Andrew J.,Baele,Guy,Faria,Nuno,Park,Daniel J.,Arias,Armando,Asogun,Danny,Bielejec,Filip,Caddy,Sarah,Cotten,Matthew,Dambrozio,Jonathan,Dellicour,Simon,DiCaro,Antonino,Diclaro,Joseph Il W.,Duraffour,Sophie,Elmore,Mike,Fakoli,Lawrence	8/9/2016	37	TR-16-193	Not available	U	A - 01	Approved for public release; distribution is unlimited.	Journal Article	The 2013-2016 epidemic of Ebola virus disease in West Africa was of unprecedented magnitude, duration and impact. Extensive collaborative sequencing projects have produced a comprehensive collection of Ebola virus genomes, representing over 5 of known cases, unprecedented for a single epidemic. In the first comprehensive analysis of this entire collection, we reconstruct a detailed history of migration, proliferation and decline of the virus throughout the region. We test the association of geographical, climatic, administrative, demographic and cultural factors with viral movement between administrative regions. We identify a classic gravity model as the core dynamic, with more intense migration between larger population centers particularly when geographically close. Notably, we show that despite a strong attenuating effect of border closures on international dispersal, localized cross-border transmission had already set the seeds for an international epidemic, rendering these measures relatively ineffective in curbing the epidemic. Finally, we use this empirical evidence to address why the epidemic did not spread into neighboring countries, showing that although these regions were susceptible to developing significant outbreaks, they were also at lower risk of viral introductions.

ADA328898	International Peace Operations and Conflict Resolution,	AIR WAR COLL MAXWELL AFB AL	Schroeder, Anita G.	4/1/1995	59	Not available	AWC	U	A - 01	Not available	Not available	The international, multipower community of the 21st century is being confronted by an epidemic of regional conflicts which are unique and disparate in their character and origins. when the complexities of the original conflicts are linked with the many-faceted aspects of international involvement, the difficulties of conflict containment and resolution are compounded. The global community lacks a consistent philosophy, be it diplomatic practice or military doctrine, for conflict resolution, and the approach to settling such conflicts has been characterized by contradiction and fluidity. This paper will review the traditional and current nature of one type of conflict resolution -- that of international peace operations. It will examine in detail two United Nations peace actions -- in El Salvador and the former Yugoslavia -- looking at the elements that have driven these conflicts and the activities employed to resolve them. From these experiences, some of the factors that influence international conflict resolution are identified and discussed.
ADA421190	Neuro-Immune Mechanisms in Response to Venezuelan Equine Encephalitis Virus Infection	UNIFORMED SERVICES UNIV OF THE HEALTH SCIENCES BETHESDA MD	Schoneboom, Bruce A.	1/1/2000	153	Not available	USUHS	U	A - 01,26	Availability: This document is not available from DTIC in microfiche.	Doctoral's thesis	Venezuelan equine encephalitis virus (VEE) is an emerging pathogen with epizootics and epidemics occurring in the Western Hemisphere. Recent outbreaks in South America have caused significant morbidity and mortality among domesticated livestock and surrounding human communities. VEE pathogenesis is characterized by infection of the central nervous system (CNS) where the virus targets neurons, resulting in significant neurodegeneration. VEE encephalitis can result in profound neurological deficits or even death. Because of the devastating nature of this disease and the lack of interventional therapies, it is important to understand the intricate details of VEE neuropathogenesis in order to identify targets for treatment to effect a cure. Inflammation has recently been implicated as a component of neurodegeneration. Inflammation in the CNS in response to acute infections is a protective mechanism that attempts to contain and clear neuro-invasive pathogens, however this upregulation of proinflammatory genes may be deleterious to surrounding neurons. The combined effects of direct infection and inflammation may be additive or synergistic in the amount of injury sustained in the CNS. Glial cells are of particular importance in the CNS immune response. These resident cells of the CNS have intimate associations with neurons and regulate the CNS milieu. One type of glial cell is the astrocyte. Astrocytes are found in vast numbers in the CNS and have essential functional roles in maintaining a healthy environment for neurons. Further, astrocytes play a role in the pro-inflammatory innate immune response. To identify the role of astrocytes in VEE infection, I characterized astrocyte susceptibility to VEE infection using an in vitro culture system and have further described their pro-inflammatory responses following VEE infection.
ADA299601	Assessment and Intervention for the Reduction of Adverse Gynecologic and Obstetric Clinical Events in Naval Personnel Aboard Ship.	NAVAL HEALTH RESEARCH CENTER SAN DIEGO CA	Brodine, Stephanie K.	8/25/1995	30	Not available	USAMRMC	U	A - 01	Approved for public release; distribution is unlimited.	Annual rept.,	Unplanned pregnancies (UPs) and sexually transmitted diseases (STDs) continue to be epidemic in active-duty women, resulting in morbidity and high financial costs with an adverse impact on combat readiness. However, the exact rates and the predisposing factors are not clearly defined. This project will document the prevalence and incidence of UPs and STDs in women assigned to two commands and define the demographic and behavioral correlates for both of these outcomes. Participants are screened for STDs and pregnancy at the time of enrollment and followed prospectively. Gynecological screening consists of pregnancy testing and newer, noninvasive assays for chlamydia and gonorrhea. Serologies for syphilis and hepatitis B also are being performed. Behavioral risk factors are being measured through a self-report questionnaire, which includes demographics, STD and pregnancy history, sexual history, and contraceptive use. Progress to date includes finalization of the survey instrument, human use approval, and identification of 2 study cohorts -- a shore-based command and a submarine tender (AS). The based enrollment procedures have been completed in 132 enlisted personnel, and the AS enrollment is in progress. Preliminary analysis documents this to be a high- risk population with early sexual debut, multiple lifetime partners, and high rate of prior STDs and UPs.
AD0291082	BIBLIOGRAPHY ON DENGUE AND YELLOW FEVERS. PART A. DENGUE FEVER. PART B. YELLOW FEVER	ARMY BIOLOGICAL LABS FREDERICK MD	Not available	10/11/1956	114	Not available	ABL/MD	U	A - 01	Approved for public release; distribution is unlimited. Availability: Document partially illegible.	Not available	Not available

ADA457312	An Analytic Framework for the War of Ideas	Naval Postgraduate School	Schramm, Harrison C.	9/1/2006	85	Not available	NPS	U	A - 01	Approved for public release; distribution is unlimited.	Master's thesis	One of the objectives listed in the 2003 National Strategy for Combating Terrorism" is to win the "War of Ideas." This thesis seeks to place an analytic framework around this war. The goal is to create a methodology for considering alternatives and some concrete metrics with which to compare courses of action. The fundamental assumption is that one-to-one (i.e.
AD0838804	PROBABLE METHOD OF SPREADING EPIDEMICS OF DERMATOPHYTOSIS OF THE GROIN	ARMY BIOLOGICAL LABS FREDERICK MD	Neves, Hermano,Xavier, N. Canova	7/15/1965	14	SMUFD-TRANS-1490	SMUFD	U	A - 01	Approved for public release; distribution is unlimited., Availability: Document partially illegible.	Not available	During an epidemic of dermatophytosis of the groin which occurred in a sanatorium and which was caused by E floccosum and T rubrum, the following was observed: (1) Relative contagiousness of the infection which was limited in general to the groins but which spread eventually to other regions and had a tendency to spontaneous cure. (2) The parasites originated at sources (active lesions in the groins and, occasionally, from carriers of fungi on the feed) which must have been transmitted indirectly, by means of contaminated articles (underwear, bedclothes, towels, sanitary utensils, etc.). (3) The spreading of the disease must have been aided by lack of careful attention to hygiene. (4) In the absence of efficient fungicides to rapidly sterilize the sources, rigorous methods of disinfection of carriers and the practice of good general hygiene is recommended to combat this type of epidemic.
AD1040790	Benzodiazepine Use Among Low Back Pain Patients Concurrently Prescribed Opioids in the Military Health System	59th Medical Wing San Antonio United States	Maddry,Joseph	8/27/2017	2	17356,59th Medical Wing	Not available	U	A - 01	Approved for public release; distribution is unlimited.	Conference Paper	Pain is a common complaint among returning deployed service members, with 25% reporting at least one pain-related injury during Basic Combat Training. Opioids are commonly prescribed to patients with low back pain (LBP) in the military health system. Concurrently prescribed opioids and benzodiazepines (benzos) pose safety risks for patients, including over sedation and overdose. Despite abuse liability and long-term safety concerns of opioids for chronic pain, there are high rates (18-38%) of concurrent opioid and benzo prescribing. These high-risk prescribing patterns have contributed to the fatal opioid overdose epidemic. There is scant evidence regarding opioid and benzos prescribing practices among Active Duty Service Member(ADSM) with LBP. It is important to understand factors associated with benzos use in this population to identify those most vulnerable to safety issues. Objective: To investigate factors associated with benzos concurrently prescribed with opioids among ADSM with LBP, who started their first opioid episode in 2012 or 2013.
ADA333170	JPRS Report: Epidemiology.	JOINT PUBLICATIONS RESEARCH SERVICE ARLINGTON VA	Not available	7/28/1993	57	JPRS-TEP-93-017	XD	U	A - 01	Approved for public release; distribution is unlimited.	Not available	Partial Contents: Seminar Discussed Meningitis in North, Dengue Epidemic Being Researched, Measles Outbreak Reported in Tamale Area, Trypanosomiasis Afflicting Tana River District, Uganda Cooperating in Trypanosomiasis Control, Yellow Fever Deaths Report Refused, Changara: Health Program To Save Children, Six Cholera Deaths in Abia State, Malaria Becoming Increasing Health Threat, Drugs Recommended, Drug Resistance, Health Status One of Worst in World', Cholera Almost Under Control in Mpika.
ADA531503	Strategic Policy for Pandemic Vaccine Distribution	NAVAL POSTGRADUATE SCHOOL MONTEREY CA	Russo, Thomas P.	9/1/2010	213	Not available	NPS	U	A - 01	Approved for public release; distribution is unlimited.	Master's thesis	The traditional public health model for mass vaccination, which is based on the assumption that workforce will be sufficient to mount a campaign, is flawed. Funding initiatives by Congress, while addressing certain inadequacies, have failed to consider workforce capacity that continued to decline resulting from state and local budget cuts. Thus, as the nation prepared for its first pandemic in 40 years and first of the twenty-first century, it found itself unprepared for a mass vaccination campaign. This thesis explores pandemic vaccine distribution, contrasting Department of Health and Human Service guidance with pandemic gap analyses and the recent H1N1 vaccination campaign. An analysis of the literature revealed that unresolved state and federal distribution issues contributed to distribution delays during the H1N1 call for mass vaccination. Policy analysis was used to evaluate public health and private sector vaccine distribution models, and a third hybrid model was proposed to improve support for public health emergencies. Adoption of the hybrid model will enhance the vaccination process from production through distribution along with administration to support U.S national security interest in biosecurity. The hybrid model offers a strategic solution for pandemic vaccine distribution and proposes a new approach for efficient, rapid distribution of biological countermeasures.

AD0403807	LITERATURE SURVEY OF VIRUSES AND RICKETTSIA IN FOODS	QUANTUM INC WALLINGFORD CT	McCrea, J. F.	6/4/1962	55	S-610	DOD	U	A - 01,23	Approved for public release; distribution is unlimited. Document partially illegible.	Rept. no. 4 (Final), 5 June 1961-4 June 1962	This report is the first known comprehensive review of those viruses and rickettsiae which may contaminate food and which may subsequently initiate infection in man. There are 10 viruses and 1 rickettsia which have this capability. Milk is the most frequent vehicle for virus infection in man. The total inactivation dose recommended is 5x10 to the 6th power roentgens for all viruses except infectious hepatitis. For this virus a dose of 2x10 to the 7th power roentgens is recommended.
ADA206076	Epidemiology of Meningococcal Disease in Northeastern Africa	NAVAL MEDICAL RESEARCH UNIT NO 3 FPO NEW YORK 09527	Sippel, John E.,Girgis, N. I.	1/1/1987	11	NAMRU-33/88,NAMRU-ACC-1514	NMRDC	U	A - 01	Approved for public release; distribution is unlimited.	Not available	Meningococcal meningitis occurs as major epidemics in the areas of Africa south of the Sahara designated by Lapeyssonnie as the meningitis belt. These outbreaks are generally sporadic and difficult or impossible to anticipate. Meningococcal disease is also a major public health problem in the Nile Valley from Alexandria, Egypt to the southern regions of the Sudan. Like the disease in the sub-Saharan region, meningococcal meningitis in the Nile Valley is seasonal and msot frequently caused by Neisseria meningitidis serogroup A. However, meningitis in Egypt and the Sudan is unique in that it occurs in the large urban areas of Cairo and Khartoum with relatively minor variations in disease incidence between seasons; i.e. while epidemics tend to occur in these cities at approximately 5- to 10-year intervals, the incidence the year after a major outbreak is generally very high, and the number of cases seen at the infectious disease hospitals during any meningitis season is almost always considerable. This predictable availability of patients with meningococcal disease presented an unusual opportunity for investigating clinical, epidemiological, prophylactic, and therapeutic aspects of meningococcal infections. The Naval Medical Research Unit No. 3 in Cairo has conducted a research program on meningococcal meningitis since 1968. These investigations were performed primarily at the Abbassia Fever Hospital in Cairo, but field studies were also carried out in Alexandria and Khartoum. Reprints.
ADA138461	The Effect of Laboratory Colonization on the Vector-Pathogen Interactions of Egyptian Culex pipiens and Rift Valley Fever Virus	ARMY MEDICAL RESEARCH INST OF INFECTIOUS DISEASES FORT DETRICK MD	Gargan, Il, Thomas P.,Bailey, Charles L.,Higbee, Glen A.,Gad, Adel,El Said, Sherif	1/1/1983	10	Not available	USAMRIID	U	A - 01	Approved for public release; distribution is unlimited.	Journal article	Field and laboratory findings implicated Culex pipiens as a vector of Rift Valley fever (RVF) virus during the 1977-1978 epizootics/epidemics in Egypt. This study evaluated changes in infection and transmission rates, and viral titers in F sub 1 through F sub 16 generation Cx. pipiens mosquitoes orally infected with RVF virus. Infection and transmission rates of RVF virus by this species changed significantly during the colonization process. However, the ultimate viral titers of either the transmitting or the infected nontransmitting mosquitoes were not affected by the colonization process. Following ingestion of virus, Cx. pipiens could be separated into three distinct subpopulations, an uninfected group and two types of infected mosquitoes - transmitters and nontransmitters. Transmitters contained significantly more virus (approximately 100-fold) than nontransmitters. These results demonstrated that not every infected female mosquito should be considered a competent vector, even if the species (population) is known to be a primary vector. Transmission was also accomplished by probing mosquitoes which were unsuccessful in obtaining a blood meal. These data document the long-held suspicion that vector competence studies based upon laboratory-colonized specimens may not represent the field situation.
ADA406056	Anthrax and Smallpox: Comparison of Two Outbreaks	MASSACHUSETTS INST OF TECH CAMBRIDGE	Guillemin, Jeanne	4/3/2002	30	Not available	ESC	U	A - 01,26	Approved for public release; distribution is unlimited. Availability: Hard copy only.	Rept. for 3-4 Apr 2002	Partial contents: Anthrax and Smallpox: Comparison of Two Outbreaks, Late Diagnosis, 1979 Sverdlovsk Epidemic, Sources of Evidence, Research Findings, Soviet Public Health Response, Structural Sources of Late Diagnosis, Solutions to Late Diagnosis.

ADA509746	Diabetes Prevention and Treatment Programs for Western PA FY04 and FY05	PITTSBURGH UNIV MEDICAL CENTER PA	Siminerio, Linda M.,Barnes, Barbara E.,Marks, Megan G.	5/1/2009	884	Not available	USAMRMC	U	A - 01	Approved for public release; distribution is unlimited.	Final rept. 15 Aug 2004-29 Apr 2009	Statistics show that over 66% of American adults, or more than 127 million, are overweight or obese. There is a strong link between obesity and diabetes. As the rates of obesity rise, so will the epidemic of diabetes. Diabetes is the fifth leading cause of death by disease in the United States, and annual costs are \$132 billion. Without proper medical care and patient education, individuals with diabetes will experience devastating, costly complications. Research shows that if patients at risk for developing diabetes make lifestyle changes, they can decrease their chance of progressing to diabetes by 59%. For those with diabetes, complications can be prevented and/or delayed with proper treatment and education. Building on previous work done by UPMC and the University of Pittsburgh, the focus of this program was to implement and evaluate comprehensive diabetes prevention and treatment programs disseminated throughout diverse practice settings and communities. In order to test the applicability of prevention and treatment modalities to diverse communities and racial and ethnic groups, we included initiatives targeted to underserved and military populations. To increase reach and access, we incorporated web-based tools and telecommunications technologies into our multi-faceted approach to prevention and treatment. As a result of the program, we were able to provide the AF SGR rationale for the implementation of the diabetes prevention and treatment programs, and assist them with such implementation. The work accomplished through these project years formed the basis of subsequent efforts to further demonstrate cost-effectiveness and sustainability.
ADA480091	Federal and State Responses to Biological Attacks: Isolation and Quarantine Authority	LIBRARY OF CONGRESS WASHINGTON DC CONGRESSIONAL RESEARCH SERVICE	Welborn, Angie A.	7/22/2002	12	Not available	CRS/DC	U	A - 01	Approved for public release; distribution is unlimited.	Not available	In the wake of the September 11 attacks, federal, state and local governments have become increasingly aware of the need for an effective response to future terrorist activities. Of significant concern is the government's ability to respond to a biological attack, including the introduction of an infectious or contagious disease into a population. An effective response could include the isolation of persons exposed to infectious biological agents or infected with a communicable disease as a result of the attacks, as well as the quarantine of certain states, cities, or neighborhoods. Currently, state and local governments have the primary authority to control the spread of dangerous diseases within their jurisdiction, with the federal government's role limited to interstate and foreign quarantine. However, many states have inadequate procedures in place for isolating individuals who are infected or believed to be infected and quarantining areas that are or may be infected. Generally, the laws currently in effect do not address the spread of disease resulting from a biological attack, and for the most part only address specific diseases that were the cause of past epidemics. In light of recent events, many states are reevaluating their public health emergency response plans and are expected to enact more comprehensive regulations relating to isolation and quarantine in the event of a biological attack. Public health experts have developed a Model State Emergency Health Powers Act to guide states as they reevaluate their plans. This report provides an overview of federal and state quarantine laws as they relate to the isolation or quarantine of individuals, as well as a discussion of the relevant case law. The Model State Emergency Health Powers Act is also discussed.

ADA473889	Breast Cancer and Early Onset Childhood Obesity: Cell Specific Gene Expression in Mammary Epithelia and Adipocytes	PURDUE UNIV LAFAYETTE IN	Camarillo, Ignacio G.,Nichols, Maxine	7/1/2007	27	Not available	USAMRMC	U	A - 01	Approved for public release; distribution is unlimited.	Final addendum rept. 1 Jul 2006-30 Jun 2007	Obesity has become a major health problem in children and adults and is associated with increased breast cancer incidence and mortality The epidemic of childhood obesity is recent and little information exists regarding its association with mammary tumorigenesis Towards better understanding this relationship we have developed and characterized a new rat model of childhood onset Diet Induced Obesity (DIO) and breast cancer We have shown that young female rats fed a high fat Western Style diet have a 24-fold higher body fat mass and elevated serum comorbidity factors as compared to Chow fed Lean rats When these animals are treated with the carcinogen MNU mammary tumors appear sooner and in greater numbers in Obese rats We determined via histology that tumors from Obese rats are of a more invasive type compared to tumors from Lean rats This is in accord with the association between human obesity and breast cancer mortality This new model parallels the onset of obesity as it occurs in humans and therefore provides an excellent system to study the underlying mechanisms of obesity and mammary tumor formation and progression Our long-term goals are to exploit this model to better understand adipocyte-epithelial interactions during mammary tumorigenesis identify and validate novel molecular therapeutic targets and to establish biomarkers for cancer prevention and prognosis
ADA528702	Worldwide Emerging Environmental Issues Affecting the U.S. Military. May 2005 Report	FEDERATION OF UN ASSOCIATIONS WASHINGTON DC MILLENNIUM PROJECT	Not available	5/1/2005	19	Not available	AEPI/VA	U	A - 01	Approved for public release; distribution is unlimited.	Not available	The new International Health Regulations adopted by the World Health Organization's annual assembly on May 23, 2005, will increase security against global epidemics of deadly diseases by improving national and international capacity for preventing and responding to disease outbreaks. The new regulations include comprehensive assessment, reporting, and response standards mandatory for each country and to be implemented within a specific timeframe; operational mechanisms; increased collaboration between countries' health offices and with the WHO; and a better coordinated international reporting and response system. The regulations stipulate the increased roles of countries and WHO in identifying, preventing, and responding to public health emergencies of international concern. WHO should be quickly informed of any outbreak of four diseases--SARS, bird flu, smallpox and polio--as well as any outbreaks of potential international public health concern" from known or unknown causes or sources. The new regulations will formally come into force two years after approved by the Assembly. The new WHO regulations should be distributed to relevant military commands so they can determine the implications for their operations and potentials for collaboration with WHO country offices and the Global Outbreak Alert and Response Network (GOARN). Such reviews should also include the new matrix developed by WHO for helping countries identify whether new health incidents are of international concern. Military organizations should be ready to use it on their own initiatives (and for their own protection) in countries that are not well prepared to respond to the new regulations."



ADA514802	Honduran-U.S. Relations	LIBRARY OF CONGRESS WASHINGTON DC CONGRESSIONAL RESEARCH SERVICE	Meyer, Peter J.	2/1/2010	24	CRS-RL34027	CRS/DC	U	A - 01	Approved for public release; distribution is unlimited.	Congressional rept.	On January 27, 2010, Porfirio Lobo Sosa was inaugurated President of Honduras. Lobo assumed power after seven months of domestic political crisis and international isolation that had resulted from the June 28, 2009 ouster of President Manuel Zelaya. The political crisis has left Lobo with a number of challenges, including considerable domestic political polarization, a lack of international recognition, and a faltering economy. Nonetheless, the strength of Lobo's National Party in the legislature and the weakness of his opposition will likely allow the new president to implement his policy agenda. The Honduran economy has undergone a number of changes in recent years. While traditional agricultural exports of coffee and bananas are still important, nontraditional sectors, especially the maquiladora, or export-processing industry, have grown significantly over the past decade. Substantial economic growth (6.3% in 2007 and 4% in 2008) and considerable debt reduction by international financial institutions have freed government resources to finance poverty-reduction programs. Nonetheless, Honduras continues to face a poverty rate of nearly 70%, in addition to widespread crime, high infant mortality, and a significant HIV/AIDS epidemic. Moreover, Honduras experienced an estimated 4.4% economic contraction in 2009 as a result of the political crisis and global economic downturn. Although relations have been strained recently as a result of the political crisis, the United States has traditionally had a close relationship with Honduras. Overall U.S. policy goals include a strengthened democracy with an effective justice system that protects human rights and promotes the rule of law, and the promotion of sustainable economic growth with a more open economy and improved living conditions. The United States also cooperates with Honduras to deal with transnational issues such as illegal migration, crime, narcotics trafficking, trafficking in persons, and port security.
AD0211584	TITRATION OF SMALLPOX VACCINES FROM TEN COUNTRIES SENT TO EAST PAKISTAN DURING THE 1958 SMALLPOX EPIDEMIC	CHICAGO UNIV IL	WANG, S. P.,GRAYSTON, J. T.	8/18/1958	12	NM52-11-02.4.1	ONR	U	A - 01	Approved for public release; distribution is unlimited.	Not available	Not available
ADA487542	Spring 2008 Industry Study: Biotechnology Industry	INDUSTRIAL COLL OF THE ARMED FORCES WASHINGTON DC	Anttonen, John,Darnauer, Trish,Douglas, Tim,Ferrari, John,Zimdahl, Jennifer,Hall, Ian M.,King, William,Klotzsche, Carl,Miller, Doug,Packard, Doug,Renegar, Mike,Rimback, Ed,Rogers, Gordon,Schnedar, Chris,Sekulovski, Zoran	1/1/2008	41	Not available	NDU/ICAF	U	A - 01	Approved for public release; distribution is unlimited.	Final rept.	Defined broadly as the manipulation of genetic material in living organisms or the derivatives thereof, biotechnology represents a veritable gold mine of possibilities for improving the human condition. Society tends to focus on the glamorous; the success of the Human Genome Project and its modern miracle of unraveling the composition of human deoxyribonucleic acid (DNA). However, biotechnology is much more than genetics. It twines the developments in understanding the building blocks of life with their characteristics and uses in organic systems. In short, biotechnology is a multifaceted science that supports all manner of micro and macro interactions within the life sciences. This paper addresses three specific industries within the rubric of biotechnology - bio-fuels, agriculture, and medicine and offers broad policy recommendations designed to foster discussion and debate among senior leadership in order to leverage the applications of biotechnology for the good of the nation. In addition, the paper provides the reader with three essays that provide greater depth and breadth on significant current biotechnology issues. Continued development and implementation of governmental policies and funding that aggressively promote continued scientific discovery and breakthroughs in this diverse industry offer unprecedented opportunities to increase mankind's quality of life by reducing dependence on fossil fuels, significantly reducing greenhouse gas emissions, increasing production and distribution of food, improving resistance to disease, and developing personalized medicine. The question is not if this will occur, but when and how to ensure that it takes place in an ethical, reasonable manner that benefits America and the rest of the world.

ADA033593	Morphologic Studies on Experimental Epidemic Encephalitis (Summer Encephalitis) in Monkeys (First Report). Anatomic and Histologic Changes, Especially of the Internal Organs, in Monkeys Infected through the Nose	ARMY MEDICAL RESEARCH INST OF INFECTIOUS DISEASES FORT DETRICK MD	Miyake, Masashi,Takaki, Fumikazu	12/13/1976	22	USAMRIID-MUL-0527	USAMRIID	U	A - 01	Approved for public release; distribution is unlimited.	Not available	The writers conclude that: (1) The morphologic changes observed in experimental monkey encephalitis are almost identical to those seen in human; (2) After intranasal inoculation of large quantities of virus, the virus readily finds its way into the brain along-side the olfactory nerve. Slight alterations develop in the brain from the time of incubation on. The virus also finds its way into the circulation within the first 48 hours and there gives rise to alterations in a certain sequence; and (3) Not only the central nervous system reacts to the encephalitis virus (summer encephalitis), but also the mesenchymal tissue of all the rest of the body, although the reactions of the latter are not as pronounced.
AD0835139	NEWCASTLE VIRUS CONJUNCTIVITIS,	ARMY BIOLOGICAL LABS FREDERICK MD	Bonamour, G.	3/9/1965	4	Trans-1317	Not available	U	A - 01	Approved for public release; distribution is unlimited.	Not available	The report serves to illustrate the very special clinical behavior of the Newcastle virus: it is unilateral, and presents the symptoms of Parinaud's syndrome; there is palperbral swelling and pre-auricular adenopathy, frequent chemosis particularly marked on the inner surface of the semi-lunar fold, frequent subconjunctival hermorrhage, benignity, and normal absence of any corneal symptoms. This kind of conjunctivitis is not very typical of the general run of acute conjunctival infections. Its appearance in rural areas where veterinarians are already alerted to the presence of a deadly epidemic in the poultry-yards should make its etiology immediately suspect. (Author)
AD0619405	PROBLEMS OF EPIDEMIOLOGICAL GEOGRAPHY. I. INTRODUCTION,	ARMY BIOLOGICAL LABS FREDERICK MD	Elkin,I. I.,Yashkul,V. K.	6/1/1965	11	Translation-1424,TT-65-63024	65-63024	U	A - 01	Approved for public release; distribution is unlimited.	Not available	Epidemiological geography is defined as the study of the nature of the geographical distribution of infectious and parasitic diseases of man. Its subject is not only nosoareal (field of disease distribution), but the area of the species of the causative agent of disease, with which the nosoareal is inseparably linked. Because the existence of causative agents of human diseases depends both on the uninterrupted flow of the epidemic process (anthroponosis), and on the uninterrupted flow of epizootic processes among farm (zoonoses of farm animals) and wild animals (naturally focal zoonoses), epidemiological geography deals with all of these categories and considers them in a geographical aspect.
AD0835143	CERTAIN EXPERIENCES IN ANTIEPIDEMIC MEASURES IN THE ARMY IN THE GREAT FATHERLAND WAR	ARMY BIOLOGICAL LABS FREDERICK MD	Smirnov, E. I.	11/17/1965	10	TRANS-1555	SMUFD	U	A - 01	Approved for public release; distribution is unlimited.	Not available	Epidemic outbursts of diseases among the troops are not the inevitable concomitants of wars, but arise as a result of the unsatisfactory state of the authorized organizational structure of the medical service and the quantitatively inadequate and topically incomplete training of the necessary specialists, especially the administrative personnel in the service. The antiepidemic experience of the past war cannot serve as the necessary basis and peacetime antiepidemic work cannot serve as a sufficient basis for the training of the necessary specialists, unless that experience and that antiepidemic work are systematically supplemented by the conclusions evolving from the achievements of the technical, natural, and especially the biological and medical sciences. The carrying out of planned inoculations among troops in the field is possible when the scheme for immunization with vaccine preparations is one-time, and the method is simple and capable of encompassing large masses of people in short periods of time. But inoculations on the basis of epidemic indications take on greater effectiveness when, in addition to this one-time principle and the simplicity of the method of application of vaccine preparations, the latter possess high immunogenic properties assuring the onset of general and local immunity in short periods of time approaching the length of the incubation period for the corresponding epidemic diseases.

ADA284793	Epidemic of Febrile Disease in Berbera, Somalia	NAVAL MEDICAL RESEARCH UNIT NO 3 CAIRO (EGYPT) DEPT OF MEDICAL ZOOLOGY	Hibbs, Richard G., Corwin, A., Thornton, S., Lluberas, M., Sanderson, R.	10/1/1993	9	NAMRU-3-PR-30/94	NMRDC	U	A - 01	Approved for public release; distribution is unlimited.	Publication rept.	In April 1989 an epidemic of febrile illness occurred in Berbera, northern Somalia, several weeks after heavy rainfall, flooding and increase in mosquito populations. A malaria epidemic was ongoing in nearby Djibouti. Malnutrition and diarrhoea were endemic. Symptoms were influenza-like, lasted approximately 1 month and progressed to shock and death in about 700 persons between April 4- June 20, 1989. A WHO team detected falciparum malaria among 16/ 25 patients, all negative by Widal tests. In July 1989 a U.S. Navy team administered a questionnaire and obtained blood samples from 100 outpatients at the District Hospital. Peripheral smears were positive from malaria in 16/82 patients (13 falciparum). An additional patient, still symptomatic, had confirmed falciparum malaria which resolved with treatment (fansidar). IgM antibody to dengue virus was detected in only 3%. IgG antibodies were detected for Dengue virus in 59% West Nile Fever virus in 34%, Yellow Fever virus in 30%, Rift Valley Fever and Congo-Crimean Haemorrhagic Fever viruses in 7% each, Chickungunya virus in 4%, Ebola and Marburg viruses in 1% each, Rickettsia conorii and Coxiella burnetii in 40% each and Rickettsia typhi in 13%. The agent responsible for the epidemic could not be confirmed, but serological evidence of arboviral and rickettsial infection requires that these agents be considered in future epidemics.
ADA333308	Frontier Missions: Peacespace Dominance.	AIR WAR COLL MAXWELL AFB AL	Baldy, Thomas F., Callahan, Joseph T., III, Christ, Louise A., Dicks, Teresa L., Kearney, Kelvin P.	8/1/1996	66	Not available	AWC	U	A - 01	Approved for public release; distribution is unlimited.	Not available	The frontier of 2025 will be the streets and fields of the developing world. The battle will be for cooperation of people ravaged by poverty, disease, hunger, and crime. These problems will be epidemic, in some regions driving the US to choose wisely where, when, and how to act. The dilemma of 2025 will mirror today: .1 whether to meet force with force or prevent violence by preventing it Within a domestic environment of increasing fiscal discipline and regard for life, the most efficient way to defend our national interest is to act before a situation flares into violence. One possibility is to dampen these violent flare-ups with a force dedicated to preventing or resolving conflict. However, this option requires a profound shift in focus and an unprecedented appreciation of degrees of conflict and hostility. Within each situation, there are instances where the application of lethal military force is appropriate. There are also instances where force is counterproductive. A murky void separates the two. We need to bridge that void. This paper advocates creating a small, rugged, and specialized composite force dedicated to creating and operating in the physical and psychological state we will call the peacespace. The size and composition of the force will be crucial to success or failure. In 30 years, we envision that a composite force will consist of military, civil service, contractor, and international personnel. Aided by technological possibilities and new conceptual thinking, a security assurance force (SAF-pronounced Safe) will foster institutions required for long-term stability in a region. SAF intervention should lead to a desired end-state of stability where political, economic, social, and information institutions take root and begin to flourish. SAF will require warriors trained like no others to operate in a complex environment.
ADA466835	Vulnerability of Concentrated Critical Infrastructure: Background and Policy Options	LIBRARY OF CONGRESS WASHINGTON DC CONGRESSIONAL RESEARCH SERVICE	Parfomak, Paul W.	1/26/2007	25	CRS/DC-RL33206	CRS/DC	U	A - 01	Approved for public release; distribution is unlimited.	Congressional Report	

AD1010992	Cloning and Characterization of the Mouse Hepatitis Virus Receptor	UNIFORMED SERVICES UNIV OF THE HEALTH SCIENCES BETHESDA MD BETHESDA United States	Dveksler,Gabriela S.	2/11/1991	213	Not available	Not available	U	A - 01	Approved for public release; distribution is unlimited.	Technical Report	The attachment of mouse hepatitis virus (MHV), a coronavirus, to the host cell membrane is the key first step leading to viral infection. The cellular receptor for MHV has been previously characterized as a 100 -120 k Damembrane glycoprotein, found in colon, small intestine and liver. This receptor has been shown to be the only portal of entry for MHV-A59. Identification of the mouse gene for the MHV receptor is essential in understanding the mechanism of host cell-virus interaction. To this end, a new cloning strategy based on the polymerase chain reaction technology was developed using RNA as starting material (RNAPCR). I employedglyceraldehyde-3-phosphate dehydrogenase as a control gene for the establishment of this cloning strategy. Amino acid homology and antibody reactivity had pointed to the murinecarcinoembryonic antigen (CEA) family as a candidate for the cellular receptor for MHV. Using the RNAPCR system with information obtained from the partial N-terminal amino acid sequence for the MHV receptor and a partial murine CEA cDNA sequence, a 710 bp product was obtained. Nucleic acid sequencing confirmed that this clone was a portion of the receptor. This fragment was then used as a probe to screen a BALB/c liver lambda gtl 1 cDNA library, from which a clone was obtained that begins at amino acid 10 and ends with a poly A tail. Using an alternative PCR technique, the sequence of the first 10 amino acids of the mature receptor protein and part of the leader peptide were then identified. The partial MHV receptor cDNA was transcribed and translated in vitro. The in vitro synthesized protein had the predicted size based on the amino acid sequence, and was immuno precipitated with polyclonal antibody directed against affinity-purified MHV receptor. This polyclonal antibody has been shown to block MHV infection of murine tissue culture cells to a dilution greater than1/1,200.
ADA241179	Serological Evidence of Dengue Fever Among Refugees, Hargeysa, Somalia	NAVAL MEDICAL RESEARCH UNIT NO 3 FPO NEW YORK 09527	Botros, Boulos A.,Watts, Douglas M.,Soliman, Atef K.,Salib, Adel W.,Moussa, Mahmoud I.	1/1/1989	6	NAMRU-3-84/89-90	NAMRU-3	U	A - 01	Approved for public release; distribution is unlimited.	Not available	Epidemics of a malaria-like illness affected several thousand residents of the Dam Camp, a refugee camp near Hargeysa in Somalia, during 1985, 1986, and 1987. The disease was characterized by fever, chills, sweats, headache, back and joint pains for as long as 10 days in some patients. Blood smears from acutely ill patients were negative for malaria. Of 28 acute and 10 convalescent sera tested by the indirect fluorescent antibody (IFA) and by the hemagglutination inhibition (HI) tests, all were negative for antibody to Rift Valley fever, Crimean-Congo hemorrhagic fever, Sindbis, Chikungunya, yellow fever, and Zika viruses. However, antibody reactive to dengue 2 virus was detected by the IFA test in 39% (15/38), and 11 of 29 (38%) of the same sera were antibody positive by the HI test. Also, IgG antibody reactive to dengue 2 was demonstrated in 60% (17/28) of the same sera by the enzyme immunoassay (EIA) , and 14% (4/28) were positive for IgM antibody.
ADA269516	Immunologic Mechanisms of HTLV-III Infection: Role of Autoimmunity in Aids	JOHNS HOPKINS UNIV BALTIMORE MD	Donnenberg, Albert D.	9/15/1992	252	Not available	USAMRDC	U	A - 01	Approved for public release; distribution is unlimited.	Final rept.	Infection with Human Immunodeficiency Virus type 1 (HIV-1), the etiologic agent of the acquired immune deficiency syndrome (AIDS), is increasing it an epidemic rate. The severity of immunologic impairment of infected individuals spans a broad range. It is not currently known whether this heterogeneity reflects distinct outcomes of infection or whether infections progress to a common endpoint at different rates. Developing closer knowledge of immunological events that precede the onset of frank AIDS, as well as the interplay between HIV, immunity and the hematopoietic elements that give rise to the immune system will assist in our understanding of the pathophysiology of AIDS. Such knowledge is also guiding our attempts to develop better therapeutic approaches to AIDS. This proposal focuses on two primary areas reflecting the respective strengths of the two participating laboratories. From their inception these efforts have been highly collaborative. The first section, Interaction of HIV-1 and Bone Marrow, focuses on hematopoietic progenitor cells as possible reservoirs of virus. It is designed to explore the relationship between acquisition of lineage specific AIDS, Biotechnology, HTLV-III, Virology, RAD I.

ADA568826	Effects of Relative Humidity and Spraying Medium on Ultraviolet (UV) Decontamination of Filters Loaded with Viral Aerosols	FLORIDA UNIV GAINESVILLE DEPT OF ENVIRONMENTAL ENGINEERING SCIENCES	Woo, Myung-Heui,Smith, Tammy,Wu, Chang-Yu,Grippin, Adam,Anwar, Diandra,Wander, Joseph D.	2/1/2012	9	AFRL-RX-TY-TP-2012-0018	TP-2012-0018,AFRL-RX-TY	U	A - 01	Approved for public release; distribution is unlimited.	Journal article	Although respirators and filters are designed to prevent the spread of pathogenic aerosols, a stockpile shortage is anticipated during the next flu pandemic. Contact transfer and reaerosolization of collected microbes from used respirators are also a concern. An option to address these potential problems is ultraviolet (UV) irradiation, which inactivates microbes by dimerizing thymine in nucleic acids. The objective of this study was to determine the effects of transmission mode and environmental conditions on decontamination efficiency by UV. In this study, filters were contaminated by different transmission pathways (droplet and aerosol) using three spraying media (deionized water (DI), beef extract (BE), and artificial saliva (AS)) under different humidity levels (30% (LRH), 60% (MRH), and 90% (HRH)). UV irradiation at constant intensity was applied for two time intervals at each relative humidity condition. The highest inactivation efficiency (IE), around 5.8 logs, was seen for DI aerosols containing MS2 on filters at LRH after applying an UV intensity of 1.0 mW/cm2 for 30 min. IE of droplets containing MS2 was lower than that of aerosols containing MS2. Absorption of UV by high water content and shielding of viruses near the center of the aggregate are considered responsible for this trend. Across the different media, IEs in AS and in BE were much lower than in DI for both aerosol and droplet transmission, indicating that solids present in AS and BE exhibited a protective effect. For particles sprayed in a protective medium, RH is not a significant parameter.
ADA258532	The Use of Coarse Resolution Satellite Imagery to Predict Human Puumala Virus Epidemics in Sweden.	AIR FORCE INST OF TECH WRIGHT-PATTERSON AFB OH	Gackstetter, Gary D.	9/11/1992	161	AFIT/CI/CIA-92-026D	AFIT	U	A - 01	Approved for public release; distribution is unlimited.	Doctoral thesis,	Contents: Evaluate the Normalized difference Vegetation Index (NDVI) as a Predictor of Bank Vole Population Fluctuations; Assess the Association Between NDVI Values and Weather Parameters; Estimate the Population Prevalence of Puumala Virus Antibody in Bank Voles; Determine if An Infectious Disease Epidemiologic Model Using NDVI can be Developed to Predict Human Puumala Virus Outbreaks; The Animal Reservoir; Some Principles of Satellite Remote Sensing; The Application of Satellite Remote Sensing Techniques to Epidemiology; The NOAA-9 Spacecraft and the AVHRR Sensor, Normalized Difference Vegetation Index (NDVI).
AD1093902	Novel Noninvasive Methods of Intracranial Pressure and Cerebrovascular Autoregulation Assessment: Seeing the Brain Through the Eyes	Regents of the University of Michigan Ann Arbor United States	Tiba,Mohamad H,Ward,Kevin,Pennington,Amanda,McCracken,Brendan,Cummings, Brandon,Soroushmehr, Reza	1/1/2019	91	Not available	Not available	U	A - 01	Approved for public release; distribution is unlimited.	Technical Report,01 Jul 2018,31 Dec 2018	Traumatic brain injury (TBI) is a major public health problem in the U.S. and around the world. It plays a major role in approximately 30%of injury related civilian deaths in the U.S. and is often referred to as the silent epidemic because of associated complications that go undiagnosed and unnoticed, but might have a lasting effect. Furthermore, the Defense and Veterans Brain Injury Center (DVBIC) has reported over 34,000 moderate to severe combat-related TBI (CRTBI) since 2000, making it a major source of mortality and morbidity for the U.S. military between 2000 and 2016. The significance of such numbers and statistics becomes apparent with the militarys increased focus on Prolonged Field Care (PFC) and prolonged damage control resuscitation (pDCR). PFC is defined by Keenan as the field medical care, applied beyond doctrinal planning time-lines by a SOCM (Special Operations Combat Medic) or higher, in order to decrease patient mortality and morbidity, utilize limited resources, and provide sustained care until the patient arrives at an appropriate level of care. Approximately 20% of individuals with combat-related severe TBI suffer acute neurological deterioration in the first 72 hours following injury, the potential time window of PFC. The austere, resource-constrained combat environment and lack of diagnostic capabilities could lead to delayed recognition of the severity of a TBI or in having rationale treatment end-points, resulting in exacerbated (secondary) brain damage and increased TBI-related disabilities. This is especially true when TBI-related injuries are combined with other injuries requiring pDCR.

ADA519002	Single Assay for Simultaneous Detection and Differential Identification of Human and Avian Influenza Virus Types, Subtypes, and Emergent Variants	NAVAL HEALTH RESEARCH CENTER SAN DIEGO CA DEPT OF RESPIRATORY DISEASE RESEARCH	Metzgar, David,Myers, Christopher A.,Russell, Kevin L.,Faix, Dennis,Blair, Patrick J.,Brown, Jason,Vo, Scott,Swayne, David E.,Thomas, Colleen,Stenger, David A.,Lin, Baochuan,Malanoski, Anthony P.,Wang, Zheng,Blaney, Kate M.,Long, Nina C.,Schnur, Joel M.,Saad, Magdi D.,Borsuk, Lisa A.,Lichanska, Agnieszka M.,Lorence, Matthew C.	2/1/2010	19	Not available	NRL	U	A - 01	Approved for public release; distribution is unlimited.	Journal article	For more than four decades the cause of most type A influenza virus infections of humans has been attributed to only two viral subtypes, A/H1N1 or A/H3N2. In contrast, avian and other vertebrate species are a reservoir of type A influenza virus genome diversity, hosting strains representing at least 120 of 144 combinations of 16 viral hemagglutinin and 9 viral neuraminidase subtypes. Viral genome segment reassortments and mutations emerging within this reservoir may spawn new influenza virus strains as imminent epidemic or pandemic threats to human health and poultry production. Traditional methods to detect and differentiate influenza virus subtypes are either time-consuming and labor-intensive (culture-based) or remarkably insensitive (antibody-based). Molecular diagnostic assays based upon reverse transcriptase-polymerase chain reaction (RT-PCR) have short assay cycle time, and high analytical sensitivity and specificity. However, none of these diagnostic tests determine viral gene nucleotide sequences to distinguish strains and variants of a detected pathogen from one specimen to the next. Decision-quality, strain- and variant-specific pathogen gene sequence information may be critical for public health, infection control, surveillance, epidemiology, or medical/veterinary treatment planning. The Resequencing Pathogen Microarray (RPM-Flu) is a robust, highly multiplexed and target gene sequencing-based alternative to both traditional culture- or biomarker-based diagnostic tests. RPM-Flu is a single, simultaneous differential diagnostic assay for all subtype combinations of type A influenza viruses and for 30 other viral and bacterial pathogens that may cause influenzalike illness. These other pathogen targets of RPM-Flu may co-infect and compound the morbidity and/or mortality of patients with influenza.
ADA496564	Qualifying Military Health Care Officers as Joint": Weighing the Pros and Cons"	RAND CORP SANTA MONICA CA CENTER FOR MILITARY HEALTH POLICY RESEARCH	Kirby, Sheila N.,Thie, Harry J.	1/1/2009	112	Not available	OSD	U	A - 01	Approved for public release; distribution is unlimited.	Monograph	The unprecedented challenges facing the U.S. military at home and abroad have highlighted the need for officers to be educated and trained in joint matters so that they are prepared to take on the new roles and responsibilities that the current environment demands. In his 2005 Vision for Joint Officer Development, Chairman of the Joint Chiefs of Staff (CJCS) Peter Pace emphasized the need for all colonels and Navy captains to be educated and experienced in joint matters (U.S. Joint Chiefs of Staff, 2005). There is increasing recognition that the roles that the Military Health System (MHS) is being asked to play--especially with respect to national emergencies (such as pandemic influenza) and reconstruction operations--require working strategically with other nations, other militaries, and other agencies. The 2006 Quadrennial Defense Review (QDR) highlighted the importance of preparing health care leaders to succeed in joint, performance-based environments. Joint is inclusive of multiservice, interagency, intergovernmental, and multinational environments. As part of a larger project examining the way in which leaders in the medical field are prepared and supported in the civilian and military sectors, the RAND National Defense Research Institute (NDRI) was asked to assess the need for and feasibility of qualifying health care officers as joint" officers. This monograph documents the results of that analysis."

ADA504585	Honduran-U.S. Relations	LIBRARY OF CONGRESS WASHINGTON DC CONGRESSIONAL RESEARCH SERVICE	Meyer, Peter J.	8/4/2009	28	CRS-RL34027	CRS/DC	U	A - 01	Approved for public release; distribution is unlimited.	Congressional rept.	On June 28, 2009, the Honduran military detained President Manuel Zelaya and flew him to exile in Costa Rica, ending 27 years of uninterrupted elected civilian democratic rule. The move was backed by the Honduran Supreme Court and National Congress, which selected Roberto Micheletti, the head of Congress, to fulfill the rest of Zelaya's term. Zelaya's removal was brought on by the ousted president's insistence in pushing ahead with a referendum that was ruled illegal and eventually could have led to changes to the Honduran constitution. The United States and international community have universally condemned the events in Honduras and called for a restoration of Zelaya and the rule of law. Those involved in the ouster and some sectors of Honduran society have rejected the international response, and maintain that Zelaya's removal was an internal matter that was necessary to protect the country's constitution. The political instability brought about by the removal of President Zelaya has created yet another challenge for Honduras, one of the hemisphere's poorest countries. In addition to significant challenges in the areas of crime, human rights, and improving overall economic and living conditions, the country faces a poverty rate of nearly 70%, high infant mortality, and a significant HIV/AIDS epidemic. The United States has a close relationship with Honduras, characterized by an important trade partnership, a U.S. military presence in the country, and cooperation on a range of transnational issues. In addition to being a party to the Dominican Republic-Central America Free Trade Agreement (DR-CAFTA), Honduras has cooperated extensively with the United States on counternarcotics and port security.
AD0681075	THE HAMBURG POLICE PRESIDENT'S REPORT ON THE LARGE SCALE AIR ATTACKS ON HAMBURG, GERMANY, IN WORLD WAR 2. APPENDIXES 8 THROUGH 19	STANFORD RESEARCH INST MENLO PARK CA	Miller, Carl F.	12/1/1968	428	USNRDL-TRC-68-48	TRC-68-48,USNRDL	U	A - 01	Approved for public release; distribution is unlimited.	Not available	This document presents information on attacks and on civil defense activities in the city of Hamburg, Germany, during and after the large scale attacks that started on July 25, 1943. Many eyewitness reports of events during the air attacks from July 25 to August 3, 1943 are quoted. Numerous illustrations show attack damage sustained by the city as well as civil defense activities initiated to counter the effects of the attack. A collection of police bulletins and newspaper articles from the period July to December, 1943, document the restoration of the civil defense forces and the implementation of police security measures to prevent looting and disease epidemics, to identify missing persons, and to restore public utilities to the city. Expert medical opinion is presented on the dangers of epidemics caused by corpses and on the causes of death from the attacks as revealed by autopsy findings. A descriptive and profusely illustrated section gives detailed information on the performance and use of air raid shelters.
ADA337815	Malarial Ecology, Transmission, Immunology, Parasitology and Prophylaxis in Kenya.	KENYA MEDICAL RESEARCH INST NAIROBI	Koech, Davy K.	1/1/1998	21	Not available	USAMRMC	U	A - 01	Approved for public release; distribution is unlimited.	Annual rept. 29 Dec 95-28 Dec 97,	Over the past 25 years, the U.S. Army and the Kenya Medical Research Institute (KEMRI) have participated jointly in medical research projects. Although the scope of the work has changed from an initial interest in trypanosomiasis to current efforts which focus almost exclusively on malaria research, the collaboration has remained strong and has resulted in significant advances for the understanding and control of tropical diseases in Kenya and East Africa in general. This report summarizes the collaborative effort for calendar years 1996 and 1997. Malaria is a potentially lethal parasitic infection of the blood which is spread by the bite of the female anopheline mosquito. Unprotected or non-immune persons who are bitten by an infective mosquito develop a febrile disease which can incapacitate and kill in a few days. Unfortunately, humans do not easily develop immunity to malaria infection and repeated illness is the rule. Treatment with drugs can effectively cure most infections, but the spread of drug resistance has made treatment and prevention much more difficult. Understanding the mosquito vector can better define the spread of malaria which, under the proper human and climatic conditions, can be truly epidemic. Kenyan people carry an enormous burden of malaria disease and western Kenya, where much of the work summarized in this report was conducted, is one of the most malarious regions of the world.
AD0815239	CONCERNING THE DEFINITION OF THE CONCEPT 'EPIDEMIC PROCESS'	ARMY BIOLOGICAL LABS FREDERICK MD	Dyadichev, N. R.	1/1/1966	13	TRANS-1735	ABL/MD	U	A - 01	Approved for public release; distribution is unlimited. Document partially illegible.	Not available	Not available

ADA488667	Future Role of Fire Service in Homeland Security	NAVAL POSTGRADUATE SCHOOL MONTEREY CA	Cloud, Rosemary	9/1/2008	141	Not available	NPS	U	A - 01	Approved for public release; distribution is unlimited.	Master's thesis	As action-oriented organizations, fire departments have traditionally played a reactive role in public safety, responding to emergencies in progress to protect the lives, and property of their citizens. The problem is that the world has changed. Increasing terrorist threats against our homeland and the potential for pandemic or other natural disasters are shifting the mission and placing new unconventional demands on the fire department. Meeting these challenges will require strategies to identify and address the future role of the fire service in homeland security. This thesis used the Delphi method to explore what this future role might be. Information, responses, and recommendations from three groups of SMEs were examined, analyzed, and synthesized to determine key issues the fire service will face. The future role of the fire service in homeland security will demand the need for progressive leadership, effective collaboration, intelligence engagement, and the adoption of a shifting mission that supports preparedness, prevention, response, and recovery of terrorist attacks. Emerging issues and areas of responsibility to meet new asymmetrical threats require a response paradigm. This response paradigm in the fire department should include the ability to adjust service delivery to meet all hazard and homeland security demands.
ADA551910	Integration of Training Civilian and Military Disaster Responders	Naval Postgraduate School	Guerica, Jr, Leonard H.	9/1/2011	75	Not available	NPS	U	A - 01	Approved for public release; distribution is unlimited.	Master's thesis	In the years since the September 11 attacks of 2001, and following the Gulf Coast hurricanes and the earthquake in Haiti, research has shown that first responders and medical institutions remain insufficiently prepared to address the increased demands for emergency response during and following major disasters. The threat from terrorism and natural disasters is very real; thus, the medical system" will face continual challenges. A brutal recent reminder of this was the international outbreak of the H1N1 virus that caused a worldwide pandemic in 2009
ADA425373	Models for Transmission and Control of Bioterroristic Epidemics	NAVAL POSTGRADUATE SCHOOL MONTEREY CA DEPT OF OPERATIONS RESEARCH	Gaver, Donald P.,Jacobs, Patricia A.,Bullock, Gregory,Simons, Robert	7/1/2004	22	NPS-OR-04-006	NDPO	U	A - 01,26	Availability: This document is not available from DTIC in microfiche.	Technical rept.	A deterministic model for control of a bioterrorist epidemic in a large nonhomogeneous population is presented. Primary considerations in model development are the representation of a large nonhomogeneous population of individuals and the implementation of the model for quick numerical execution. The model represents the effect of mass pre-vaccination and mass vaccination during the epidemic. It is recognized that the vaccination can result in life threatening complications. The model also represents the effect of tracing and quarantining as control options. The model has been implemented in Java for a Web-based educational tool. Numerical examples (pp. 12-15) illustrate possible behavior of populations exposed to such a disease as smallpox. Various disease controls such as vaccination and case tracing are studied.
AD1000377	Phospholipids as Biomarkers for Excessive Alcohol Use	Indiana University Indianapolis United States	Liangpunsakul,Suthat	10/1/2015	6	Not available	Not available	U	A - 01	Approved for public release; distribution is unlimited.	Technical Report,15 Sep 2014,14 Sep 2015	Our proposal is to determine the diagnostic utility of sphingomyelin (SM) and lysophosphatidylcholine (LPC) as the potential biomarkers to screen for excessive alcohol use (EAU); a rising epidemic reported to be as high as 40% among returning veterans. Drinking becomes excessive when it causes or elevates the risk for alcohol-related problems or complicates the management of other health problems. According to the NIH/NIAAA, excessive drinking is defined as men who drink more than 4 standard drinks in a day (or more than 14 per week) and women who drink more than 3 drinks in a day (or more than 7 per week). Non-civilian military personnel have been deployed in support of the war efforts in Afghanistan (Operation Enduring Freedom, OEF) and Iraq (Operation Iraqi Freedom, OIF) since September 11, 2001. These sustained combat operations have resulted in military personnel experiencing physical threat or actual injury during the deployment and difficult adjustments during post-deployment period. Negative life stress is a major contributor to the onset and exacerbation of EAU. Theprevalence of EAU is alarming, and the vigilance and action to identify veterans with EAU is of importance. The consequences of under detection of EAU, thus delayed intervention are serious because relative risk of alcohol-related health conditions such as cirrhosis, pancreatitis, and hepatocellular carcinoma, is increased with the amounts and duration of alcohol consumed per day. We hypothesize that alcohol consumption elevates a panel of serum phospholipids (sphingomyelin, and lysophosphatidylcholines) in proportion to the level of consumption in the past month.



ADA477249	Epidemiologic Considerations in Network Modeling of Theoretical Disease Events	COMMUNICABLE DISEASE CONTROL DIV TUNNEYS PASTURE OTTAWA (ONTARIO) PRIMARY HEALTH CARE AND PUBLIC HEALTH DIRECTORATE	Lem, Marcus	12/1/2006	37	Not available	X5	U	A - 01	Approved for public release; distribution is unlimited. NATO.	Not available	Social network modeling is a relatively new addition to the armament of public health and epidemiology. Epidemiologists and communicable disease control researchers have been turning to network analysis to address and understand gaps in traditional outbreak management techniques such as contact tracing. Network analysis has shown utility in the study of a range of communicable disease outbreaks affecting both health and commerce, including SARS, tuberculosis, syphilis and foot-and mouth-disease, and may have applications in automated disease surveillance systems. Visualization of these communicable disease networks is an integral component of such analysis. However, visualization of more complex relationships will require consideration of a variety of epidemiologic factors which affect these relationships, and the development of techniques to display them. Any analysis of case level health data has the potential for compromising privacy, and network visualization is no exception. Like other analysis tools such as data mining, or Geographic Information Systems (GIS), network visualization will need to incorporate techniques to ensure confidentiality. In this paper we shall discuss the role of network analysis in communicable disease outbreak control, epidemiologic considerations in visualizing networks, and the emerging issue of confidentiality.
ADA514196	Immigration Policies and Issues on Health-Related Grounds for Exclusion	LIBRARY OF CONGRESS WASHINGTON DC CONGRESSIONAL RESEARCH SERVICE	Haddal, Chad C.,Wasem, Ruth E.	1/29/2010	20	CRS-R40570	CRS/DC	U	A - 01	Approved for public release; distribution is unlimited.		Under current law, foreign nationals not already legally residing in the United States who wish to come to the United States generally must obtain a visa and submit to an inspection to be admitted. They must first meet a set of criteria specified in the Immigration and Nationality Act (INA) that determine whether they are eligible for admission. Moreover, they also must not be deemed inadmissible according to specified grounds in the INA. One of the reasons why a foreign national might be deemed inadmissible is on health-related grounds. The diseases that trigger inadmissibility in the INA are those communicable diseases of public health significance as determined by the Secretary of Health and Human Services (HHS). The outbreak of the 2009 H1N1 virus (commonly called Swine Flu") has generated attention in Congress and the media
ADA497192	Medical Surveillance Monthly Report (MSMR). Volume 5, Number 4, May 1999	ARMED FORCES HEALTH SURVEILLANCE CENTER SILVER SPRING MD	DeFraites, Robert F.,Rubertone, Mark V.,Brundage, John F.,Kohlhase, Kimmie F.	5/1/1999	17	Not available	USACHPPM	U	A - 01	Approved for public release; distribution is unlimited.	Monthly rept.	Acute respiratory diseases (ARD) cause significant morbidity in military populations. Training centers have traditionally been the foci of respiratory disease epidemics due to the close living conditions, the physically and psychologically stressful activities, and the multitude of pathogens brought together by these troops. For more than five decades, mass antibiotic prophylaxis has been used with success to interrupt outbreaks, to prevent serious clinical sequelae of streptococcal and meningococcal infections, to reduce infection transmission and nasopharyngeal carriage, and to minimize acute febrile respiratory morbidity in general. Still, many military medical officers are reluctant to use mass antibiotic prophylaxis, mainly due to concerns regarding side effects (e.g., allergic reactions), unintended consequences (e.g., antibiotic resistance), and costs. While these concerns are important, they must be weighed against the medical and military operational costs associated with recurrent outbreaks. Of historical note, in March 1991, in the aftermath of outbreaks of pneumococcal pneumonia and streptococcal pharyngitis, Ranger students at Fort Benning began to receive two doses of benzathine penicillin (4 weeks apart) at the start of their training. In September 1997, the prophylaxis regimen was reduced to a single dose, and in March 1998, routine prophylaxis was discontinued altogether. Pneumonia quickly reemerged as a problem among Ranger students, first in the spring of 1998 and then in the winter of 1998-1999 (figure).
ADA517291	Scalable and Fault Tolerant Group Key Management	AIR FORCE INST OF TECH WRIGHT-PATTERSON AFB OH GRADUATE SCHOOL OF ENGINEERING AND MANAGEMENT	Not available	3/1/2010	60	AFIT/GSEM	AFIT/GCS/ENG/10-05	U	A - 01	Approved for public release; distribution is unlimited.	Not available	To address the group key management problem for modern networks this research proposes a lightweight group key management protocol with a gossip-based dissemination routine. Experiments show that by slightly increasing workload for the key update mechanism, this protocol is superior to currently available tree-based protocols with respect to reliability and fault tolerance, while remaining scalable to large groups. In addition, it eliminates the need for logical key hierarchy while preserving an overall reduction in rekey messages to rekey a group. The protocol provides a simple pull" mechanism to ensure perfect rekeys in spite of the primary rekey mechanism's probabilistic guarantees

ADA538495	Defining the Antigenic Structure of the Henipavirus Attachment (G) Glycoprotein: Implications for the Fusion Mechanism	UNIFORMED SERVICES UNIV OF THE HEALTH SCIENCES BETHESDA MD	Hickey, Andrew C.	1/1/2009	204	Not available	USUHS	U	A - 01	Approved for public release; distribution is unlimited.	Doctoral thesis	Epidemics of communicable disease such as the Medieval Black Death (Yersinia pestes) or the introduction of smallpox to the Aztecs decimated human populations interrupted trade routes, and transformed social and economic conventions (reviewed in 69, 105, 136). However, communicable diseases remained enigmatic until the advancement of germ theory suggested these illnesses resulted from discrete biological sources. In 1928, Sir Alexander Flemming discovered penicillin and proved communicable disease could be treated and cured (54). Further, development of the smallpox and rabies vaccines by Edward Jenner and Louis Pasteur, respectively demonstrated illness was preventable. These scientific advances ushered in an era of rapid development in prophylactic and therapeutic modalities resulting in significant global decreases in the health burden of infectious agents. As early as the mid 1940s widespread achievement in the control of infectious disease prompted public health leaders in the United States and elsewhere to declare the global threat of infectious disease had passed (140).
ADA632231	Inventory Management of Cholera Vaccinations in the Event of Complex Natural Disasters	NAVAL POSTGRADUATE SCHOOL MONTEREY CA	Gregory, Joshua A., Taranto, Christine	12/1/2015	69	Not available	NPS	U	A - 01	Approved for public release; distribution is unlimited.	Research paper	This MBA Project explores the considerations and recommendations for mass vaccination campaigns in response to natural disasters and their secondary effects, specifically cholera epidemics and the vaccine stockpile necessary to effectively treat the disease. Cholera is a significant post disaster risk to an already affected population. As a first responder to these disasters, the Marine Air Ground Task Force (MAGTF) must consider an epidemic cholera outbreak as a threat to mitigate and be considered in the planning process for Humanitarian Aid/Disaster Relief (HA/DR) scenarios. This project considers these factors based on former HA/DR events as well as an inventory management model which determines optimized stock pile of vaccinations necessary in a given year in order to reduce the number of lives lost to cholera.
ADA487294	National Infrastructure Advisory Council: Chemical, Biological, and Radiological Events and the Critical Infrastructure Workforce. Final Report and Recommendations	NATIONAL INFRASTRUCTURE ADVISORY COUNCIL WASHINGTON DC	Denlinger, Rebecca F., Marsh, Martha H., Rhode, Bruce A., Gallegos, Gilbert G., Nicholson, James B., Nye, Erle A., Thompson, John W.	1/8/2008	89	Not available	NIAC/DC	U	A - 01	Approved for public release; distribution is unlimited.	Final rept.	The National Infrastructure Advisory Council (NIAC) convened a Working Group to study the impact of chemical, biological, and radiological (CBR) events on the critical infrastructure worker, and to make recommendations. NIAC designed this report to identify attributes of different chemical, biological, or radiological event scenarios, identify key elements necessary to sustain critical infrastructure operations, and to make recommendations that will improve our ability to contain the impact, recover from its consequences, and restore the nation's critical infrastructure to a pre-event state. The NIAC formed an approach to the CBR study that focused on six key questions. These questions were: 1) Do organizations have programs focused on CBR event planning, preparedness, response or training? 2) Is there a market or other financial incentive to invest in CBR planning, preparedness, response or training capabilities? 3) Is there a sufficient communications infrastructure in place to support CBR event response and recovery? 4) What tools and technologies are available, or should be made available in the future, to support CBR event planning, preparedness, response or training programs? 5) Is there sufficient coordination between Federal, state, local, and private sector entities in support of CBR planning, preparedness, response, or training programs? and 6) What can the Federal government do to encourage or enhance planning, preparedness, response, and training capabilities across the public and private sectors? This Report addresses the rationale behind these questions. The Executive Summary highlights key themes found throughout the document, and identifies a number of findings and recommendations that are common across CBR events. Included in subsequent sections are appendices that identify specific findings and recommendations unique to chemical, biological, or radiological events.
ADA475319	Agribusiness Industry, 2006	INDUSTRIAL COLL OF THE ARMED FORCES WASHINGTON DC	Beck, Marlon, Bruins, Amy, Fox, Tim, Gayl, Franz, Giordano, Debbie, Holmes, Dianne, Johnson, James, Kyser, Giles, Lamarre, Chuck, Lovejoy, Kevin, Morgan, D'Arcy	1/1/2006	65	Not available	NDU/ICAF	U	A - 01	Approved for public release; distribution is unlimited.	Final rept.	The U.S. Agribusiness industry feeds some 300 million Americans daily, provides nearly 13% of the Gross Domestic Product and, throughout its value chain, employs approximately 17% of all U.S. workers. Of the three main responsibilities of a sovereign state, governing, defending and feeding its population, the last one towers over the others in terms of meeting the hierarchy of human needs. Agriculture in the U.S. is robust due to its supporting foundation of arable land, water, extensive government support and, most of all, the hard work of those who make up this industry, from the farmers to the retailers. It also has some critical vulnerabilities, be they urban encroachment, sustainable water resources, labor, agro terrorism, the threat of pandemics and the sometimes negative effects of globalization, which must be addressed in order to enable the U.S. to continue feeding its population.

AD1012351	Neuro-Immune Mechanisms in Response to Venezuelan equine encephalitis Virus Infection	Uniformed Services University Of The Health Sciences Bethesda United States	Schoneboom,Bruce A.	5/1/2000	151	Not available	Not available	U	A - 01	Approved for public release; distribution is unlimited.	Technical Report	Venezuelan equine encephalitis virus (VEE) is an emerging pathogen with epizootics and epidemics occurring in the Western Hemisphere. Recent outbreaks in South America have caused significant morbidity and mortality among domesticated livestock and surrounding human communities. VEE pathogenesis is characterized by infection of the central nervous system (CNS) where the virus targets neurons, resulting in significant neurodegeneration. VEE encephalitis can result in profound neurological deficits or even death. Because of the devastating nature of this disease and the lack of interventional therapies, it is important to understand the intricate details of VEE neuropathogenesis in order to identify targets for treatment to effect a cure. Inflammation has recently been implicated as a component of neurodegeneration. Inflammation in the CNS in response to acute infections is a protective mechanism that attempts to contain and clear neuro-invasive pathogens, however this upregulation of pro inflammatory genes may be deleterious to surrounding neurons. The combined effects of direct infection and inflammation may be additive or synergistic in the amount of injury sustained in the CNS.
ADA465497	Is Host-Based Anomaly Detection + Temporal Correlation = Worm Causality	CARNEGIE-MELLON UNIV PITTSBURGH PA SCHOOL OF COMPUTER SCIENCE	Sekar, Vyas,Xie, Yinglian,Reiter, Michael K.,Zhang, Hui	3/6/2007	30	CMU-CS-07-112	NSF	U	A - 01	Approved for public release; distribution is unlimited.	Not available	Epidemic-spreading attacks (e.g., worm and botnet propagation) have a natural notion of attack causality - a single network flow causes a victim host to get infected and subsequently spread the attack. This paper is motivated by a simple question regarding the diagnosis of such attacks - is it possible to establish attack-causality through network-level monitoring, without relying on signatures and attack-specific properties? Using the observation that communication patterns of normal hosts are sparse, we posit the hypothesis that it is feasible to uncover attack causality through a combination of host-based anomaly detection and temporal correlation of network events. The contribution of this paper is a systematic exploration of this hypothesis over the spectrum of attack properties and system design options. Our analysis, trace-driven experiments, and real prototype based study suggest that it is feasible to establish attack causality accurately using anomaly detection and temporal event correlation in enterprise network environments with tens of thousands of hosts.
AD0699410	MULTIPLICATION AND ANTIBODY FORMATION OF JAPANESE ENCEPHALITIS VIRUS IN SNAKES	SEOUL NATIONAL UNIV (REPUBLIC OF KOREA) SEOUL Korea, South	Lee,Ho W.	10/1/1969	16	ARDG(FE)-343-3, ARDG(FE)-343-4	ARDG(FE)-343-3, ARDG(FE)-343-4	U	A - 01	Approved for public release; distribution is unlimited.	Technical Report,01 Aug 1968,31 Aug 1969	There is a hypothesis that Japanese encephalitis virus overwinters in the hibernating animals in the regions like Korea of which winter is so cold. The author has recently reported that injection of Japanese encephalitis virus in cold-blooded animals, snakes, induced proliferation of the virus and antibody formation, though irregular. In 1967, a strain of encephalitis virus was isolated from the snakes caught in the nature, and as a result of serologic test with 535 snakes, 40% of them proved to contain hemagglutination inhibition antibodies to the virus. And the proportion was higher in the snakes collected during the epidemic season than other times. In hemagglutination inhibition antibody test, the properties was higher when acetone extraction was done three or four times than twice. In 1968, as a result of serologic test with 412 collected snakes, neutralizing antibody to encephalitis virus was detected from 9 snakes, 2% of the total snakes.
ADA195216	Pathogenesis and Management of Gonorrhea	WALTER REED ARMY INST OF RESEARCH WASHINGTON DC	Tramont, Edmund C.,Boslego, John W.	1/1/1987	11	Not available	WRAIR	U	A - 01	Approved for public release; distribution is unlimited.	Not available	Gonorrhea is one of the oldest recorded diseases of mankind. Over the past 15 years it has reached epidemic proportions, afflicting principally the most sexually active 15-30 years old age group at a rate of 12/1000/yr. The reasons for such high rates are multifactorial. Increased promiscuity among sexually active adults, the propensity of gonorrhea to remain asymptomatic, the unique epidemiology of the disease and increased antibiotic resistance have all played important roles. Gonorrhea rates have always been particularly high in the Armed Forces, and presently remain 6 times that of a matched U.S. civilian cohort.

ADA480093	Federal and State Isolation and Quarantine Authority	LIBRARY OF CONGRESS WASHINGTON DC CONGRESSIONAL RESEARCH SERVICE	Welborn, Angie A.	1/18/2005	12	Not available	CRS/DC	U	A - 01	Approved for public release; distribution is unlimited.	Not available	In the wake of recent terrorist attacks and increasing fears about the spread of highly contagious diseases, such as severe acute respiratory syndrome (SARS), federal, state and local governments have become increasingly aware of the need for an effective public health response to such events. An effective response could include the isolation of persons exposed to infectious biological agents released during an attack or infected with a communicable disease, as well as the quarantine of certain states, cities, or neighborhoods. Currently, state and local governments have the primary authority to control the spread of dangerous diseases within their jurisdiction, with the federal government's role limited to interstate and foreign quarantine. However, many states have inadequate procedures in place for isolating individuals who are infected or believed to be infected and quarantining areas that are or may be infected. Generally, the laws currently in effect do not address the spread of disease resulting from a biological attack, and for the most part only address specific diseases that were the cause of past epidemics, not newly emerging diseases such as SARS. In light of recent events, many states are reevaluating their public health emergency response plans and are expected to enact more comprehensive regulations relating to isolation and quarantine. Public health experts have developed a Model State Emergency Health Powers Act to guide states as they reevaluate their emergency response plans. This report provides an overview of federal and state quarantine laws as they relate to the isolation or quarantine of individuals, as well as a discussion of the relevant case law. The Model State Emergency Health Powers Act is also discussed.
ADA197400	Studies on Typhus and Spotted Fever	MARYLAND UNIV BALTIMORE DEPT OF MICROBIOLOGY	Wisseman, Charles L., Jr.	9/1/1986	8	Not available	USAMRDC	U	A - 01	Approved for public release; distribution is unlimited.	Technical progress rept. 1 Jul 1980-30 Jun 1981	The studies reported here suggest that one of the mechanisms by which cell mediated immunity may control and kill intracellular rickettsiae is through a sequence which begins with an immunologically specific step in which immune T lymphocytes are stimulated by rickettsial antigens to produce a soluble factor which induces in rickettsia-infected cells in a non-immunologically specific reaction (1) an antirickettsial action which is dependent upon new host cell protein synthesis and (2) a cytolytic action specific for infected cells which is not dependent upon the synthesis of proteins by either host cell or rickettsia. Within the limits of specificity and purity of the reagents which were available at the time of these studies, the major contributor to both of these actions has been identified as gamma or immune interferon. It is currently unknown if other components of the complex leukocyte supernatant fluids contribute to reactions of this kind in a minor or enhancing manner. Keywords: Reaction kinetics, Reaction mechanisms, Rickettsia, Typhus, Louse-borne, Epidemic, Rickettsia prowazekii, Immunity, Cell mediated, CMI, Effector, Vaccine, Interferon, Gamma interferon, Immune interferon, Intracellular, Infection, Antirickettsial, Rickettsiacidal, Cytolysis, Cytolytic, Cytotoxic, Lymphotoxin, Neutralization, Cytokine, Lymphokine.
ADA567671	Differential Equation Models for Sharp Threshold Dynamics	NAVAL POSTGRADUATE SCHOOL MONTEREY CA	Schramm, Harrison C.,Dimitrov, Nedialko B.	8/1/2012	38	NPS-OR-12-003	NPS	U	A - 01	Approved for public release; distribution is unlimited.	Technical rept. 1 Oct 2011-1 Aug 2012	We develop an extension to differential equation models of dynamical systems to allow us to analyze probabilistic threshold dynamics that fundamentally change system behavior. We apply our novel modeling approach to two cases of interest: a model of cyber infection, where a detection event drastically changes dynamics, and the Lanchester model of armed conflict, where the loss of a key capability drastically changes dynamics. We derive and demonstrate a step-by-step, repeatable method for applying our novel modeling approach to an arbitrary system, and we compare the resulting differential equations to simulations of the system s random progression. Our work leads to a simple and easily implemented method for analyzing probabilistic threshold dynamics using differential equations.

ADA200898	Viable Legionella Pneumophila Not Detectable by Culture on Agar Media	NAVAL MEDICAL RESEARCH INST BETHESDA MD	Hussong, D.,Colwell, R. R.,O'Brien, M.,Weiss, E.,Pearson, A. D.,Weiner, R. M.,Burge, W. D.	9/1/1987	5	NMRI-87-64	NMC	U	A - 01	Approved for public release; distribution is unlimited. Document partially illegible.	Journal article	Detection and monitoring of genetically engineered microorganisms released to the environment, as well as pathogens, are primary factors in risk assessment. Culture methods have been proposed for both detection and monitoring. However, microorganisms in natural systems may not always be culturable. We surveyed environmental samples collected from sources implicated in an epidemic of Legionnaires' disease and, although no cultures were recovered from environmental samples, numerous cells were observed by fluorescent microscopy when anti-L. pneumophila group 1 antibody was used. Similar observations have often been made by others. To study this loss of culturability, L. pneumophila strains were maintained in a microcosm (vessels containing sterilized environmental water) and assayed at intervals for growth an appropriate media, and lethality for chick embryos. At 4 C, the decimal rate of decline of colony forming cells was approximately 29 days; at 37 C it was 13 days. When microcosm water samples were injected into embryonated eggs, far greater chick embryo mortality was observed than could be accounted for by the number of culturable cells in the injections. Thus, previously non-culturable Legionella had multiplied once again and become culturable. These results indicate that samples that do not contain culturable cells, may contain cells that are viable, as demonstrated by their pathogenicity for chick embryos. The fluorescent antibody assay may provide a valuable indication of the presence of such viable but non-culturable cells. Keywords: Bioassay, Reprints, Cultures(Biology).
ADA407832	PREVENTING FUTURE SHOCK: A Case for Addressing Future Threats to America's National Security	JOHN F KENNEDY SCHOOL OF GOVERNMENT CAMBRIDGE MA	Bjostad, James D.,Hooten, Sheila F.	4/1/2001	62	Not available	DOD	U	A - 01	Approved for public release; distribution is unlimited.	Not available	The U,S has emerged as the sole superpower in the world for the foreseeable future, Despite this, there remain numerous threats to U,S vital national interests, including developing threats that have the potential to become significant threats in the future, We propose a National Security process that looks separately at future threats, as well as existing ones, In addition, we propose a reconsideration of the National Security Council's evaluation process and its coordination of national security and foreign policy among the various departments and agencies To illustrate the problem of focusing primarily on more current threats, we present two very different but significant threats to the future of the national interest of the U,S,: the HIV/AIDS pandemic in Sub-Saharan Africa and the approximately forty thousand tactical nuclear weapons of the former Soviet Union (FSU) and the fissile material both within them and in stockpiles throughout Russia, Both issues have far-reaching international implications in the next 10-20 years that could be reduced to a much lesser level of threat, if not fully eliminated, by a concerted and appropriately funded effort now, The HIV/AIDS pandemic in Sub-Saharan Africa is a U,S national security threat with far reaching international implications that, if left unconstrained will develop into a depopulation crisis of the African continent of as much as a 50-80% over the next twenty year, The net effect would be reflected in the numbers of key professionals and skilled workers critical for the mining and production of minerals that are unavailable from any other part of the world, as well as 20% of all crude oil imported by the U,S, The cost of eliminating and controlling HIV/AIDS in Sub-Saharan Africa over the ten years is currently estimated to be \$50 billion, comparable to the Marshall Plan in 1952 that pumped the equivalent of \$88 billion into Europe,
ADA078780	The Multivariate Normal Behaviour of a Symmetric m- Dimensional Simple Epidemic.	FLORIDA STATE UNIV TALLAHASSEE DEPT OF STATISTICS	Langberg,Naftali A.	10/1/1979	25	FSU-STATISTICS- M523,TR-D-40- ARO,ARO- 16713.3-M	16713.3-M	U	A - 01	Approved for public release; distribution is unlimited.	Technical rept.,	We consider a group of n susceptible individuals who are exposed to m contagious diseases. The progress of the epidemic among the individuals is modeled by a stochastic process $X_{sub n}(t)$ identical with $(X_{sub n,1}(t), ..., X_{sub n,m}(t))$ , $t$ in $(0, infinity)$ . The components of $X_{sub n}(t)$ describe the number of infective individuals with the respective disease at time $t$ . For a class of epidemic models named symmetric m-dimensional simple epidemics we establish, with a suitable standardization, the asymptotic normal convergence of $X_{sub n}(t)$ as $n$ approaches infinity for $t$ in $(0, infinity)$ .

ADA387876	Studies into Militarily Relevent Infectious Diseases of interest to Both United States and Royal Thai Governments	ARMED FORCES RESEARCH INST OF MEDICAL SCIENCES/ROYAL THAI ARMY MEDICAL COMPONENT BANGKOK	Puavilai, Gobchoke,Nitayaphan, Sorachai	1/1/2001	44	Not available	USAMRMC	U	A - 01	Approved for public release; distribution is unlimited.	Final rept. 15 Oct 1994- 31 Dec 2000	Cooperative agreement # DAMD17-95-2-5001 was implemented October 15, 1994 to provide funding support for Royal Thai Army at Armed Forces Research Institute of medical Sciences (AFRIMS) engaged in research activities in collaboration with US Army. The principal focus of research under the agreement is directed to activities to prepare for development and testing of vaccine(s) for prevention of HIV infection and /or disease. During the funding period, research activities were directed in 4 primary areas 1) active surveillance of RTA conscripts to determine the dynamics of HIV epidemic in Thailand; 2) studies of natural history of HIV infection/disease in Thais; 3) cohort development studies attempting to define an appropriate population(s) for phase III vaccine testing; 4) conduction of phase 1/11 vaccine studies to determine safety and immunogenicity of potential HIV vaccines in Thais. Other efforts under the Cooperative Agreement during the funding period included 1) animal care and handling in support of other ongoing research activities at AFRIMS, exclusive of HIV research; and 2) site maintenance activities in support of research activities including glassware and utilities support.
ADA274467	Risk Factors for Sexually-Transmitted Diseases Among Deployed U.S. Military Personnel	NAVAL MEDICAL RESEARCH INST BETHESDA MD	Malone, John D.,Hyams, Kenneth C.,Hawkins, Richard E.,Sharp, Trueman W.,Daniell, Fredric D.	10/1/1993	6	NMRI-93-86	NMRDC	U	A - 01	Approved for public release; distribution is unlimited. Document partially illegible.	Journal article,	Sexually transmitted diseases (STDs), which are the most frequently reported category of communicable diseases in the United States, have historically been a problem in military populations. STDs are commonly acquired by military personnel outside of the United States, especially during overseas military deployments and during times of armed conflicts. The prevention of STD transmission has become a more important priority of the military because of the human immunodeficiency virus (HIV) epidemic. In order to implement a STD prevention and control program that relies on education, risk factors for acquiring STDs in young, sexually-active populations must be understood. However, the epidemiology of STDs in U.S. military populations has infrequently been characterized in recent years, and under-reporting is common in the military's passive surveillance system. In this study, risk factors for the transmission of STDs are evaluated in a questionnaire survey of U.S. military personnel deployed aboard ship to assist in evaluating and designing STD educational programs.
AD1027376	Adaptive Dynamics, Control, and Extinction in Networked Populations	Naval Research Laboratory Washington United States	Schwartz,Ira B.,Lindley,Brandon,Shaw,Leah B.	7/9/2015	6	Not available	Not available	U	A - 01	Approved for public release; distribution is unlimited.	Conference Paper	Real networks consisting of social contacts do not possess static connections. That is, social connections may be time dependent due to a variety of individual behavioral decisions based on current network links between people. Examples of adaptive networks occur in epidemics, where information about infectious individuals may change the rewiring of healthy people, or in the recruitment of individuals to a cause or fad, where rewiring may optimize recruitment of susceptible individuals. In this talk, we will review some of the dynamical properties of adaptive and random networks, such as bifurcation structure and the size of fluctuations. We will also show how adaptive networks predict novel phenomena as well as yield insight into new controls. Applying a new transition rate approximation that incorporates link dynamics, we extend the theory of large deviations to stochastic network extinction to predict extinction times. In particular, we use the theory to find the most probable paths leading to extinction. We then apply the methodology to network models and discover how mean extinction times scale with network parameters in Erdos-Renyi networks. The results are shown to compare quite well with Monte Carlo simulations of the network in predicting both the most optimal paths to extinction and mean extinction times.

ADA079762	Evaluation of Evidence in Causal Inference.	YALE UNIV NEW HAVEN CT DEPT OF PSYCHOLOGY	Schustack,Miriam W.,Sternberg,Robert J.	10/1/1979	81	RR-7-79,TR-21	Not available	U	A - 01	Approved for public release; distribution is unlimited.	Technical rept. 1 Jul-30 Sep 79,	In three experiments, we investigated what evidence people use in making inferences about causality in complex and uncertain situations. Given evidence consisting of multiple observations of some outcome, with each observation including information about the presence or absence of that outcome and of some of its possible causes, subjects estimated the strength of the causal relationship between the outcome and a predetermined possibly-causal event. Over problems and over experiments, the nature and strength of evidence supporting the causal role of the hypothesized cause varied along many dimensions. Using regression-modeling, we found a set of five evidence types that together gave a good account of subjects' judgments. Four of the independent variables in this model directly concern the relation between the hypothesized cause and the outcome (confirmation by Joint Presence and by Joint Absence of target and outcome, and disconfirmation by violation of sufficiency and of necessity of the target for the outcome), and the fifth represents the goodness of alternative causes as explanations for the outcome. Over the experiments, involving four groups of subjects and five sets of problems, this single linear model accounted for 84 to 90% of the variance in each problem-set. (Author)
ADA425053	The Homefront: World War One At Home	AIR UNIV PRESS MAXWELL AFB AL	Smiley, Anthony W.	4/1/2000	36	Not available	ACSC	U	A - 01	Approved for public release; distribution is unlimited. Availability: This document is not available from DTIC in microfiche.	Not available	America was drawn into a conflict, one in which it really had no intention of participating. Regardless, America found itself a belligerent. This paper is a brief study of the general causes of the war, Wilson's reaction, how America prepared and supported her troops. This examination will include a political, economic and social overview of America and how those changes are still affecting us today. Almost every social, political or economic conflict of this century can be traced back to the incredible bloodletting on the battlefields of the Great War. The Great War framed the political posturing of several generations of diplomats, politicians, military officers and everyday people. The gross failures of the war-making powers generated and fed a century of rebellion against any legitimate authority and the monarchical systems of government in particular. Prohibition and the influenza pandemic also took their place in forming America at the beginning of the twentieth century.
AD0625951	EPIDEMIOLOGICAL AND GENETICAL STUDY ON THE DRUG-RESISTANCE OF SHIGELLAE AND STAPHYLOCOCCI.	INSTITUTE OF MICROBIAL CHEMISTRY TOKYO (JAPAN)	Mitsuhashi,Susumu	11/14/1964	5	ARDG(FE)-J-183	J-183	U	A - 01	Approved for public release; distribution is unlimited.	Semi-annual rept., 15 May-14 Nov 64,	From the in-patients of 6 city hospitals, 6,000 strains of Shigella were isolated, and their bacteriological properties and drug-resistance patterns were examined. Approximately 90% of the isolated Shigella strains were resistant to sulfanilamide (SA). Among the drug-resistant Shigella strains, 78% were resistant to chloramphenicol(CM), tetracycline(TC), streptomycin(SM) and sulfanilamide(SA). A transmissible drug-resistance factor, R(CM(s)TC(s)SM(r)SA(r) was obtained from an epidemic in Tokyo. Following the administration of tetracycline, R(CM(s)TC(r)SM(r) SA(r) was obtained from the same patients. It was found by in vitro study that R(CM(s)TC(s)SM(r)SA(r) factor was converted to R(CM(s)TC(r)SM(r)SA(r) factor in high frequency on the plate containing tetracycline. From the in-patients of 14 hospitals, 1284 strains of staphylococci were isolated, and their phase typing and drug-resistance patterns were examined. Ninety-nine percent were drug-resistant. Among the resistant strains, 31% were resistant to SA, 20% to PC.SA, 17% to TC.SM.PC.SA, and 12% to TC.PC.SA. It was noted that the degree of resistance to each drug was extremely high in the multiple resistant strains.
ADA464728	Molecular Mechanisms and Treatment Strategies for Obesity-Associated Coronary Artery Disease, an Imminent Military Epidemic	which would protect macrophages from advanced lesional apoptosis. If successful	these drugs would help stem the rising tide of obesity-related heart disease in middle-aged and older military personnel and their families as well as in the general population."	12/1/2006	Tabas, Ira	U	53	U	A - 01	Approved for public release; distribution is unlimited.	USAMRMC	There is an epidemic of obesity in the military. Obesity leads to insulin resistance syndromes, notably metabolic syndrome and type 2 diabetes. The major cause of death in these syndromes is atherothrombotic vascular disease, including coronary artery disease. Therefore, when retired military personnel and their families reach middle age, there will be an epidemic of obesity-related vascular disease. The studies completed as part of this project have revealed new cellular and molecular links between obesity/insulin resistance and atherothrombotic vascular disease. We have shown that a side effect of a class of insulin-sensitizing PPAR gamma-activating drugs called TZDs, which are used widely in obese people, may promote vascular disease. We have also shown how adiponectin, a hormone that is decreased in obese subjects, might protect against vascular disease. These advances suggest new ideas for drug therapy: a super" TZD that would eliminate the potential pro-atherogenic effects; and an adiponectin mimetic

ADA476452	Differential Dengue Tropism & Neutralization: Potential Mechanisms of Pathogenesis	UNIFORMED SERVICES UNIV OF THE HEALTH SCIENCES BETHESDA MD DEPT OF MICROBIOLOGY AND IMMUNOLOGY	Martin, Nicole C.	1/4/2006	195	Not available	USUHS	U	A - 01	Approved for public release; distribution is unlimited.	Doctoral thesis	The mechanisms underlying the pathogenesis of dengue hemorrhagic fever (DHF) remain poorly understood. Intriguing evidence suggest a role for viral strain differences. Consistent genetic differences exist in the envelope glycoproteins of dengue 2 strains associated with DHF epidemics (Asian genotype) and dengue 2 strains only associated with DF (American genotype). It has also been established that dengue virus infection can be mediated by C-type lectins DC-SIGN and L-SIGN. We developed an assay that uses cells expressing these relevant lectin receptors and low-passage viral isolates. Using this assay, we examined whether Asian and American genotype dengue 2 viruses exhibit differences in utilization of these two receptors. Our results showed that American strains infect DC-SIGN bearing cells to a greater extent than L-SIGN bearing cells while Asian strains preferentially infect L-SIGN bearing cells. A single mutation in the envelope glycoprotein of an American strain at E390 from aspartic acid (American) to asparagine converted the C-type lectin binding phenotype from an American strain to an Asian strain by the observation that the E390 amino acid (aa) in the Asian strain is also asparagine. Asian and American strains differed in their sensitivity to antibody neutralization. The neutralizing capacity of mAbs 3H5 and 4G2 for Asian virus was significantly decreased when infection was measured in L-SIGN bearing cells compared to DC-SIGN bearing cells. Serum from Venezuelan DF patients had much greater neutralizing capacity for Asian virus in L-SIGN cells than serum from patients who progressed to DHF. Magnitude of neutralization of L-SIGN-mediated Asian virus infection was inversely associated with disease severity. Our studies suggest that differences in receptor utilization and neutralization sensitivity may contribute to our understanding of the role that viral strain differences play in dengue pathogenesis.
ADA119370	On the Asymptotic Distribution of the Size of a Stochastic Epidemic.	STANFORD UNIV CA DEPT OF STATISTICS	Sellke,Thomas	5/1/1982	13	TR-17	Not available	U	A - 01	Approved for public release; distribution is unlimited.	Technical rept.,	For a stochastic epidemic of the type considered by Bailey (1) and Kendall (3), Daniels (2) showed that 'when the threshold is large but the population size is much larger, the distribution of the number remaining uninfected in a large epidemic has approximately the Poisson form.' A simple, intuitive proof is given for this result without use of Daniels' assumption that the original number of infectives is 'small'. The proof is based on a construction of the epidemic process which is more explicit than the usual description. (Author)
ADA470950	Molecular Pathogenesis of Rickettsioses and Development of Novel Anti-Rickettsial Treatment by Combinatorial Peptide-Based Libraries	TEXAS UNIV MEDICAL BRANCH AT GALVESTON	Walker, David H.,Olano, Juan P.	2/1/2007	101	Not available	USAMRMC	U	A - 01	Approved for public release; distribution is unlimited.	Final rept. 1 Feb 2002-31 Jan 2007	The purpose of this study is to utilize adaptein libraries coded within pantropic retroviral vectors that confer protection against rickettsiae and to study the molecular pathogenesis of rickettsioses. The following specific aims were proposed: 1) To establish heterogeneous cell populations, with each cell expressing a unique member of a complex combinatorial peptide-based (e.g., adaptein) library and challenge with R. prowazekii, R. rickettsii, and O. tsutsugamushi; 2) To determine the role of NF-kB, cytokines, ROS and NO in intracellular killing of rickettsia-infected monolayers containing adapteins and 3) To characterize signal transduction pathways modulating the cytoskeletal events responsible for the increased vascular permeability. Work on specific aim 1 was partially successful. Resistant colonies of 20-25 cells were obtained after rickettsial challenges. However, expansion of such colonies was not possible. Great progress was made on specific aims 2 and 3. The role of rickettsiae, cytokines (IFN-gamma, TNF-alpha, and IL-1beta), ROS and NO in endothelial permeability was very well characterized in vitro. Changes in occludin, p120 and beta-catenin have also been documented by confocal microscopy and are related to increased endothelial permeability. mRNA microarray experiments revealed differences between infected and non-infected endothelial monolayers and between R. conorii and R. rickettsii-infected endothelial monolayers.



AD1090960	Longitudinal Active Sampling for Respiratory Viral Infections across Age Groups	Columbia University New York United States	Galanti,Marta,Morita, Haruka,Ibrahim,Sadiat, Shittu,Atinuke,Birger,R uthie,Comito,Devon,La ne,Benjamin,Tagne,Eu dosie,Ud- Dean,Minhaz,Anthony, Simon,Ligon,Chanel,Sh aman,Jeffrey,Filip,Ioan ,Freyer,Greg A.,Rabadan,Raul	12/19/2018	7	Not available	Not available	U	A - 01	Approved for public release; distribution is unlimited.	Journal Article - Open Access	BACKGROUND: Respiratory viral infections are a major cause of morbidity and mortality worldwide. However, their characterization is incomplete because prevalence estimates are based on syndromic surveillance data. Here, we address this shortcoming through the analysis of infection rates among individuals tested regularly for respiratory viral infections, irrespective of their symptoms. METHODS: We carried out longitudinal sampling and analysis among 214 individuals enrolled at multiple New York City locations from fall 2016 to spring 2018. We combined personal information with weekly nasal swab collection to investigate the prevalence of 18 respiratory viruses among different age groups and to assess risk factors associated with infection susceptibility. RESULTS: 17.5% of samples were positive for respiratory viruses. Some viruses circulated predominantly during winter, whereas others were found year round. Rhinovirus and coronavirus were most frequently detected. Children registered the highest positivity rates, and adults with daily contacts with children experienced significantly more infections than their counterparts without children. CONCLUSION: Respiratory viral infections are widespread among the general population with the majority of individuals presenting multiple infections per year. The observations identify children as the principal source of respiratory infections. These findings motivate further active surveillance and analysis of differences in pathogenicity among respiratory viruses.
AD1069362	Establish and Characterize an Oral Opioid Self-Administration Model	AIR FORCE MEDICAL WING (59TH) Science and Technology LACKLAND AFB United States	Valtier, Sandra,Ginsburg,Bret	3/1/2018	28	Not available	Not available	U	A - 01	Approved for public release; distribution is unlimited.	Technical Report	Non-medical opioid use has reached epidemic proportion in the United States. Due to the nature of the work, many service members may be vulnerable to developing opioid use problems. Animal models have already provided valuable information about the reinforcing effects of opioids; however improving animal models to better reflect aspects present in human use and could help us better understand, prevent, and treat this problem. Thus, we developed an animal model of opioid use that has better face validity (oral rather than intravenous opioid delivery, as is found in many cases of non-medical prescription opioid abuse) and incorporates alternative reinforcement, which is ever present and likely important in mitigating opioid abuse in humans, but which is rarely incorporated in to animal models.
AD0684960	STUDIES ON LEPTOSPIROSIS IN THAILAND, WITH SPECIAL REFERENCE TO THE EPIDEMIOLOGY, PATHOLOGY AND CLINICAL ASPECTS, AND ITS RELATION TO THE ANIMAL RESERVOIR HOSTS	UNIVERSITY OF MEDICAL SCIENCES BANKOK (THAILAND) BANGKOK SCHOOL OF TROPICAL MEDICINE	Sundharagiati, Bundham	2/14/1969	67	ARDG(FE)-J-210-8	J-210-8,ARDG(FE)	U	A - 01	Approved for public release; distribution is unlimited.	Progress rept. no. 4 (Final), 1 Jan-31 Dec 1968	Epidemiological study of suspected cases of leptospirosis in 39 provincial hospitals in Thailand during January 1968 - December 1968 revealed 197 positives out of 1,377 cases (14.3%). Common Serogroups were L. icterohemorrhagiae, L.autumnalis and L.wolffii. However, in Bangkok Hospitals leptospirosis bataviae was common. Annual variation of human leptospirosis in Thailand (residual antibodies survey) was studied for the third consecutive year and the results indicated that the incidence was slightly increased (from 4% to be 6% and 9% respectively). Surveys of leptospiral antibodies in Umong Canton (an epidemic area near Chiangmai Province) revealed that the area was still considered to be an endemic area of leptospirosis. The correlation studies at Pitsanuloke Province enabled the author to find out an endemic area and revealed five leptospiral serogroups were prevalent in Pitsanuloke Province. The dried blood filter paper method was experimentally studied and the results revealed that it was reliable and practical for diagnosis of the disease in suspected cases from provincial areas. In animal experiments, L.javanica (Bangkok) L. icterohemorrhagiae (Uttaradith) and L.akiyami A (Uthaidanee) were all proved to be of high virulence to hamsters. There were at least 20 serotypes of pathogenic leptospirae so far discovered from Thailand and belong to 12 serogroups.

ADA133982	RNA Fingerprinting as a Method for Distinguishing Dengue 1 Virus Strains	ARMY MEDICAL RESEARCH INST OF INFECTIOUS DISEASES FORT DETRICK MD	Repik, Patricia M.,Dalrymple, Joel M.,Brandt, Walter E.,McCown, Jack M.,Russell, Philip K.	1/1/1983	13	Not available	USAMRIID	U	A - 01	Approved for public release; distribution is unlimited.	Journal article	Virion RNAs of 12 geographically distinct dengue type 1 (DEN-1) virus isolates were clearly unique by RNA fingerprinting. Isolates from the same geographic area were very similar but differed from those of other areas, allowing us to establish three geographical groupings based upon percent shared oligonucleotides. Three Caribbean strains were virtually identical (85-91% homologous oligonucleotides) whereas Pacific/S.E. Asian strains exhibited considerably less homology to one another (44-49%). The Pacific/S.E. Asian strains exhibited little relationship (20-30%) to the Caribbean and African strains. A Sri Lankan isolate displayed a relatively high degree of homology to Nigerian isolates (60-66% homologous oligonucleotides), suggesting that the Sri Lanka DEN-1 infection originated from Africa. A 1978 Nigerian DEN-1 isolate and the 1969 Sri Lankan strain each exhibited greater than 50% homology with a 1977 Jamaican strain. The similarities observed between the African/Sri Lankan and Jamaican strains suggest that the DEN-1 virus which caused the 1977 Jamaican epidemic may have originated from Africa or Sri Lanka. The RNA fingerprint is a unique characteristic of DEN-1 strains from a particular geographic region, suggesting this technique as a useful tool for dengue epidemiological investigations.
ADA249869	AIDS: The Impact on the Criminal Justice System Management of Aids in Corrections.	AIR FORCE INST OF TECH WRIGHT-PATTERSON AFB OH	Spranger, Erich M.	1/1/1991	94	AFIT/Ci/CIA-91-136	AFIT	U	A - 01	Approved for public release; distribution is unlimited.	Master's thesis,	Acquired Immune Deficiency Syndrome (AIDS) will be the most challenging and complex health problem of the century. Because of the catastrophic nature of AIDS and the fear the disease engenders, the AIDS epidemic in the United States is posing medical, legal, and ethical questions to policy makers at all levels. The issues raised by AIDS are controversial and the center of public attention. These issue parallel many of the legal, ethical, professional, and social issues that exist in the provision of health care for the entire population. It is paramount that the medical, legal, and ethical questions related to the provision of health care for those with AIDS be addressed, particularly at a time when many health related decisions being made are based on economic concerns. We must not lose sight of individuals' rights.
ADA526455	Project on National Security Reform: Vision Working Group Report and Scenarios	ARMY WAR COLL STRATEGIC STUDIES INST CARLISLE BARRACKS PA	Ronis, Sheila R.	7/1/2010	279	Not available	AWC/SSI	U	A - 01	Approved for public release; distribution is unlimited.	Monograph	Today, many of the most pressing challenges to the United States do not take the form of strong and aggressive states. Instead, they include diverse threats, including nonstate actors, environmental change, pandemic disease, recession, a burgeoning national debt, and so on. Addressing such disparate challenges demands a range of capabilities and expertise. Adapting to this increasingly complex environment thus necessitates not only that we improve the system's ability to communicate across a horizontal range of competencies, but also that it learn to anticipate the potential future impacts of changes to the system and respond to unanticipated events. On November 26, 2008, the Project on National Security Reform (PNSR) submitted its 2-year study of the national security system, 'Forging a New Shield,' to the President, President-elect, and Congress. The study found that the national security system was at risk of failure and needed serious reform. The PNSR has proposed a series of reforms that would equip the U.S. Government to better meet and respond to this new security environment we inhabit. Its Vision Working Group tested the findings against a diverse set of scenarios to determine if the recommendations were robust and effective. This testing revealed that each of the five major findings improved the performance of the current national security system. This volume documents the scenario-testing process used by the Vision Working Group. It includes the actual pre-reform and post-reform scenarios and details many other scenario techniques used. The work of the Vision Working Group has led to the formulation of another recommendation: a mechanism to infuse greater foresight into the Executive Branch, and in particular the national security system. This proposed mechanism, named the Center for Strategic Analysis and Assessment, would exist and operate within the Executive Office of the President. This volume details the proposed architecture and operation of the Ce
ADA516378	Pandemic Flu and Medical Biodefense Countermeasure Liability Limitation	LIBRARY OF CONGRESS WASHINGTON DC CONGRESSIONAL RESEARCH SERVICE	Liu, Edward C.	2/12/2010	9	CRS-7-5700,CRS-RS22327	CRS/DC	U	A - 01	Approved for public release; distribution is unlimited.	Congressional rpt.	Division C of P.L. 109-148 (2005), 42 U.S.C. 247d-6d, 247d-6e, also known as the Public Readiness and Emergency Preparedness Act (PREP Act), limits liability with respect to pandemic flu and other public health countermeasures. Specifically, upon a declaration by the Secretary of Health and Human Services of a public health emergency or the credible risk of such emergency, Division C would, with respect to a covered countermeasure

ADA434863	Interferon Alfacon1 is a Potent Inhibitor of SARS-Corona Virus in Cell-Based Models	ARMY MEDICAL RESEARCH INST OF INFECTIOUS DISEASES FORT DETRICK MD	Paragas, Jason,Blatt, Lawrence M.,Hartmann, Chris,Huggins, John W.,Endy, Tim P.	1/4/2005	5	RPP-04-260	USAMRIID	U	A - 01	Approved for public release; distribution is unlimited., Availability: This document is not available from DTIC in microfiche.	Not available	Preliminary data examining interferon alfacon1 treatment of SARS-CoV (severe acute respiratory syndrome-corona virus)-infected patients suggest this therapy is well tolerated and of therapeutic benefit. We report herein that interferon alfacon1, has potent in vitro antiviral activity against SARS-CoV. In a cytopathic effect protection (CPE) assay, interferon alfacon1 inhibited the generation of CPE in a dose-dependent manner with an IC50 of 0.001 g/ml, a clinically achievable level. Furthermore, interferon alfacon1 also demonstrated significant antiviral activity in yield reduction and plaque reduction assays. The in vitro antiviral activity of interferon alfacon1 against SARS-CoV suggests continued evaluation of interferon alfacon1 as a therapeutic treatment for patients infected with SARS-CoV.
ADA615206	Development of Antibacterials Targeting the MEP Pathway of Select Agents	GEORGE MASON UNIV FAIRFAX VA	Couch, Robin	3/1/2015	9	Not available	USAMRMC	U	A - 01	Approved for public release; distribution is unlimited.	Annual rept. 10 Feb 2014-9 Feb 2015	The threat of bioterrorism and the use of biological weapons against both military personnel and civilian populations has become an increasing concern for governments around the world. The 1984 Rajneeshee Salmonella attack, 2001 anthrax letter attacks, 2003 SARS outbreak, 2009 H1N1 swine flu pandemic, and the current US flu epidemic all illustrate our vulnerability to both deliberate and natural outbreaks of infectious disease and underscore the necessity of effective antimicrobial and antiviral therapeutics. The prevalence of antibiotic resistant strains and the ease by which antibiotic resistance can be engineered into bacteria further highlights the need for continued development of novel antibiotics against new bacterial targets. This research project directly addresses this need through the development of a broad spectrum inhibitor of the biothreat agents Francisella tularensis and Yersinia pestis. During this period of performance, we have utilized our optimized assays with the Y. pestis MEP synthase and the F. tularensis MEP cytidyltransferase to screen molecular libraries and identify effective inhibitors of both MEP synthase and MEP cytidyltransferase.
ADA038224	Influenza Virus Isolations from Dogs During a Human Epidemic in Taiwan	NAVAL MEDICAL RESEARCH UNIT NO 2 MANILA (PHILIPPINES)	Chang, C. P.,New, A. E.,Taylor, J. F.,Chiang, H. S.	1/1/1976	7	NAMRU-2-TR-714	NMRDC	U	A - 01	Approved for public release; distribution is unlimited.	Technical rept.	During an islandwide outbreak of human influenza in June and July 1971, throat swabs were taken from dogs and cats in 3 urban communities of Taiwan. Eight influenza isolates were obtained from dogs in July 1971: two were identified as influenza A closely related to the human Hong Kong/68 virus, and one was a strain of influenza type B closely resembling human influenza B virus. The latter is the first such reported isolation from dogs under natural conditions.
AD0749953	Studies of Infectious Diseases at NAMRU-2 in Taiwan	WASHINGTON UNIV SEATTLE SEATTLE	Alexander,E. R.	9/19/1972	5	Not available	Not available	U	A - 01	Approved for public release; distribution is unlimited.	Technical Report,01 Oct 1968,31 Aug 1972	In a 3 month prospective study of Chinese army recruits (9 companies) a large epidemic of influenza (both A and B) was the overwhelming cause of respiratory morbidity. Unlike U.S. experience, adenovirus, Mycoplasma pneumoniae and rhinovirus were not associated with significant morbidity. Meningococcal prevalence increased during training (20-40%) with no significant disease. Thirty-six percent of 59 hospitalized children with hepatitis were associated with Hepatitis B antigen (HBsAg). Nine percent of 249 children without hepatitis were HBsAg positive. Family members of positive cases had a high prevalence of antigen. History of parenteral infections or blood transfusion were uncommon suggesting significant non-parenteral spread. The first epidemic of scrub typhus on Taiwan since World War II occurred in Chinese soldiers on the east coast of the island, and was thoroughly described. In the US airforce personnel on Taiwan 51% of men with urethritis had gonorrhea. Nineteen percent of cases of non gonococcal urethritis were positive for chlamydia (contrasted with 3% of controls). T-strain or large colony mycoplasma did not differ between urethritis cases and controls (with or without GC).
ADA221213	Comparison of Ground and Aerial Ultra-Low Volume Applications of Malathion against Aedes aegypti in Santo Domingo, Dominican Republic	ARMY BIOMEDICAL RESEARCH AND DEVELOPMENT LAB FORT DETRICK MD	Perich, M. J.,Tidwell, M. A.,Williams, D. C.,Sardelis, M. R.,Pena, C. J.	3/1/1990	6	Not available	Not available	U	A - 01	Approved for public release; distribution is unlimited.	Not available	Efficacy of ground and aerial ultra-low volume (ULV) applications of 91% malathion at 438 ml/ha against Aedes aegypti in the Dominican Republic was evaluated using indoor collections, oviposition trapping and adult sentinel mortality rates. Ground compared to aerial ULV applications in this study were found to have a greater effect on Ae. aegypti when measured by the described sampling techniques. Rigorous environmental sanitation and source reduction are the proven long-term control methods against Ae. aegypti, but these methods are neither routinely nor uniformly practiced in many nations. Even with a long-term vector control program, natural catastrophes (hurricanes, floods and earthquakes) and man-made disasters (wars) create conditions favorable for large Ae. aegypti populations, which can lead to epidemic outbreaks of dengue and dengue hemorrhagic fever. Reprints.

ADA443993	Monotone Approximation for a Nonlinear Size and Class Age Structured Epidemic Model	NORTH CAROLINA STATE UNIV AT RALEIGH CENTER FOR RESEARCH IN SCIENTIFIC COMPUTATION	Banks, H. T.,Bokil, V. A.,Hu, Shuhua	2/22/2006	21	Not available	DARPA	U	A - 01	Approved for public release; distribution is unlimited.	Not available	In this paper, we study a nonautonomous size and class age structured epidemic model with nonlinear and nonlocal boundary conditions. We establish a comparison principle and construct convergent monotone sequences to prove the existence of solutions. Uniqueness of solutions is also established.
ADA077187	Field Evaluation of 'Cercospora rodmanii' as a Biological Control of Waterhyacinth; Inoculum Rate Studies.	FLORIDA UNIV GAINESVILLE DEPT OF PLANT PATHOLOGY	Conway ,K. E.,Cullen ,R. E.,Freeman ,T. E.,Cornell,J. A.	10/1/1979	56	WES-MP-A-79-6	MP-A-79-6	U	A - 01	Approved for public release; distribution is unlimited.	Final rept.,	The fungus 'Cercospora rodmanii' Conway has been shown to have good potential as a biological control agent for waterhyacinth in Florida. Previous work has shown what will happen if known quantities of the fungus are placed on an area of waterhyacinth. This current research addresses the study as optimal levels of inoculum necessary to begin an epidemic, various levels of inoculum on small populations of waterhyacinth, morphological changes of the infested plants, the effect of subsequent inoculations on infested plants, and the effect of off-the-shelf fungicides on 'Cercospora rodmanii'. It was shown that the fungus can severely affect waterhyacinth in conditions that favor a reduced growth of the plant. The 'Cercospora rodmanii' can be controlled with available fungicides if necessary. The greatest effect of the fungus on waterhyacinth was in reduction in height of the plants. Secondary infestations can occur with the spread of the disease from inoculated plants. (Author)
ADA442827	Physiologic and Endocrine Correlates of Overweight and Obesity in African Americans and Caucasians	HENRY M JACKSON FOUNDATION FOR THE ADVANCEMENT OF MILITARY MEDICINE ROCKVILLE MD	Deuster, Patricia A.,Poth, Merrily,Sbrocco, Tracey,Faraday, Martha	3/1/2005	9	Not available	USAMRMC	U	A - 01	Approved for public release; distribution is unlimited.	Annual rept. 1 Mar 2004-28 Feb 2005	Obesity has reached epidemic levels and yet the incidence continues to rise. The current study is seeking to examine the hypothesis that obesity may reflect dysfunctioning of the hypothalamic-pituitary-adrenal (HPA) axis in response to stressors. African American persons are at greatest risk, but reasons for this difference are unknown. We will study 120 men and women of Caucasian and African American ethnicity and examine their responses to physiologic stressors: exercise and ingestion of a meal. The HPA axis will be studied in some detail by using two stressor paradigms and two steroid regimens. We expect to be able to detect subtle differences in HPA axis reactivity in obese individuals and that might contribute to morbidity and perhaps even make individuals resistant to therapeutic interventions. We have enrolled 63 participants, with 46 completed. Data collection and analyses are proceeding on schedule. Two abstracts were submitted and accepted for presentation in Summer 2005. We are on schedule for all milestones for this study and look forward to being able to answer the important questions regarding the potential role of the HPA axis in obesity.
ADA577997	Adaptive Networks Foundations: Modeling, Dynamics, and Applications	COLLEGE OF WILLIAM AND MARY WILLIAMSBURG VA DEPT OF PHYSICS	Shaw, Leah B.	2/13/2013	22	ARO-54682-MA-11	54682-MA-11,ARO	U	A - 01	Approved for public release; distribution is unlimited.	Final rept.	We are studying adaptive social networks, focusing on spread of infectious disease as our primary example and including terrorist recruitment as an additional example. In an adaptive network, individuals change their social connections in response to their neighbors' characteristics, and these changes in network topology affect subsequent properties of the individuals. The network adaptation can be disease avoidance or connecting to potential recruits. Major goals of the project included extending previous models to incorporate more realistic network structure, adding spread of information that affects human behavior, studying the extinction of diseases, developing control strategies for epidemics on adaptive networks, and developing tools to analyze and monitor adaptive network properties. We have extended models to include network community structure, information spread, and more realistic social adaptation. We developed the first adaptive network model for terrorist recruitment. Our analytic work includes new techniques for predicting extinction rates of epidemics and the trajectory to extinction, methods to apply this to extinction on a network, and new moment closure approximation techniques that lead to more accurate predictions. For monitoring and control, we developed a method to quantify network adaptation and studied vaccine control for epidemics in adaptive networks.
AD1031198	Generation and Characterization of Protective Antibodies to Marburg Virus	USAMRIID Frederick United States	Froude,Jeffrey II W.,Pelat,T.,Miethe,S.,Zak,S. E.,Wec,A. Z.,Chandran,K.,Brannan,J. M.,Bakken,R. R.,Hust,M.,Thullier,P.,Dye,J. M.	4/3/2017	22	TR-17-041	TR-17-041	U	A - 01	Approved for public release; distribution is unlimited.	Journal Article	Marburg virus (MARV) and Ebola virus (EBOV) have been a source of epidemics and outbreaks for several decades. We present here the generation and characterization of the first protective antibodies specific for wild-type MARV. Non-human primates (NHP), cynomolgus macaques, were immunized with viral-replicon particles expressing the glycoproteins (GP) of MARV (Ci67 isolate). An antibody fragment (single chain variable fragment, scFv) phage display library was built after four immunogen injections, and screened against the GP1-649 of MARV. Sequencing of 192 selected clones identified 18 clones with distinct VH and VL sequences.

AD1094854	Aerosol and Surface Stability of SARS-CoV-2 as Compared with SARS-CoV-1	NATIONAL INST OF ALLERGY AND INFECTIOUS DISEASES HAMILTON MT HAMILTON	van Doremalen,Neeltje,Bushmaker,Trenton,Morris,Dylan H.,Holbrook,Myndi G.,Gamble,Amandine,Williamson,Brandi N.,Tamin,Azaibi,Harcourt,Jennifer L.,Thornburg,Natalie J.,Gerber,Susan I.,Lloyd Smith,James O.,de Wit,Emmie,Munster,Vincent J.	3/17/2020	3	Not available	Not available	U	A - 01	Approved for public release; distribution is unlimited.	Journal Article - Open Access	A novel human coronavirus that is now named severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) (formerly called HCoV-19) emerged in Wuhan, China, in late 2019 and is now causing a pandemic.1 We analyzed the aerosol and surface stability of SARS-CoV-2 and compared it with SARS-CoV-1, the most closely related human coronavirus.2We evaluated the stability of SARS-CoV-2 and SARS-CoV-1 in aerosols and on various surfaces and estimated their decay rates using a Bayesian regression model (see the Methods section in the Supplementary Appendix, available with the full text of this letter at NEJM.org). SARS-CoV-2nCoV-WA1-2020 (MN985325.1) and SARS-CoV-1Tor2 (AY274119.3) were the strains used. Aerosols(<5 micron) containing SARS-CoV-2 (105.25 50%tissue-culture infectious dose [TCID50] per milliliter)or SARS-CoV-1 (106.75-7.00 TCID50 per milliliter)were generated with the use of a three-jet Collison nebulizer and fed into a Goldberg drum to create an aerosolized environment. The inoculum resulted in cycle-threshold values between20 and 22, similar to those observed in samples obtained from the upper and lower respiratory tract in humans.
ADA536070	Environmental Threats to Security, Stability, and U.S. Interests in Southern Africa: Opportunity Knocks - Time for a Comprehensive Region Defense Environmental International Cooperation and Environmental Security Assistance Strategy	NAVAL WAR COLL NEWPORT RI	Jasparro, Christopher	1/1/2009	30	Not available	INSS	U	A - 01	Approved for public release; distribution is unlimited.	Not available	
ADA591427	Toward Integrated DoD Biosurveillance: Assessment and Opportunities	RAND ARROYO CENTER SANTA MONICA CA	Moore, Melinda,Fisher, Gail,Stevens, Clare	1/1/2013	157	Not available	AFHSC	U	A - 01	Approved for public release; distribution is unlimited.	Research rept.	Biosurveillance is a cornerstone of public health. In July 2012, the White House issued the National Strategy for Biosurveillance, which defines the term and sets out key functions and guiding principles. The Department of Defense (DoD) carries out biosurveillance to monitor the health of military and affiliated populations and supports biosurveillance in other countries through a range of programs across the department. The Deputy Secretary of Defense issued interim guidance in June 2013 for implementation of the new National Strategy. This begins to set formal policy for DoD's biosurveillance enterprise. The Office of Management and Budget (OMB) recognized the importance of effective DoD biosurveillance not only for the department itself but also within the context of the National Strategy. With this in mind, OMB tasked DoD to carry out a comprehensive examination of its biosurveillance enterprise to determine priority missions and desired outcomes, the extent to which DoD biosurveillance programs contribute to these missions, and whether the current funding system is appropriate and how it can be improved to ensure stable funding. DoD leaders designated the Armed Forces Health Surveillance Center (AFHSC) to lead this assessment effort. AFHSC sought objective external analytic support from the RAND Arroyo Center, a component of the RAND Corporation, to respond to the tasks specified by OMB: Task 1: Identify a prioritized list of the program's missions and desired outcomes, and develop performance measures and targets to track progress toward achieving those outcomes; Task 2: Evaluate how the current array of DoD biosurveillance program assets contributes to achieving these prioritized missions; and Task 3: Assess whether the current funding system is appropriate and how it can be improved to assure stable funding.

ADA623604	Case Series: Chikungunya and Dengue at a Forward Operating Location	SCHOOL OF AEROSPACE MEDICINE WRIGHT-PATTERSON AFB OH	Reeves, Will K.,Rowe, Natasha M.,Kugblenu, Richard K.,Magnuson, Cheryl L.	5/1/2015	3	AFRL-SA-WP-JA-2015-0032	JA-2015-0032,AFRL-SA-WP	U	A - 01	Approved for public release; distribution is unlimited.	Journal article	Chikungunya virus is a mosquito borne arbovirus in the genus Alphavirus. In humans, infection with chikungunya virus causes a painful but self-limiting febrile illness that is often associated with a maculopapular rash and polyarthrits. The virus can cause encephalitis, long-term (greater than 3 months) arthritis, and rarely death. There is no commercially available vaccine or antiviral treatment for chikungunya; however, experimental vaccines are under development, and the U.S. military was involved in vaccine development in the 1990s. Chikungunya epidemics are often significant because most infected people become symptomatic (72%-97%) and large portions of the population can be sick at the same time. Prior to 2013, the majority of the population of the New World had never been exposed to chikungunya and had no immunity to the virus. In recent years, U.S. military bases in the Caribbean and worldwide have been on alert for cases. The island nation of Curacao had notified the Pan American Health Organization of more than 1,800 cases of chikungunya by February 2015, with up to 20,000 reported in local media (i.e., up to 13% of the population). The epidemic of chikungunya extended to several active duty personnel located at the U.S. Forward Operating Location, 429th Expeditionary Operations Squadron in Curacao. Based on reported cases, the outbreak was the largest single cluster of chikungunya cases in USAF active duty personnel to date. This report describes a case series and discusses the significance of this disease in the Americas and diagnostic challenges when other arboviruses such as dengue are present.
ADA200148	Hemorrhagic Fever with Renal Syndrome (Korean Hemorrhagic Fever)	KOREA UNIV SEOUL COLL OF MEDICINE	Wang, Lee H.	6/30/1988	56	HFRS-2	USAMRDC	U	A - 01	Approved for public release; distribution is unlimited.	Annual summary rept. 10 Feb 1987-9 Feb 1988	There were 701 cases of hospitalized Hemorrhagic Fever with Renal Syndrome (HFRS) patients serologically confirmed at our laboratory and, 163 and 5 of them were ROK Army and US Army soldiers, respectively in Korea, 1987. Epidemic of scrub typhus occurred about a month before the peak of HFRS and 209 scrub typhus patients were diagnosed at out laboratory among 1,530 suspect HFRS in 1987. Serologic survey of infected wild Apodemus agrarius with Hantaan virus, R. tsutsugamushi and Leptospira interrogans in the U.S. Marine and ROK Army camps in Wucheon, Kyunggido showed higher infection rate of mice with the agents in the US Marine camp than ROK Army camp. A new serotype of Hantavirus was identified and 4 strains of Hantaan virus were isolated from Apodemus agrarius caught in Jinhae, Kyungsangnamdo, Korea where HFRS were not reported previously. As a part of global survey of HFRS, Hantavirus Infection was demonstrated for the first time not only among laboratory personnel but also in experimental rats and wild mice, C. musculus in Argentina. A strain of Seoul virus was isolated from a Syrian hamster purchased from a local animal farm. In our limited study, inbred hamsters were broad spectrum animals to support multiplication of hantaviruses and 2 out of 4 inbred hamsters PD4 died about 20 days after inoculation of a strain of Hantaan virus. Keywords: Puumala virus, Maaji virus, Seroepidemiology, Immunoassay.
ADA181931	Effect of Temperature on the Vector Efficiency of Aedes aegypti for Dengue 2 Virus	ARMY MEDICAL RESEARCH INST OF INFECTIOUS DISEASES FORT DETRICK MD	Watts, Douglas M.,Burke, Donald S.,Harrison, Bruce A.,Whitmire, Richard E.,Nisalak, Ananda	6/26/1986	10	Not available	USAMRIID	U	A - 01	Approved for public release; distribution is unlimited.	Journal article.	The effect of temperature on the ability of Aedes Aegypti to transmit dengue (DEN) 2 virus to rhesus monkeys was assessed as a possible explanation for the seasonal variation in the incidence of dengue hemorrhagic fever in Bangkok, Thailand. In two laboratory experiments, a Bangkok strain of Ae. aegypti was allowed for feed upon viremic monkeys infected with DEN-2 virus. Blood-engorged mosquitoes were separated into two groups and retained at constant temperatures. Virus infection and transmission rates were determined for Ae. aegypti at intervals ranging from 4 to 7 days during a 25-day incubation period. Results of the first experiment for mosquitoes infected with a low dose of DEN-2 virus and maintained at 20, 24, 26, and 30C, indicated that the infection rate ranged from 25% to 75% depending on the incubation period. However, DEN-2 virus was transmitted to monkeys only by Ae. aegypti retained at 30C for 25 days. In the second experiment, the infection rate for Ae. aegypti that ingested a high viral dose, and incubated at 26, 30, 32, and 35C ranged from 67% to 95%. DEN 2 virus was transmitted to monkeys only by mosquitoes maintained at > or = 30C. The extrinsic incubation period was 12 days for mosquitoes at 30C, and was reduced to 7 days for mosquitoes at 32C and 35C. These results imply that temperature-induced variations in the vector efficiency of Ae. aegypti may be a significant determinant in the annual cyclic pattern of dengue hemorrhagic fever epidemics in Bangkok.

ADA433486	Simultaneous Genomic Detection of Multiple Enteric Bacterial and Viral Pathogens, Including Sars-CoV and RVFV	TEXAS UNIV AT AUSTIN	Payne, S.,Peters, C. J.,Makino, S.,Oliver, K.,Weiss, C.,Kornguth, S.,Carruthers, L.,Chin, R.	12/1/2004	7	Not available	ECBC	U	A - 01	Approved for public release; distribution is unlimited.	Conference paper	A multiplexed screening system to detect pathogenicity islands (PI) of bacteria causing enteric disease and pathogenicity factors (PF) associated with the SARS-associated coronavirus (SARS-CoV) and Rift Valley Fever Virus (RVFV) has been developed. This system is based upon the Luminex xMAP System
ADA451348	A Model for the Ordering and Distribution of the Influenza Vaccine	NAVAL POSTGRADUATE SCHOOL MONTEREY CA	Gurr, James R.	6/1/2006	69	Not available	NPS	U	A - 01	Approved for public release; distribution is unlimited.	Master's thesis	The system for the production and distribution of the United States supply of influenza vaccine has experienced disruptions during past influenza seasons. The identification of elements of the influenza vaccine is different each year and must be researched and identified each year prior to the influenza season. The manufacturing of the vaccine is a complicated process with many potential problems. This thesis identifies the requirements and constraints of the current manufacturing and distribution system including the annual demand and supply. This information is used to create an illustrative model based on operational research and operational management theory to develop a systematic approach to distribution of the influenza vaccine in a shortage situation. Two different policies are identified for use in a normal influenza season to determine how many companies are required to provide a sufficient amount of influenza vaccine with the understanding that some of the companies might have manufacturing difficulties. These two policies are the percentage distribution policy and the strict priority distribution policy. The model includes a determination of the number of companies that should be available for influenza vaccine production and the amount of vaccine that should be ordered from each company to minimize the total cost. The majority of the influenza seasons could be covered by purchasing fewer than 108 million doses, as in the percentage distribution policy, making sure that the vaccine dose orders are spread out evenly over four companies and distributed evenly by age group percentage, but could be reduced to as little as 24.5 million total vaccine doses if necessary with minimal cost and loss of life using a strict priority distribution policy.
ADA501821	Physiologic and Endocrine Correlates of Overweightness in African Americans and Caucasians	UNIFORMED SERVICES UNIV OF THE HEALTH SCIENCES BETHESDA MD DEPT OF MILITARY AND EMERGENCY MEDICINE	Deuster, Patricia A.,Poth, Merrily,Sbrocco, Tracey	3/27/2009	94	Not available	USAMRMC	U	A - 01	Approved for public release; distribution is unlimited.	Final rept. 28 Feb 2003-28 Feb 2009	Obesity has reached epidemic levels and the incidence continues to rise. The current study was seeking to examine the hypothesis that obesity may reflect dysfunctioning of the hypothalamic-pituitary-adrenal (HPA) axis in response to stressors. African American persons are at greatest risk, but reasons for this difference are unknown. We studied 126 healthy men and women of Caucasian (CA) and African American (AA) ethnicity and examined their responses to physiologic stressors: exercise and ingestion of a meal. Methods: The HPA axis was studied by using two stress paradigms and two steroid regimens: hydrocortisone (HCO) and dexamethasone (DEX). We were able to detect subtle differences in HPA axis reactivity in obese individuals that might contribute to morbidity and perhaps even make individuals resistant to therapeutic interventions. Results: AA, particularly those who are obese by percent body fat, are highly sensitive to glucocorticoids. This was noted during exercise under conditions of DEX and in response to a meal, under all conditions but to a greater extent under conditions for DEX. Importantly, AA had significantly lower cardiovascular fitness than CA. Fitness was inversely related to obesity, insulin resistance, and glucocorticoid sensitivity. Lastly, lipid profiles of AA are more favorable than age-matched, healthy CA. Using either triglycerides or HDLcholesterol as indicators of cardiovascular disease would indicate minimal risk. Conclusions: Over the past five years, we achieved all goals for this project. Notably, we enrolled 160 participants and completed testing on 126.

ADA539479	Training Initiatives within the AFHSC-Global Emerging Infections Surveillance and Response System: Support for IHR (2005)	ARMED FORCES HEALTH SURVEILLANCE CENTER SILVER SPRING MD	Otto, Jean L.,Baliga, Priya,Sanchez, Jose L.,Johns, Matthew C.,Gray, Gregory C.,Grieco, John,Lescano, Andres G.,Mothershead, Jerry L.,Wagar, Eric J.,Blazes, David L.	3/4/2011	9	Not available	AFHSC	U	A - 01	Approved for public release; distribution is unlimited.	Journal article	Training is a key component of building capacity for public health surveillance and response, but has often been difficult to quantify. During fiscal 2009, the Armed Forces Health Surveillance Center, Division of Global Emerging Infections Surveillance and Response System (AFHSC-GEIS) supported 18 partner organizations in conducting 123 training initiatives in 40 countries for 3,130 U.S. military, civilian and host-country personnel. The training assisted with supporting compliance with International Health Regulations, IHR (2005). Training activities in pandemic preparedness, outbreak investigation and response, emerging infectious disease (EID) surveillance and pathogen diagnostic techniques were expanded significantly. By engaging local health and other government officials and civilian institutions, the U.S. military's role as a key stakeholder in global public health has been strengthened and has contributed to EID-related surveillance, research and capacity-building initiatives specified elsewhere in this issue. Public health and emerging infections surveillance training accomplished by AFHSC-GEIS and its Department of Defense (DoD) partners during fiscal 2009 will be tabulated and described.
ADA460299	Synopsis of Epidemic Modeling Studies	INSTITUTE FOR DEFENSE ANALYSES ALEXANDRIA VA	Not available	3/20/2001	28	DTRA/FB	Not available	U	A - 01	Approved for public release; distribution is unlimited.	Approved for public release; distribution is unlimited.	Acquire Actual and, as Appropriate, Surrogate Epidemiological Data Sets for Smallpox, Pneumonic Plague and Hemorrhagic Fever Outbreaks On the Basis of Available Epidemiological Data
ADA550001	The Armed Forces Health Surveillance Center: Enhancing the Military Health System's Public Health Capabilities	ARMED FORCES HEALTH SURVEILLANCE CENTER SILVER SPRING MD	DeFraites, Robert F.	1/1/2011	5	Not available	AFHSC	U	A - 01	Approved for public release; distribution is unlimited.	Journal article	Since its establishment in February 2008, the Armed Forces Health Surveillance Center (AFHSC) has embarked on a number of initiatives and projects in collaboration with a variety of agencies in the Department of Defense (DoD),other organizations within the federal government, and non-governmental partners. In 2009, the outbreak of pandemic H1N1 influenza attracted the major focus of the center, although notable advances were accomplished in other areas of interest, such as deployment health, mental health and traumatic brain injury surveillance.
ADA607635	Modeling the Effects of Cyber Operations on Kinetic Battles	NAVAL POSTGRADUATE SCHOOL MONTEREY CA DEPT OF OPERATIONS RESEARCH	Yildiz, Fatih	6/1/2014	125	Not available	NPS-OR	U	A - 01	Approved for public release; distribution is unlimited.	Master's thesis	This thesis considers the effects of cyber operations on kinetic warfare, by exploring and building on two recently proposed extensions to traditional Lanchester models of combat. In one model, we consider instantaneous changes to kinetic fighting capability resulting, for example, from the disruption or restoration of communications or other supporting cyber systems. Such changes create discontinuous shocks in the overall combat dynamics and can dramatically affect the outcome of a battle. In the second model, we represent cyber operations as a continuous process of degradation and recovery in fighting capability based on the dynamics of epidemic spread. By using analytical and numerical approaches, we obtain insights about the effect of cyber operations on battle duration and attrition, how cyber operations can affect victory conditions, and tradeoffs in the allocation of limited resources to cyber operations and kinetic operations. Building on a common model framework, we develop several additional models that can be used to investigate specific aspects of cyber operations on kinetic combat.
ADA065538	Prophylactic Methods in the Prevention of Diseases Among Army Personnel.	LETTERMAN ARMY MEDICAL CENTER SAN FRANCISCO CALIF	Smith,Creed D.,Stewart,Robert S.,Shiromoto,Ronald S.,Hull,Angus C.	12/1/1978	53	Not available	Not available	U	A - 01	Approved for public release; distribution is unlimited.	Annual rept. for FY 78,	Acute respiratory disease (ARD) surveillance studies as conducted during fiscal year 1978 and for the past 15 years before at CONUS training Forts indicate that ARD continues to be the principal cause of morbidity at military training units in CONUS. These studies have been effective in revealing the first signs of oncoming epidemics to provide early warnings as indicators for vaccine administration. Vaccine prophylaxis has been our most efficacious tool. These surveillance studies were performed on hospitalized basic combat trainees (BCTs) at 9 BCT Forts, and on hospitalized and quartered patients at 1 Navy Training Center-San Diego, and 1 Advance Individual Training Fort (AIT).



ADA195902	Evidence of Human Infection with a Rat-Associated Hantavirus in Baltimore, Maryland	JOHNS HOPKINS UNIV BALTIMORE MD DEPT OF IMMUNOLOGY AND INFECTIOUS DISEASES	Childs, James E.,Glass, Gregory E.,Korch, George W.,Arthur, Ray R.,Shah, Keerti V.,Glasser, David,Rossi, Cynthia,Leduc, James W.	1/1/1988	4	Not available	USAMRDC	U	A - 01	Approved for public release; distribution is unlimited.	Journal article	Viruses of the proposed genus Hantavirus (in the family Bunyaviridae) are etiologic agents of hemorrhagic fever with renal syndrome in Asia and Europe. Four antigenically distinct hantaviruses have been isolated from different rodent reservoirs, and three are associated with hemorrhagic fever with renal syndrome in humans. The primary virus-rodent associations and corresponding human diseases are Hantaan virus-Apodemus agrarius with Korean hemorrhagic fever and severe-type epidemic hemorrhagic fever in eastern Asia (1, 4); Puumala virus-Clethrionomys glareolus with nephropathia epidemica in eastern Europe, western Soviet Union, and Scandinavia (2); and Seoul virus (and other isolates) and species of Rattus with mild-type epidemic hemorrhagic fever in China and in laboratory outbreaks of hemorrhagic fever with renal syndrome (4-6) . Prospect Hill virus, isolated from Microtus pennsylvanicus in the United States, is known to infect humans, but is not associated with a disease (7). Recently, hantaviral infections in wild Rattus norvegicus of the United States were documented and shown by virologic and serologic techniques to be caused by a virus antigenically related to Seoul virus, isolated in 1980 from a Norway rat in Korea. We now report serologic evidence of human infections specifically due to a rat-associated Hantavirus in residents of Baltimore. To our knowledge, this is the first report to definitively link to a rat source the occurrence of hantaviral antibodies in humans who are lifelong residents of the United States.
ADA451065	Cynomolgus Macaque as an Animal Model for Severe Acute Respiratory Syndrome	ARMY MEDICAL RESEARCH INST OF INFECTIOUS DISEASES FORT DETRICK MD	Lawler, James V.,Endy, Timothy P.,Hensley, Lisa E.,Garrison, Aura,Fritz, Elizabeth A.,Lesar, May,Baric, Ralph S.,Kulesh, David A.,Norwood, David A.,Wasieloski, Leonard P.	5/1/2006	11	RPP-05-302	USAMRIID/VD	U	A - 01	Approved for public release; distribution is unlimited.	Journal article	The emergence of severe acute respiratory syndrome (SARS) in 2002 - 2003 had a tremendous global impact. Adequate animal models are required to study the underlying pathogenesis of SARS-associated coronavirus (SARS-CoV) infection and to develop effective vaccines and therapeutics. In order to characterize clinically relevant parameters of SARS-CoV infection in non-human primates, we infected cynomolgus macaques with SARS-CoV in three groups: Group I was infected in the nares and bronchus, group II in the nares and conjunctiva and Group II intravenously. Animals in Groups I and II developed mild-moderate symptomatic illness. All animals demonstrated evidence of viral replication and developed neutralizing antibodies. Chest radiographs from several animals in Groups I and II revealed unifocal or multifocal pneumonia that peaked between days 8 -10 postinfection. Clinical laboratory tests were not significantly changed. Overall, inoculation by a mucosal route produced more significant disease than intravenous inoculation. SARS-CoV infection of cynomolgus macaques did not reproduce the severe illness seen in the majority of human cases of SARS; however, our results suggest similarities to the more mild syndrome of SARS infection characteristically seen in young children.
ADA530030	Stalin's Plague: The Impact of Psychological Trauma on Russian National Security Considerations	NATIONAL DEFENSE UNIV NORFOLK VA JOINT ADVANCED WARFIGHTING SCHOOL	Meinhardt, Eric	4/1/2010	93	Not available	NDU/JAWS	U	A - 01	Approved for public release; distribution is unlimited.	Master's thesis	The Russian Federation is pursuing a national security strategy that primarily utilizes economic power with the goal of dismantling the European security alliances. The Russians may feel compelled to pursue this strategy over more cooperative partnership building strategies because they could be suffering from an unprecedented, unrecognized epidemic of generationally transmitted psychological stress disorders, most notably Post Traumatic Stress Disorder, which could be driving their motivations to seek security above all other alternatives. Europe depends on Russia as the only economically viable source of hydrocarbon based energy sources. As time passes Russia's energy monopoly over the European market will increasingly shape the domestic and international political policies of the European countries into a relationship that will placate Russian actions. The Europeans will be forced to accept a tolerant position with Russia in their interest of ensuring a stable supply of energy, with the aim of preventing punitive price increases or an embargo. The transfer of European wealth to Russia in payment for that energy will drastically increase the level of Russian influence in European affairs. That amalgamation of influences could be leveraged against European nations and could ultimately lead to a dramatic restructuring of the political dynamics in European affairs.

ADA484172	Breast Cancer and Early Onset Childhood Obesity: Cell Specific Gene Expression in Mammary Epithelia and Adipocytes	PURDUE UNIV LAFAYETTE IN	Camarillo, Ignacio,Nichols, Maxine	7/1/2006	12	Not available	USAMRMC	U	A - 01	Approved for public release; distribution is unlimited.	Final rept. 1 Jul 2003-30 Jun 2006	Obesity has become a major health problem in children and adults and is associated with increased breast cancer incidence and mortality. The epidemic of childhood obesity is recent and little information exists regarding its association with mammary tumorigenesis. Towards better understanding this relationship we have developed and characterized a new rat model of childhood onset Diet Induced Obesity (DIO) and breast cancer. We have shown that young female rats fed a high fat Western Style diet have a 2-fold higher body fat mass and elevated serum comorbidity factors as compared to Chow fed Lean rats. When these animals are treated with the carcinogen MNU mammary tumors appear sooner and in greater numbers in Obese rats. We determined via histology that tumors from Obese rats are of a more invasive type compared to tumors from Lean rats. This is in accord with the association between human obesity and breast cancer mortality. This new model parallels the onset of obesity as it occurs in humans and therefore provides an excellent system to study the underlying mechanisms of obesity and mammary tumor formation and progression. Our long-term goals are to exploit this model to better understand adipocyte-epithelial interactions during mammary tumorigenesis identify and validate novel molecular therapeutic targets and to establish biomarkers for cancer prevention and prognosis.
AD1027557	The Distribution of the Total Size of an Epidemic	UNIVERSITY OF BIRMINGHAM Edgbaston, Birmingham United Kingdom	Daniels,H. E.	1/1/1967	14	Not available	Not available	U	A - 01	Approved for public release; distribution is unlimited.	Conference Paper	This paper examines in some detail the distribution of the total number of cases in an epidemic of the general stochastic type for a closed population. The assumed model is that of Bartlett [2] and McKendrick [11] which Bailey [1] used to study the stochastic analogue of the deterministic threshold theorem (Kermack and McKendrick [10], D. G. Kendall [9]). Bailey obtained recurrence relations from which the required probabilities were computed numerically. His calculations revealed a gradual transition from J-shaped distributions containing only small epidemics for population sizes below the threshold, to U-shaped distributions containing either large or small epidemics but practically no epidemics of intermediate size when the threshold is exceeded. There is also an interesting transitional form of distribution near the threshold value. In an attempt to understand what motivates an epidemic to behave in this way, Whittle [13] and Kendall [9] constructed different models approximating to the one used by Bailey but easier to handle analytically. Both explained Bailey's results in terms of an initial birth and death process where extinction is certain in the first case and not certain in the second. This work is summarized, with additional references, in the book by Bailey [2]. In a paper presented at this Symposium, Gani [7] develops some recent work by Siskind [12] and himself [6] on a method of obtaining time dependent solutions of the epidemic equations. For the limiting case considered here he shows how the probabilities can be computed by successive multiplication of matrices.
AD0722494	Louse-Borne Relapsing Fever; A Clinical and Laboratory Study of 62 Cases in Ethiopia and a Reconsideration of the Literature	NAVAL MEDICAL RESEARCH UNIT NO 3 APO NEW YORK 09319 FIELD FACILITY	Bryceson, A. D. M., Parry, E. H. O., Perine, P. L., Warrell, D. A., Vukotich, D., Leithead, C. S.	7/23/1969	54	NAMRU-3-TR-1-71-F.F.	NAMRU-3	U	A - 01	Approved for public release; distribution is unlimited. Document partially illegible.	Technical rept.	Sixty-two patients with louse-borne relapsing fever in Addis Ababa, Ethiopia, from 1966 to 1968 were studied. The clinical presentation varied. Fever, headache, skeletal and abdominal pain, and the usual symptoms of acute infection were common. Tachypnoea and upper abdominal tenderness with a palpable liver and spleen were found in two-thirds of the patients, jaundice in one-third, and purpura in one-sixth. Thrombocytopenia was the rule. Biochemical evidence of hepatocellular damage was found in most patients. Myocardial damage was suspected in one-third of them. Pulmonary ventilation and cardiac output were increased and there was evidence of impaired gas exchange. Evidence of renal and cerebral damage was less striking. The literature on the immune response has been reviewed in order to understand the phenomenon of the crisis. Treatment was with intravenous tetracycline, and was followed by a Jarisch-Herxheimer reaction. The clinical and physiological features of this reaction are described. Spirochaete death and phagocytosis, resulting in the release of endogenous pyrogen, may be responsible for all its features. Hyperpyrexia in the chill phase and hypotension and cardiac failure in the flush phase can be fatal. The mortality was 5 per cent. The epidemic and pathological processes which determine the prognosis of this disease are discussed.

ADA487442	Sharing Information Today: Maritime Domain Awareness	DEFENSE INFORMATION SYSTEMS AGENCY ARLINGTON VA	Todd, Michael	7/1/2007	3	Not available	STSC	U	A - 01	Approved for public release; distribution is unlimited.	Journal article	In a world where unforeseen human or natural disasters (i.e., U.S.S. Cole, September 11, Hurricane Katrina, the 2004 Indian Ocean tsunami, and the possibility of an avian flu pandemic) may occur, interagency information sharing and collaboration is essential to mitigating the effects of these types of catastrophic events. The Maritime Domain Awareness Data Sharing Community of Interest (MDA DS COI) pilot demonstrated a net-centric data-sharing capability as a first step towards addressing the common challenge of global identification and tracking of maritime vessels, cargo, and crew usage of existing information sources to better secure our coasts, ports, and waterways. This Department of Defense (DoD), Department of Homeland Security (DHS), and Department of Transportation (DOT) partnership developed capabilities to expose maritime data as a consumable Web-enabled service to authorized, unanticipated users employing community-based agreements defining a common vocabulary and data-sharing services. This COI pilot also leveraged enterprise services resulting in a repeatable process, an extensible vocabulary, and reusable services available for developing responsive, agile solutions for any number of data-sharing challenges.
AD1006675	Klebsiella Species Infections in the Department of the Navy [DoN] and Department of Defense [DoD]: Annual Report 2014	Navy and Marine Corps Public Health Center Portsmouth United States	McAuliffe,Kathryn,Chukwuma,Uzo	3/14/2016	42	NMCPHC-EDC-TR-120-2016,NMCPHC	Not available	U	A - 01	Approved for public release; distribution is unlimited.	Technical Report,01 Jan 2014,31 Dec 2014	Gram-negative Klebsiella bacterial infections are of growing global public health and clinical concern. Epidemics of multidrug-resistant (MDR) gram-negative bacteria, including Klebsiella species, have occurred worldwide in the last two decades, including regions where United States (US) military forces are regularly deployed. In 2014, the incidence of all Klebsiella spp. infections increased to 83.6 cases per 100,000 eligible beneficiaries from 63.0 cases per 100,000 eligible beneficiaries in 2013 among Department of the Navy (DON) and Department of Defense (DOD) beneficiaries seeking care in the Military Health System (MHS). A pronounced gender disparity was observed for Klebsiella spp. infections; overall, DON and DOD female beneficiaries were infected more than four times as often as males. Within the MHS, Klebsiella spp. cases commonly manifested as urinary tract infections (UTIs), which was consistent with previous analysis. MDR Klebsiella spp. infections accounted for less than 5 of all Klebsiella spp. infections. Females over the age of 45 had the highest rates of MDR infections. Compared to non-MDR Klebsiella spp. infections, a higher percentage of MDR infections were healthcare-associated. Klebsiella spp. infections remained susceptible to many antibiotic classes, such as carbapenems, sulfonamides, fluoroquinolones, and cephalosporins; ciprofloxacin was the most commonly prescribed antibiotic. MDR Klebsiella spp. infections were least resistant to carbapenems.
ADA420209	Environmental Security: A Strategy for the Mitigation of Regional Instabilities?	USAWC	Manous, Joe D., Jr	4/7/2003	46	USAWC	Not available	U	A - 01	Approved for public release; distribution is unlimited.	Research paper	Maintaining regional stability has risen in importance in U.S. foreign policy and in some instances to the level of a vital national interest. However, the current role of the United States as the world's sole hyperpower has produced unique challenges as the United States confronts asymmetric threats from terrorist (non-state) organizations. Of special interest to the United States military is the prevention or mitigation of regional instabilities. These instabilities hamper economic prosperity and provide breeding grounds for popular discontent. While regional instabilities alone may not constitute a direct physical threat to the United States, their secondary effects, which include impacts on international trade, access to resources, and support bases for terrorist organizations, have major implications for U.S. national security interests. The unprecedented growth of the world's population, particularly in developing nations, is consuming the basic resources of food and water at an alarming rate, while the spread of epidemic diseases such as HIV/AIDS, tuberculosis, and malaria are destroying entire generations. In developing countries, the populations often focus much of their energy fulfilling the basic needs of food and water and when these needs are not met, an internal disruption of the State can result. While these environmental issues" may not provide the sole reason for a population to take up arms

ADA460696	Bioterrorism Countermeasure Development: Issues in Patents and Homeland Security	LIBRARY OF CONGRESS WASHINGTON DC CONGRESSIONAL RESEARCH SERVICE	Schacht, Wendy H.,Thomas, John R.	11/27/2006	25	CRS-RL32917	CRS/DC	U	A - 01	Approved for public release; distribution is unlimited.	Congressional rept.	Congressional interest in the development of bioterrorism countermeasures remains strong, even after passage of legislation establishing Project BioShield. Several bills considered, but not enacted during the 109th Congress, including S. 3, the Protecting America in the War on Terror Act of 2005; S. 975, the Project Bioshield II Act; and S. 1873, the Biodefense and Pandemic Vaccine and Drug Development Act, would have generated additional incentives for the creation of new products and processes by the private sector to counteract potential biological threats. These bills proposed reforms to current policies and practices associated with intellectual property, particularly patents, and the marketing of pharmaceuticals and related products. Patents appear to be important in the promotion of innovation, particularly in the pharmaceutical sector. This report explores the role of patents in encouraging the development and commercialization of new inventions and discusses the relationships between patent ownership and the generation of biomedical products. However, the grant of a patent on a pharmaceutical does not permit marketing of the product without the approval of the Food and Drug Administration (FDA). Thus, this report also examines policies concerning the use of FDA marketing exclusivity as an additional incentive to industry research and development (R&D) in this arena. Current law and suggested legislative changes are discussed to provide a context for any further exploration of related issues during the 110th Congress.
ADA416999	Interactions of HIV-1 and HIV-2 in West Africa	HARVARD COLL CAMBRIDGE MA	Kanki, Phyllis J.	10/1/2002	40	Not available	USAMRMC	U	A - 01	Not available	Final rept. 15 Nov 1994-30 Sep 2002	Since. the discovery of the second human immunodeficiency virus in 1985, considerable progress has been made in understanding the virology and epidemiology of HIV-2. The data suggests differences between HIV-2 and HIV-1 in geographic distribution, distinct epidemic trends, differences in perinatal transmission rates and incubation periods to the development of AIDS. The virologic determinants and mechanisms for these apparent biological differences are still unknown. However, an understanding of how HIV-2 differs from HIV-1 is essential for interpretations of comparative virologic studies. We have specifically studied the interactions between HIV-2 and HIV-1 and found that the attenuated phenotype of HIV-2 is apparently capable of providing protection from subsequent infection with HIV-1. In vitro studies suggest multiple mechanisms for such protection and we have characterized some of these virus and host determinants with an aim towards understanding correlates of immune protection. This further suggests that understanding HIV-2 immunity and cross-immunity may be useful for HIV vaccine design and development. A second aim of our studies has been the development of an HIV-2 based vaccine using the novel modified lethal factor toxin of anthrax. Several HIV-2 constructs have been made and demonstrated that this novel means of antigen delivery is capable of eliciting robust HIV- 2 responses. We are hopeful that such information will be useful in future vaccine design for HIV/AIDS.
ADA487334	The Effect of Social Mixing Controls on the Spread of Smallpox-A Two-Level Model	NAVAL POSTGRADUATE SCHOOL MONTEREY CA DEPT OF OPERATIONS RESEARCH	Kress, Moshe	1/1/2005	14	Not available	NPS-OR	U	A - 01	Approved for public release; distribution is unlimited.	Journal article	Responding to a possible bioterror attack of Smallpox has become a major concern to governments, local public officials and health authorities. This concern has been reflected in numerous studies that model and evaluate possible response strategies. Many of these studies consider only vaccination policies and assume homogeneous mixing, where all instances of contacts in the population are equally likely. Such a mixing pattern is rather unlikely to represent population interaction in a modern urban setting, which typically is separated into households on the one hand, and into daily meeting sites such as schools and offices, on the other hand. In this paper we develop a two-level social interaction model where an individual moves back and forth between home and a daily meeting site, possibly passing through a general meeting site such as mass transit system or other crowded areas. Based on the model, we evaluate the effect of social mixing controls, situational awareness of the public health system and mass vaccination on the spread of smallpox. It is shown that mixing controls and alertness of the response system may have a significant impact on the spread of the epidemic. Some policy recommendations are discussed.

AD0648123	THE SIGNIFICANCE OF METHODOLOGY OF DIALECTIC MATERIALISM FOR THE SOLUTION OF INDIVIDUAL EPIDEMIOLOGICAL PROBLEMS. REPORT 1. THE LAWS OF DIALECTIC MATERIALISM AND THEIR MANIFESTATIONS IN EPIDEMIOLOGY	ARMY BIOLOGICAL LABS FREDERICK MD	Klimenko, E. P.	1/1/1966	6	SMUFD-TRANS-1740,SMUFD-TT-67-61218	TT-67-61218,ABL/MD	U	A - 01	Approved for public release; distribution is unlimited.	Not available	Thorough knowledge, a skillful utilization of the laws and categories of materialistic dialectics and their disclosure in the process of studying concrete sciences are of great importance in the activity of a doctor. They orient him on the correct path for searches and investigations and also on the uniquely correct conclusions and deductions based on observations. The separate provisions examined in the report point to the significance of the laws of dialectic materialism in epidemiology. A knowledge of these laws is necessary for doctors for the correct synthesis of his daily prophylactic and sanitary anti-epidemic work.
AD1059824	China's Pursuit of Overseas Security	RAND Corp Santa Monica	Heath,Timothy R	9/13/2018	66	RR-2271-OSD	Not available	U	A - 01	Approved for public release; distribution is unlimited.	Technical Report	Chinas ascent as the worlds second-largest economy has brought the country tremendous prosperity, but integration into the global economy has also exposed growing numbers of its citizens and their assets to potential harm. According to Chinese authorities, 30,000 of the country's enterprises are located overseas, and more than 100 million Chinese citizens travel abroad annually.1 Dangers in distant lands menace the markets, resources, and investments upon which Chinas economy now depends. In the words of the country's 2015 Military Strategy White Paper, China has become more vulnerable to international and regional turmoil, terrorism, piracy, and serious natural disasters and epidemics.2 Chinese leaders have accordingly elevated in priority the provision of security for the country's overseas interests
AD0712488	A METHOD FOR STUDYING THE INTEGRAL FUNCTIONALS OF STOCHASTIC PROCESSES WITH APPLICATIONS: III,	PURDUE UNIV LAFAYETTE IND DEPT OF STATISTICS	Puri,Prem S.	9/1/1970	29	Mimeograph Ser-243	Not available	U	A - 01	Approved for public release; distribution is unlimited.	Not available	The paper is concerned with the problem of obtaining the joint distribution of $X(t)$ and integrals of the form $Y(t) = \int_0^t f(X(\tau), \tau) d\tau$ , where $X(t), t \geq 0$ is a continuous time parameter stochastic process appropriately defined on a probability space, with $Z$ as its state space; $f$ is a nonnegative (measurable function defined on $Z \times$ the interval $0 \leq t < \infty$ ). It is assumed that the integral $Y(t)$ exists and is finite almost surely for every $t > 0$ . In another paper, a method was introduced by the author for obtaining the joint distribution of $X(t)$ and $Y(t)$ . This method is based on an auxiliary process $Z(t)$ called 'Quantal Response Process,' defined as in the text. In this paper, the method is applied to birth processes, both time homogeneous and time nonhomogeneous. The results so obtained are then specialized to case of Simple Epidemic and to certain well-known processes such as Poisson process, Polya process. The method is also applied to certain well-known birth and death processes such as Linear Birth and Death processes with Immigration, and M/M/1 Queue. The paper ends with an application to Illness and Death processes. In each of these cases, distributions of certain useful integrals are explicitly derived by using the above technique. (Author)
AD0841149	EXPERIMENTS WITH A FILTRABLE VIRUS IN A TRANSFERABLE ILLNESS OF CANARY BIRDS	FORT DETRICK FREDERICK MD	Kikuth, W.,Gollub, H.	9/1/1968	8	SMUFD-TRANS-2329	SMUFD	U	A - 01	Approved for public release; distribution is unlimited. Document partially illegible.	Not available	A filterable virus (Berkefeld-N-Candle filter) is described, which occurred spontaneously in canaries and may cause epidemics. It is high pathogenic killing animals 100% in 7-12 days. Unusual forms occurred in blood of infected birds and appear to be related to infection. They may arise from altered, degenerated blood elements. The virus is still infectious at 0.000001 dilution; stable for 3 months in cold, but liable to 60C. IM transmission causes necrotic, degenerative alterations at the site of injection. It cannot be transferred to pigeons, chicks, chickens, but can be to sparrows. Virus may be latent in certain birds (finches) which might be classified as virus carriers.
AD1023769	Perspective: Some Causal and Priority Language about Food Energy Supply as the Sufficient Cause of the Obesity Pandemic is Premature or Incorrect	USAF School of Aerospace Medicine Wright-Patterson AFB United States	Voss,Jameson D.,Ruiz,Stefani A.,Clark,Leslie L.	8/9/2016	21	AFRL-SA-WP-SR-2016-0015	AFRL-SA-WP-SR-2016-0015	U	A - 01	Approved for public release; distribution is unlimited.	Technical Report,01 Apr 2014,31 Jul 2016	Several obesity experts have claimed the growth in food supply after 1965 was the primary cause of the global obesity pandemic based on ecologic data. Using public access global data we explored per capita food supply and two metabolic diseases (i.e., obesity and raised fasting glucose). We also compared overweight military service members who were semi-randomly assigned to countries with variable food supply and observed obesity outcomes for 7 years. Among countries with 2008 food supply above the United States in 1965 (2,926 kcal per capita per day), higher national supply was paradoxically associated with lower prevalence of raised fasting glucose (e.g., $r = -0.42$ , $p 0.001$ ).

ADA435955	A Retrospective Comparison of Military Health Surveillance Systems: An Example of Respiratory Illness at Marine Corps Recruit Depot (MCRD) San Diego	NAVAL HEALTH RESEARCH CENTER SAN DIEGO CA	Woodruff, Susan I., Kleiner, Hilary, Murphy, Brian P., Hawksworth, Anthony W., Bownman, Wendi, Bohnker, Bruce K.	5/4/2005	18	NHRC-05-11	BUMED	U	A - 01	Approved for public release; distribution is unlimited., Availability: This document is not available from DTIC in microfiche.	Rept. July 2002-Oct 2003	Primary goals of health surveillance in the military include monitoring the health status of military personnel, and detecting outbreaks of naturally occurring and bioterrorism-related epidemics. Two near real-time automated surveillance systems currently in use by the Department of Defense are the Medical Data Surveillance System (MDSS) and the Electronic Surveillance System for the Early Notification of Community-Based Epidemics (ESSENCE). Both prototype systems are passive surveillance systems, using already collected diagnostic data reported as primary ICD-9 codes on automated medical encounter records. Although MDSS and ESSENCE use the same data source (i.e., ICD-9 codes entered into the Ambulatory Data System), their assignment of ICD-9 codes into disease/syndrome categories differs, and each system uses a different outbreak detection algorithm. The purpose of this retrospective research was to compare the two systems surveillance trends and potential outbreak detection of respiratory illness at the Marine Corps Recruit Depot (MCRD) San Diego, over the 64 weeks of July 29, 2002, to October 19, 2003. For additional comparison, data from traditional active surveillance of febrile respiratory illness (FRI) conducted on-site at MCRD are also included. Results of the present study describe counts of respiratory illness captured by MDSS and ESSENCE and active FRI surveillance, as well as each system's outbreak detection performance.
ADA513042	Would an Influenza Pandemic Qualify as a Major Disaster Under the Stafford Act?	LIBRARY OF CONGRESS WASHINGTON DC CONGRESSIONAL RESEARCH SERVICE	Liu, Edward C.	12/15/2009	14	CRS-RL34724	CRS/DC	U	A - 01	Approved for public release; distribution is unlimited.	Congressional rept.	This report provides a legal analysis of the eligibility of an influenza pandemic (flu pandemic) to be declared by the President as a major disaster under the Robert T. Stafford Disaster Relief and Emergency Assistance Act. Given the current influenza A(H1N1) pandemic, awareness has been raised regarding the potential effects of a severe flu pandemic occurring in the United States. In such an event, the Stafford Act could provide authority for federal assistance. Although it is widely agreed that emergency assistance under the Stafford Act could be provided by the President in the event of a flu pandemic, questions remain as to whether broader major disaster assistance would be available. An analysis of the text and history of the Stafford Act suggests that this question was not addressed by Congress when it drafted the current definition of a major disaster, and that neither inclusion nor exclusion of flu pandemics from major disaster assistance is explicitly required by the current statutory language.
ADA070024	Clustering: Reminiscences of Some Episodes in My Research Activity,	CALIFORNIA UNIV BERKELEY STATISTICAL LAB	Neyman, Jerzy	1/1/1979	23	CU-SL-79-03-ONR	Not available	U	A - 01	Approved for public release; distribution is unlimited.	Not available	The ideas of a stochastic process of clustering came to the author's attention from Dr. Geoffrey Beall, an entomologist interested in the distribution of larvae over an experimental field. Larvae are born from eggs deposited by moths, not singly, but in egg-masses. After hatching, larvae begin to crawl in search of food. Later, a general census of larvae is performed. The r. v. of interest $X = \text{no. of larvae counted in a unit area plot in the field}$ . Conceptual elements: cluster centers (= egg-masses), cluster size (= no. of larvae from a single egg-mass), dispersal of cluster members. Over the four decades since the publication of the theory relating to larvae, essentially the same mechanism of clustering was found to underlay many diverse natural phenomena: clustering of galaxies, population dynamics, epidemics and effects of irradiation of living cells. (Author)
ADP013437	South African Military Health Service Involvement During Outbreak of Cholera in Kwazulu-Natal	PROTECHNIK LABORATORIES (PTY) LTD PRETORIA (SOUTH AFRICA)	Erasmus, Cornelis	9/1/2001	8	Not available	X5	U	A - 01	Approved for public release; distribution is unlimited.	Not available	Cholera is an acute diarrheal disease endemic to Africa, which is caused by the bacterium <i>Vibrio cholerae</i> . It may cause a formidable epidemic, and even a single case of cholera needs to be notified within 48 hours to the World Health Organization.
ADA577999	Converging Towards the Optimal Path to Extinction	COLLEGE OF WILLIAM AND MARY WILLIAMSBURG VA DEPT OF APPLIED SCIENCE	Forgoston, Eric, Bianco, Simone, Shaw, Leah B., Schwartz, Ira B.	1/1/2011	13	ARO-54682-MA-6	54682-MA-6, ARO	U	A - 01	Approved for public release; distribution is unlimited.	Journal article	Extinction appears ubiquitously in many fields, including chemical reactions, population biology, evolution and epidemiology. Even though extinction as a random process is a rare event, its occurrence is observed in large finite populations. Extinction occurs when fluctuations owing to random transitions act as an effective force that drives one or more components or species to vanish. Although there are many random paths to an extinct state, there is an optimal path that maximizes the probability to extinction. In this paper, we show that the optimal path is associated with the dynamical systems idea of having maximum sensitive dependence to initial conditions. Using the equivalence between the sensitive dependence and the path to extinction, we show that the dynamical systems picture of extinction evolves naturally towards the optimal path in several stochastic models of epidemics.

ADA518313	Stability Operations and Explosive Ordnance Including Humanitarian Mine Action (HMA)	ARMY WAR COLL CARLISLE BARRACKS PA	Quick, Marue R.	2/18/2010	36	Not available	USAWC	U	A - 01	Approved for public release; distribution is unlimited.	Strategy research project	A review of Explosive Ordnance Disposal and Humanitarian Mine Action (HMA) within Department of Defense and stability operations, and discusses proliferation of explosives and explosive material including mines, explosive remnants of war, and explosive ordnance promulgation as the pandemic root of human security threats, and subsequent worldwide instability. Explosive remnants of war directly contribute to worldwide instability. Control of explosives is an inherent national interest and essential to security and requires inclusion within strategy and service, and force utilization guidance and doctrine for explosive ordnance operations including humanitarian mine action (HMA). Explosive material kills and maims Soldiers and people around the world, and costs hundreds of millions of dollars annually. A review of international initiatives and agreements, as well as, U.S. structure, policies, and efforts on behalf of Soldiers during stability operations and indigenous people worldwide is included with highlights of the importance of control of explosive material during combat and stability operations, nation building and reconstruction activities, forces ideally suited to execute operations in support of Geographic Combatant Commanders, combat and Humanitarian Mine Action (HMA) training of indigenous forces.
ADA500196	Swine Influenza A Outbreak, Fort Dix, New Jersey, 1976	WALTER REED ARMY INST OF RESEARCH SILVER SPRING MD	Gaydos, Joel C., Top, Jr, Franklin H., Hodder, Richard A., Russell, Philip K.	1/1/2006	7	Not available	WRAIR/MD	U	A - 01	Approved for public release; distribution is unlimited.	Journal article	In early 1976, the novel A/New Jersey/76 (Hsw1N1) influenza virus caused severe respiratory illness in 13 soldiers with 1 death at Fort Dix, New Jersey. Since A/New Jersey was similar to the 1918?1919 pandemic virus, rapid outbreak assessment and enhanced surveillance were initiated. A/New Jersey virus was detected only from January 19 to February 9 and did not spread beyond Fort Dix. A/Victoria/75 (H3N2) spread simultaneously, also caused illness, and persisted until March. Up to 230 soldiers were infected with the A/New Jersey virus. Rapid recognition of A/New Jersey, swift outbreak assessment, and enhanced surveillance resulted from excellent collaboration between Fort Dix, New Jersey Department of Health, Walter Reed Army Institute of Research, and Center for Disease Control personnel. Despite efforts to define the events at Fort Dix, many questions remain unanswered, including the following: Where did A/New Jersey come from? Why did transmission stop?
ADA494534	Joint Operations for the 21st Century	DEPARTMENT OF DEFENCE CANBERRA (AUSTRALIA)	Not available	5/1/2007	28	Not available	DODA	U	A - 01	Approved for public release; distribution is unlimited.	Not available	Our purpose is very clear: we are responsible to the Government of Australia for the protection of Australia, our people and our national interests, whenever and wherever those interests lie. In undertaking this mission the Australian Defence Force (ADF) enabled by the Defence Organisation might act independently, or it might contribute to a broader effort of other Australian or international civilian agencies or military forces. The 21st century promises a future whose shape is uncertain, and whose security and prosperity are challenged by dangers both seen and unseen. We must understand those dangers, and develop concepts and strategies to meet them, if we are to build on our successes today and position ourselves for ongoing success tomorrow. The first few years of the 21st century have demonstrated that dangers can take many forms. Some dangers are traditional, and relate to state-on-state tensions over territory, resources or the balance and distribution of power. Some are old challenges in new guises, such as the emergence of new terrorist groups and pandemic diseases. Some challenges are entirely new, such as climate change and the impacts of global demography. And some are natural dangers, such as cyclones, earthquakes and tsunamis, to name just a few. Whatever form the dangers take, the uncertainty of the future operating environment requires us to constantly challenge the orthodoxy, to innovate to solve old and new challenges, and to espouse and debate a new vision for the role of the ADF in the 21st century.

ADA614086	Multidrug-Resistant Gram-Negative Bacterial and Carbapenem-Resistant Enterobacteriaceae Infections in the Department of the Navy: Annual Report 2013	NAVY AND MARINE CORPS PUBLIC HEALTH CENTER PORTSMOUTH VA EPIDATA CENTER DEPT	Meddaugh, Paul,Chukwuma, Uzo	3/19/2015	77	NMCPHC-EDC-TR-139-2015	NMCPHC-EDC	U	A - 01	Approved for public release; distribution is unlimited.	Annual rept. 1 Jan 2005-31 Dec 2013	Gram-negative bacterial infections are a growing global public health and clinical concern. Additionally, epidemics of multidrug-resistant (MDR) gram-negative bacteria have occurred worldwide in the last couple decades, including regions where United States (US) military forces are regularly deployed. In 2013, the incidence of MDR Escherichia coli, Enterobacter, Klebsiella, and Pseudomonas aeruginosa in Department of Defense (DOD) beneficiaries seeking care in the Military Health System (MHS) increased from 2012. MDR E. coli was the organism most frequently identified with an incidence 37-40 times higher than the next most frequent organism. A pronounced gender disparity was noted for all organisms except MDR P. aeruginosa. Overall, DOD female beneficiaries were impacted much more than their male counterparts. Furthermore, MDR E. coli, MDR Enterobacter, and MDR Klebsiella cases commonly manifested as urinary tract infections (UTIs), which is consistent with historic observations. In 2013, cases of MDR P. aeruginosa more commonly manifested as respiratory infections, which is also consistent with historic observations. MDR P. aeruginosa did not display any consistent high susceptibilities at the population level.
AD0844566	Possible Incidence of Arbor Virus in the Etiology of Viral Affections in Mediterranean France	ARMY BIOLOGICAL LABS FREDERICK MD	Panthier, R.,Hannoun, Cl.	11/17/1965	16	TRANS-1553	SMUFD	U	A - 01	Approved for public release; distribution is unlimited., Availability: Document partially illegible.	Not available	A study is being carried out in France regarding the virus types transmitted by arthropods. A brief review is given of arbor virus-caused diseases present in the Mediterranean area and which should therefore be sought in the Mediterranean part of France. The study is limited to those arbor viruses which may be encountered in our regions either permanently present or present due to a regular annual reinfection process.
ADA481903	Characterization of Reaerosolization in an Effort to Improve Sampling of Airborne Viruses	FLORIDA UNIV GAINESVILLE DEPT OF ENVIRONMENTAL ENGINEERING SCIENCES	Riemenschneider, Lindsey	4/1/2008	107	AFRL-RX-TY-TR-2008-4565	TR-2008-4565,AFRL-RX-TY	U	A - 01	Approved for public release; distribution is unlimited.	Interim technical rept. 1 Mar 2007-30 Apr 2008	Airborne virus outbreaks, including the influenza pandemic of 1918, the recent SARS pandemic and the anticipated H5N1 outbreak, plus the perceived threat of bioterrorism warrant concern about the prevalence and potential effects of airborne viruses. However, current bioaerosol sampling methods do not effectively sample airborne viruses (typically 20 - 300 nm). To address this problem, a novel Bioaerosol Amplification Unit (BAU) has been designed and constructed to increase the size of the virus particles by condensational growth, thereby enhancing sample recovery. In this study reaerosolization of viral particles from the impinger was investigated to assess its impact on the capability of the BAU. Reaerosolization was characterized as a function of flow rate and concentration of the collection liquid in the impinger. An impinger containing a known concentration of particles (MS2 bacteriophage or polystyrene latex) was operated at various flow rates with sterile air, and a scanning mobility particle sizer was used to determine the reaerosolization rates. Results indicate that reaerosolization increased with increasing flow rate due to the additional energy added to the system. However, reaerosolization increased with concentration up to ~10e4 PFU/mL and then decreased at progressively higher concentrations. This phenomenon likely resulted from aggregation of viral particles or increased surface tension or viscosity at higher concentration. Adjusting surface tension by adding soap and increasing viscosity by adding a layer of heavy white mineral oil decreased reaerosolization. Thus, reaerosolization from an impinger could compromise the improved collection capability of the BAU
AD0762617	A Brief Review of the Epidemiology of Influenza and Recent Advances in the Study of the Virus	NAVAL MEDICAL RESEARCH UNIT NO 2 MANILA (PHILIPPINES) MANILA Philippines	Green,Irving J.	1/1/1973	8	Lect/Review-033	Not available	U	A - 01	Approved for public release; distribution is unlimited.	Technical Report	Epidemics of influenza have occurred, so far as is definitely known, for the past 400 years, and possibly hundreds of years before that. Three distinct types of influenza virus have been isolated and described to date. The first was labeled type A. A second type, designated as influenza virus B, was isolated independently by Francis and by Magill in 1940. A third type of influenza virus, type C, was found in 1947. More recently both influenza types A and B have been divided into subtypes such as A1 and A2, B1, B2 and B3. Influenza type C virus exists as a single and stable antigenic type. It is believed that influenza vaccination is effective for only up to three months under the best of circumstances because influenza is essentially an external disease. Since the area affected is predominantly the upper respiratory tract, a much smaller quantity of antibody reaches these cells than is found in the blood. Some of the more recent knowledge relating to the physical, biochemical and immunological characteristics of the influenza viruses, and how these characteristics are used in the most recent classification of the myxoviruses are discussed.



AD1025845	Multiple Introductions of Zika Virus into the United States Revealed Through Genomic Epidemiology	USAMRIID Frederick United States	Grubaugh, Nathan, Ladner, Jason, Kraemer, Moritz U, Dudas, Gytis, Tan, Amanda L, Gangavarapu, Karthik, Wiley, Michael R, White, Stephen, Theze, Julien, Magnani, Diogo M, Prieto, Karla, Reyes, Daniel, Bingham, Andrea, Paul, Lauren M, Robles-Sikisaka, Refugio, Oliveira, Glenn, Pronty, Darryl, Metsky, Hayden C, Baniecki, Mary L, Barnes, Kayla G, Chak, Bridget, Freije, Catherine A, Gladden-Young, Adrianne, Gnirke, Andreas, Luo, Cynthia, MacInnis, Bronwyn, Matranga, Christian B, Park, Danny J, Qu, James, Schaffner, Stephen F, Tomkins-Tinch, Christopher, Wes	2/2/2017	35	USAMRIID-TR-17-042, TR-17-042	TR-17-042	U	A - 01	Approved for public release; distribution is unlimited.	OSTP Journal Article	Zika virus (ZIKV) is currently causing an unprecedented pandemic linked to severe congenital syndromes <sup>1,2</sup> . In July 2016, mosquito-borne ZIKV transmission was first reported in the continental United States and since then, hundreds of locally acquired infections have been described <sup>3</sup> . To gain insights into the timing, source, and likely route(s) of introduction into the United States, we tracked the virus from its first detection in Miami, Florida by direct sequencing of ZIKV genomes from infected patients and Aedes aegypti mosquitoes. We detected at least four distinct ZIKV introductions and estimate that 11-52 introductions contributed to the outbreak in Florida. Furthermore, our data suggests that ZIKV transmission likely started in the spring of 2016 - several months before initial detection. By analyzing epidemiological, surveillance, and genetic data, we discovered that several spatially distinct ZIKV transmission zones were likely portions of the same outbreak, rather than isolated events. Our analyses show that most introductions are linked to the Caribbean, which is supported by the high incidence rates and traffic, especially via cruises, from the region into Miami. By comparing mosquito abundance and travel capacity across the United States, we find that southern Florida is especially vulnerable to ZIKV introductions and at risk of repeat occurrences. By tracking the virus from its initial introduction into the United States, we provide a deeper understanding of how ZIKV initiates and sustains transmission in new regions.
ADA546220	Rewiring for Adaptation	NAVAL RESEARCH LAB WASHINGTON DC PLASMA PHYSICS DIV	Schwartz, Ira B., Shaw, Leah B.	2/22/2010	10	ARO-54682-MA.4	54682-MA.4, ARO	U	A - 01	Approved for public release; distribution is unlimited.	Journal article	The idea behind adaptive behavioral epidemiology is that groups and individuals respond to the knowledge of a disease threat by changing their habits to avoid interactions with those who are contagious. Network-based models take this adaptive behavior into account by allowing the network to rewire" its connections."
ADA543089	On Integrated Social and QoS Trust-Based Routing in Delay Tolerant Networks	VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY BLACKSBURG DEPT OF COMPUTER SCIENCE	Chen, Ing-Ray, Bao, Fenyue, Chang, Moonjeong, Cho, Jin-Hee	5/15/2011	24	Not available	ONR	U	A - 01	Approved for public release; distribution is unlimited.	Quarterly rept. 15 Feb-14 May 2011	We propose and analyze a class of integrated social and quality of service (QoS) trust-based routing protocols in mobile ad-hoc delay tolerant networks. The underlying idea is to incorporate trust evaluation in the routing protocol, considering not only QoS trust properties but also social trust properties to evaluate other nodes encountered. We prove that our protocol is resilient against bad-mouthing, good-mouthing and whitewashing attacks performed by malicious nodes. By utilizing a stochastic Petri net model describing a delay tolerant network consisting of heterogeneous mobile nodes with vastly different social and networking behaviors, we analyze the performance characteristics of trust-based routing protocols in terms of message delivery ratio, message delay, and message overhead against connectivity-based, epidemic and PROPHET routing protocols. The results indicate that our trust-based routing protocols outperform PROPHET and can approach the ideal performance obtainable by epidemic routing in delivery ratio and message delay, without incurring high message overhead. Further, integrated social and QoS trust-based protocols can effectively trade off message delay for a significant gain in message delivery ratio and message overhead over traditional connectivity-based routing protocols.

ADA461395	Jamaica: Political and Economic Conditions and U.S. Relations	LIBRARY OF CONGRESS WASHINGTON DC CONGRESSIONAL RESEARCH SERVICE	Sullivan, Mark P.	2/3/2006	7	CRS-RS22372	CRS/DC	U	A - 01	Approved for public release; distribution is unlimited.	Congressional rept.	Although Jamaica has a stable parliamentary democracy and is a middle-income developing country, the government of Prime Minister P.J. Patterson faces several significant challenges. These include a violent crime wave fueled by gangs and drug trafficking; high external debt, estimated at 135% of gross domestic product, that could constrain the government's social expenditures; and an adult HIV/AIDS infection rate of over 1%. U.S. relations with Jamaica are close and characterized by significant economic linkages and cooperation on such bilateral issues as anti-drug trafficking measures, hurricane reconstruction support, and efforts to combat the AIDS epidemic. Overall U.S. foreign aid to Jamaica amounted to about \$41 million in FY2005 (with \$18 million for hurricane assistance) and an estimated \$19 million in overall aid for FY2006. This report will not be updated. For further information, see CRS Report RL32160, Caribbean Region: Issues in U.S. Relations, and CRS Report RL32001, AIDS in the Caribbean and Central America, both by Mark P. Sullivan.
AD0404015	1962 ZONOTIC DISEASE INCIDENCE FOR TURKEY	UNITED STATES AIR FORCES IN EUROPE (TURKEY)	Kiely, Jack E., Bridgewater, Donald R.	1/1/1963	13	USAFE-T-63-3	USAFE	U	A - 01	Approved for public release; distribution is unlimited. Document partially illegible.	Not available	An over-all picture is given of the incidence of six of the zoonotic diseases as reported in Turkey. All information was extracted from 'The Bulletin of the Reportable Contagious Diseases,' published in Ankara. This information was collected covering the period 1 January 1962 through 31 December 1962, with particular reference to epidemic areas and consequential spread to the surrounding provinces.
ADA493591	Getting Beyond Getting Ready for Pandemic Influenza	HOUSE OF REPRESENTATIVES MAJORITY STAFF OF THE COMMITTEE ON HOMELAND SECURITY WASHINGTON DC	Not available	1/1/2009	44	Not available	US/CONGRESS	U	A - 01	Approved for public release; distribution is unlimited.	Not available	Pandemic influenza is not a new phenomenon. Historically, there have been other influenza pandemics, enough so that we now believe the planet is well overdue. We watch avian influenza move across the world, worry about how more than 60% of those people that contract the disease die from it, and realize that further mutations in currently circulating strains could cause them to easily infect human beings. Work is clearly underway to prepare for such a biological event. However, despite the fact that we are overdue for an influenza pandemic and that we fear the consequences of such a disease spreading unchecked - we are not prepared as a Nation to fully withstand the impact of such a devastating widespread biological event. Recognizing the devastating impact an influenza pandemic would have on our Homeland and National Security, and the need to be ready to handle the pandemic when it occurs, Chairman Thompson and Subcommittee Chairman Langevin directed the Majority Staff to: * Conduct oversight regarding the pandemic influenza preparedness activities of DHS and other members of the Executive Branch; * Gather information through hearings, briefings, and meetings to determine the status of National efforts to prepare for pandemic influenza; * Identify weaknesses in our National preparedness for pandemic influenza; and * Determine what specific actions could strengthen such efforts and help the Nation achieve readiness for pandemic influenza.
ADA444905	Mechanical Ventilation in Hypobaric Atmosphere - Aeromedical Transport of Critically Ill Patients	CIMA MADRID (SPAIN)	Hernandez Abadia de Barbara, A., Gil Heras, A., Lopez Lopez, J. A., Rios Tejada, F.	9/1/2004	11	Not available	X5	U	A - 01	Approved for public release; distribution is unlimited. NATO.	Conference paper	Mechanical ventilation is used in most of the aeroevacuations of critically ill patients. Patients and mechanical ventilators suffer from variations in the environmental pressure, partial pressure of oxygen, humidity, luminosity, accelerations and vibrations. We describe briefly the history of Mechanical Ventilation and aeromedical transport: Vesalius was the first author to describe one method of ventilation with positive pressure; 400 years later the method was applied for the first time to a patient. Robert Hook in 1667 applied continuous flow ventilation to a dog. Woillez in 1876 made the first mechanical ventilator with negative pressure over the thorax, but the first iron lung was built in 1928 by Drinker and Shaw and later modified by Kroghs and Emerson. In 1955 the poliomyelitis epidemic was the main factor affecting the great success of the mechanical ventilation, with the device of the Emerson Company (Boston, Massachusetts) applying Mechanical Ventilation with positive pressure for the respiratory treatment of the patients affected by poliomyelitis. These innovations could represent the beginning of Mechanical Ventilation and possibly Critical Care treatment also.

ADA463575	The Role of the Expeditionary Strike Group in the New Maritime Strategy	NAVAL WAR COLL NEWPORT RI JOINT MILITARY OPERATIONS DEPT	Hershman, Brett	10/10/2006	23	Not available	NWC	U	A - 01	Approved for public release; distribution is unlimited.	Final rept.	The Navy-Marine Corps team continues to face new challenges in the 21st century. While traditional threats remain, the rise of transnational terrorism, trafficking in personnel, the proliferation of weapons of mass destruction, pandemics, natural disasters and piracy represent some of the worldwide issues which impact global safety and economic stability. The international community relies on the sea for commerce and trade, and the U.S. Navy's vision of the 1000 Ship Navy is a demonstration of how global cooperation by maritime nations can help secure the world's oceans for all. Striking a balance in the ability to cooperate across vast distances with global partners while still maintaining the ability to mass forces and project power in response to traditional threats to our National Security interests is critical in the development of the Navy's new Maritime Strategy. This paper examines the role the Expeditionary Strike Group has played in maritime operations in the post-9/11 world and demonstrates how its inherent strengths naturally lend themselves to the needs of the Navy's new vision. It will discuss the General Officer / Flag Officer staff leadership model and the potential such expertise brings to the joint and coalition operating environments of the future. Additionally, it will highlight areas for improvement as the concept is solidified based on lessons learned over the past four years of operational deployments. This analysis intends to show that the Expeditionary Strike Group can play a critical role in the long-term future and merits significant consideration in the development of the new Maritime Strategy.
ADA080888	The Exact and Asymptotic Formulas for the State Probabilities in Simple Epidemics with m Kinds of Susceptibles.	FLORIDA STATE UNIV TALLAHASSEE DEPT OF STATISTICS	Lacayo,H.,Langberg,Naftali A.	12/1/1979	17	FSU-STATISTICS-M530,TR-D43-ARO,ARO-16713.6-M	16713.6-M	U	A - 01	Approved for public release; distribution is unlimited.	Technical rept.,	A population of susceptible individuals partitioned into m groups and exposed to a contagious disease is considered. It is assumed that an individual's susceptibility at time t depends on the number of susceptible individuals at time t in his group, and on the total number of infective individuals at time t. The progress of this simple epidemic is modeled by an m-dimensional stochastic process. The components of this stochastic process represent the number of infective individuals in the respective groups at time t. Exact and approximate formulas for the joint and marginal state probabilities are obtained. It is shown that the approximate formulas are simple functions of time while, the derivations of the exact formulas involved tedious computations. (Author)
ADA529161	Universal Detection and Identification of Avian Influenza Virus by Use of Resequencing Microarrays	NAVAL RESEARCH LAB WASHINGTON DC CENTER FOR BIOMOLECULAR SCIENCE AND ENGINEERING	Lin, Baochuan,Malanoski, Anthony P.,Wang, Zheng,Blaney, Kate M.,Long, Nina C.,Meador, Carolyn E.,Metzgar, David,Myers, Christopher A.,Yingst, Samuel L.,Monteville, Marshall R.	4/1/2009	7	Not available	NRL/CBSE	U	A - 01	Approved for public release; distribution is unlimited.	Journal article	Zoonotic microbes have historically been, and continue to emerge as, threats to human health. The recent outbreaks of highly pathogenic avian influenza virus in bird populations and the appearance of some human infections have increased the concern of a possible new influenza pandemic, which highlights the need for broad-spectrum detection methods for rapidly identifying the spread or outbreak of all variants of avian influenza virus. In this study, we demonstrate that high-density resequencing pathogen microarrays (RPM) can be such a tool. The results from 37 influenza virus isolates show that the RPM platform is an effective means for detecting and subtyping influenza virus, while simultaneously providing sequence information for strain resolution, pathogenicity, and drug resistance without additional analysis. This study establishes that the RPM platform is a broad-spectrum pathogen detection and surveillance tool for monitoring the circulation of prevalent influenza viruses in the poultry industry and in wild birds or incidental exposures and infections in humans.
ADA484174	Epidemic Outbreak Surveillance (EOS)	HENRY M JACKSON FOUNDATION FOR THE ADVANCEMENT OF MILITARY MEDICINE ROCKVILLE MD	Scofield, Thomas C.,Walter, Elizabeth,Livingstone, Samuel J.	7/1/2006	17	Not available	USAMRMC	U	A - 01	Approved for public release; distribution is unlimited.	Final rept. 1 Jul 2004-30 Jun 2006	This funding is established to support Operations and Management. The goal of the project is to develop and test new technologies for the diagnosis and surveillance of respiratory tract pathogens. This funding supported purchase of supplies and shipping services necessary to carry out protocols to standardize methods of specimen collection and to optimize processing of these specimens. After these processes were established initial supplies were purchased in order to begin enrollment of healthy ill and recovered Basic Military Trainees (BMTs) in order to compare methods of detection of respirator and host response. This funding enabled successful initiation of the project.
ADA201888	Intestinal Capillariasis	NAVAL MEDICAL RESEARCH UNIT NO 2 MANILA (PHILIPPINES)	Cross, John H.,Basaca-Sevilla, Virginia	12/1/1987	14	NAMRU-2-TR-1045	NMRDC	U	A - 01	Approved for public release; distribution is unlimited.	Technical rept.	Capillaria philippinensis, the tiny nematode causing intestinal capillariasis in humans, is a unique parasite. It is one of the newest parasites that has been shown to infect humans; it can occur in epidemic proportions and chronic untreated infections can lead to death. Furthermore, its life cycle is unusual in that the female worms are capable of producing living larvae as well as eggs, leading to autoinfection and hyperinfections. Reprints.

ADA442084	The Great Pretense - The Clinton Administration and Land Mines	NATIONAL WAR COLL WASHINGTON DC	Folkerts, Jerald L.	1/1/1997	32	Not available	NDU/NWC	U	A - 01	Approved for public release; distribution is unlimited.	Not available	Today, and for the foreseeable future, the issue confronting the world community is the widespread illegitimate use of an otherwise legitimate, and as some believe, a necessary weapon that has caused unnecessary suffering of epidemic proportions to non-combatants. There are actually two separate problems. The first deals with the existing problem of land mines, the second deals with the global trade in land mines -- the production, use, transfer, and stockpiling of land mines. Other than to describe the impact of land mines already in the ground, the problem of existing land mines will not be addressed in this paper. Locating these mines poses a substantial technological challenge far different from current military breaching techniques through known minefields. Instead, they require technologies to locate and destroy small numbers of mines left after a long-forgotten battle, set out on a perimeter by small patrols making camp, deliberating placed to drive civilians from an area, or even those washed from the steep hills of heavenly guarded borders.
AD1093912	New Genetic Tools for Comparative Analysis of Emerging Viruses and Virus-Host Molecular Interactions in Reservoir Hosts versus Spillover Hosts	Trustees of Boston College Chestnut Hill United States	Johnson,Welkin	4/1/2019	16	Not available	Not available	U	A - 01	Approved for public release; distribution is unlimited.	Technical Report,01 Apr 2018,30 Mar 2019	Emerging viruses pose significant problems for military personnel living in close quarters, and/or deployed overseas. Significant gaps remain in our understanding of the underlying molecular mechanisms of viral emergence. To fill this gap in knowledge we seek to develop a robust method for identifying the binding partners of small viral proteins implicated in modifying host cell defenses. We are employing a cutting edge genetic system for incorporating synthetic amino-acids at defined positions in proteins within cellular systems; these non-canonical amino-acids (ncAAs) are modified with a side chain that can be induced by UV light to covalently cross-link cellular binding partners. This effectively tags the target proteins allowing subsequent identification by massspec. We have generated the necessary mutants of two viral proteins, Vpr of HIV-1and ORF4a of MERS-Coronavirus, and have conducted a pilot mass-spec experiment. All tools and reagents are now in place, and in the next/final period of this 18-monthDiscovery Award we plan to move forward with mass-spec identification and experimental confirmation of candidate binding partners.
AD0609409	ON A PARTIAL DIFFERENTIAL EQUATION OF EPIDEMIC THEORY. I,	MICHIGAN STATE UNIV EAST LANSING	Gani,J.	12/18/1964	13	RM-122-JG-3	Not available	U	A - 01	Approved for public release; distribution is unlimited.	Not available	Not available
AD0488986	SOME UREDOSPORE CHARACTERISTICS OF IMPORTANCE IN EXPERIMENTAL EPIDEMIOLOGY,	ARMY BIOLOGICAL DEFENSE RESEARCH CENTER FREDERICK MD	Bromfield, Kenneth R.	7/1/1966	20	Technical Manuscript-300	Not available	U	A - 01	Approved for public release; distribution is unlimited.	Not available	The experimental initiation of stem rust epidemics with uredospores of Puccinia graminis var. tritici is a valuable technique for the epidemiologist. Successful utilization of the technique requires that sufficient quantities of uredospores of the desired race be available for timely application and that the infectivity of these spores be properly assessed prior to their employment. Moisture content of spores and their storage temperature have a major influence on viability retention. Reducing spore moisture to about 10% and storing at 4 C will generally retain satisfactory germinability in most cultures for 1 to 2 years. Uredospores vacuum-dried and stored in the absence of oxygen and water vapor may retain viability for at least 5 years. Spores at ultra-low temperatures in liquid nitrogen (-196 C) may remain viable indefinitely; however, they require heat shock at 40 C to restore maximum germinability. Rate of cooling and subsequent thawing are not critical for survival, nor is moisture content below 25%. Laboratory germination tests have most frequently been used to assess the infectivity of spores. By themselves these are inadequate, however, because germination is but the first in a series of sequential events required for infection. These events are modified by factors inherent in the spore, by those peculiar to the host plant, and by the environment.
AD0636477	SALMONELLA ANATUM: REPORT OF AN ALASKAN OUTBREAK	ARCTIC AEROMEDICAL LAB FORT WAINWRIGHT AK	Butler, Clifford E.,Miller, Wayne L.,Marrow, Charles T.,Evans, Raymond D.	5/1/1966	16	AAL-TR-66-5	AAL	U	A - 01	Approved for public release; distribution is unlimited.	Rept. for 24 Sep 1964-1 Mar 1965.	In the central part of Alaska, gastroenteritis is a perennial problem, with the incidence rate reaching almost epidemic proportions in the early summer and early autumn. The causative agents appear to be both viral and bacterial. In 1964 during the autumn epidemic, Salmonella anatum invaded the University of Alaska campus along with a probable viral infection. Approximately 300 students developed symptoms of gastroenteritis during this outbreak but only a very small percentage became acutely ill. Thirty-five students and eight food handlers were found to be infected with Salmonella anatum. A therapeutic history of the outbreak showed (ampicillin) Polycillin to be very effective in eradicating the organisms from the patients.

ADA479121	Restoring Eelgrass ( <i>Zostera marina</i> ) from Seed: A Comparison of Planting Methods for Large-Scale Projects	ENGINEER RESEARCH AND DEVELOPMENT CENTER VICKSBURG MS ENVIRONMENTAL LAB	Orth, Robert, Marion, Scott, Granger, Steven, Traber, Michael	3/1/2008	12	ERDC/TN-SAV-08-1	ERDC/EL	U	A - 01	Approved for public release; distribution is unlimited.	Not available	Eelgrass ( <i>Zostera marina</i> ) seeds are being used in a variety of both small- and large-scale restoration activities and have been successfully used to initiate recovery of eelgrass in the Virginia seaside coastal lagoons, which lost eelgrass in the 1930s wasting disease pandemic (Orth et al. 2006a). However, a major bottleneck with the use of seeds has been the relatively low rate of seedling establishment, generally 10 percent or less of seeds placed in the field (Orth et al. 2003). A recently developed underwater seed planter (Traber et al. 2003) represents an alternative method that could improve seedling success compared to techniques used in previous Chesapeake Bay studies and elsewhere. The objective of this study was to compare the effectiveness of different techniques of seeding for use in large-scale projects: injecting seeds into submerged sediments with a mechanical seed planter and hand-broadcasting seeds on the sediment surface using divers.
ADA239227	Molecular Studies of Alphavirus Immunogenicity.	CALIFORNIA INST OF TECH PASADENA	Strauss, James H.	5/1/1991	22	Not available	USAMRDC	U	A - 01	Approved for public release; distribution is unlimited.	Annual rept. 30 Mar 90-29 Mar 91,	Ockelbo virus, first isolated in 1982 in Sweden, causes arthritis, fever and rash in man. We have obtained the complete nucleotide sequence of Ockelbo virus and compared this sequence to that of other strains of Sindbis virus. Partial sequence analysis of five other strains of Sindbis virus was also performed. Three principal conclusions arise from our data. (1) Ockelbo is virtually identical to the causative agents of Karelian Fever of Russian and of Pogosta disease of Finland. (2) These agents are closely related to South African strains of Sindbis virus, and Ockelbo was probably introduced into northern Sweden from Africa in the 1960's, followed by spread to Russian and Finland. (3) There exist an European-African group of closely related Sindbis viruses and an Asian-Australian group of Sindbis viruses. The alphaviruses are a widespread group of human pathogens that are endemic and epidemic in many parts of the world. They are mosquito-borne and are particularly prevalent in tropical and subtropical areas of the world, but alphaviruses pathogenic for man are also present in temperate and even Arctic areas. Many alphaviruses are capable of causing fever, rash and arthralgia in man that in some cases can be disabling for extended periods of time. Many of the New World alphaviruses can cause encephalitis in man. We wish to determine the relationships of alphaviruses and strains of alphaviruses to one another and to search for emerging viruses.
ADA454054	Physiologic and Endocrine Correlates of Overweight and Obesity in African Americans and Caucasians	HENRY M JACKSON FOUNDATION FOR THE ADVANCEMENT OF MILITARY MEDICINE ROCKVILLE MD	Deuster, Patricia A.	3/1/2006	9	Not available	USAMRMC	U	A - 01	Approved for public release; distribution is unlimited.	Annual rept. 1 Mar 2005-28 Feb 2006	Obesity has reached epidemic levels and yet the incidence continues to rise. The current study is seeking to examine the hypothesis that obesity may reflect dysfunctioning of the hypothalamic-pituitary-adrenal (H PA) axis in response to stressors. African American persons are at greatest risk, but reasons for this difference are unknown. We will study 120 men and women of Caucasian and African American ethnicity and examine their responses to physiologic stressors: exercise and ingestion of a meal. Methods: The HPA axis will be studied in some detail by using two stressor paradigms and two steroid regimens. We expect to be able to detect subtle differences in HPA axis reactivity in obese individuals that might contribute to morbidity and perhaps even make individuals resistant to therapeutic interventions. Results: We have enrolled 96 participants, with 66 completed. Data collection and analyses are proceeding on schedule. Two abstracts were submitted and accepted for presentation in Spring 2006. Conclusions: We are on schedule for all study milestones and look forward to being able to answer the important questions regarding the potential role of the HPA axis in obesity.
ADB081493	Isolation of the Etiologic Agent of Scandinavian Epidemic (Endemic) Nephropathy from Human Patients (and from Wild Rodents) as Presumptive Strain in a Vaccine against Korean Hemorrhagic Fever).	UPPSALA UNIV (SWEDEN) DEPT OF INFECTIOUS DISEASES	Friman, G., Rockborn, G., Dinter, Z.	9/1/1982	11	Not available	Not available	U	A - 01	Approved for Public Release; Distribution Unlimited.	Annual progress rept. no. 1, 1 Oct 81-30 Jun 82,	In an effort to isolate the etiologic agent of Scandinavian epidemic (endemic) nephropathy (NE) for presumptive use in a vaccine against Korean hemorrhagic fever early drawn blood samples from patients suffering NE have been investigated. Samples were inoculated on to A-549 and VERO cell lines and into rodents. After several passages the materials were tested for the presence of antigen using an indirect immunofluorescence method. In addition, lungs of wild rodents from endemic NE areas have been tested for NE antigen. So far, results have been negative but with a combination of an even stricter selection of patients and of those methods applied the authors recommend the work should continue.

ADA583897	Influenza Risk Management: Lessons Learned from an A(H1N1) pdm09 Outbreak Investigation in an Operational Military Setting	NAVAL MEDICAL RESEARCH UNIT NO 3 FPO NEW YORK 09527	Farrell, Margaret,Sebeny, Peter,Klena, John D.,DeMattos, Cecilia,Pimentel, Guillermo,Turner, Mark,Joseph, Antony,Espiritu, Jennifer,Zumwalt, John,Dueger, Erica	7/10/2013	8	Not available	GEISRS/MD	U	A - 01	Approved for public release; distribution is unlimited.	Journal article	Background: At the onset of an influenza pandemic, when the severity of a novel strain is still undetermined and there is a threat of introduction into a new environment, e.g., via the deployment of military troops, sensitive screening criteria and conservative isolation practices are generally recommended. Objectives: In response to elevated rates of influenza-like illness among U.S. military base camps in Kuwait, U.S. Naval Medical Research Unit No. 3 partnered with local U.S. Army medical units to conduct an A(H1N1) pdm09 outbreak investigation. Patients/Methods: Initial clinical data and nasal specimens were collected via the existent passive surveillance system and active surveillance was conducted using a modified version of the World Health Organization/U.S. Centers for Disease Control and Prevention influenza-like illness case definition [fever (T > 100.5 F/38 C) in addition to cough and/or sore throat in the previous 72 hours] as the screening criteria. Samples were tested via real-time reverse-transcription PCR and sequenced for comparison to global A(H1N1) pdm09 viruses from the same time period. Results: The screening criteria used in Kuwait proved insensitive, capturing only 16% of A(H1N1) pdm09-positive individuals. While still not ideal, using cough as the sole screening criteria would have increased sensitivity to 73%. Conclusions: The results of and lessons learned from this outbreak investigation suggest that pandemic influenza risk management should be a dynamic process (as information becomes available regarding true attack rates and associated mortality, screening and isolation criteria should be re-evaluated and revised as appropriate), and that military operational environments present unique challenges to influenza surveillance.
ADA434692	Bioterrorism Preparedness for Infectious Disease	HAWAII UNIV HONOLULU	Burgess, Lawrence	1/1/2005	163	Not available	USAMRMC	U	A - 01	Approved for public release; distribution is unlimited.	Annual rept. 1 Jan 2003-31 Dec 2004	Bioterrorism preparedness for infectious disease (BTPID) as part of homeland defense initiatives is advancing rapidly, with the Center for Disease Control (CDC) taking the lead in mandating improved surveillance and management for States to follow, centered around 6 major focus areas with 17 critical capacities. Significant opportunities exist for new research and development of bioinformatics and telecommunications solutions for BTPID that would complement CDC led initiatives. The objectives of this planning grant are to: 1) identify problems and propose bioinformatics and telecommunications solutions for BTPID surveillance for both military and civilian populations emphasizing the use of secure, redundant, real-time networks, 2) identify problems and propose bioinformatics and telecommunications for BTPID outbreak management. A multidisciplinary team is conducting the study consisting of members from the Department of Defense, State of Hawaii Department of Health, Maui High Performance Computing Center (MHPCC), University of Hawaii (Telemedicine, Environmental Health, Bioinformatics, Infectious Disease), University of Southern California (Image Processing and Informatics Lab) and Stanford University-NASA Ames (National Biocomputation Center). Information has been gathered through meetings, retreats and literature reviews regarding problems and solutions for a variety of potential scenarios such as Anthrax, Dengue, Smallpox and SARS epidemics. In addition to working meetings, a summit was hosted to gather experts in the field for technology demonstrations and information gathering for subsequent analysis for BTPID solutions. The information acquired is currently archived and available through a website and has been incorporated and referenced together with new information for the analyses and recommendations portion (year 2) of this project. In separate modifications to the original cooperative agreement, a report is being prepared for DTRA.

ADA452375	PR01 Molecular Pathogenesis of Rickettsioses and Development of Anti-Rickettsial Treatment by Combinatorial Peptide-Based Libraries	TEXAS UNIV MEDICAL BRANCH AT GALVESTON	Walker, David H.	2/1/2006	29	Not available	USAMRMC	U	A - 01	Approved for public release; distribution is unlimited.	Annual rept. 1 Feb 2005-31 Jan 2006	The purpose of this study is to utilize adaptein libraries coded within pantropic retroviral vectors that confer protection against rickettsial pathogens and to study the molecular pathogenesis of rickettsioses. The following specific aims were proposed: 1) To establish heterogeneous cell populations, with each cell expressing a unique member of a complex combinatorial peptide-based (e.g., adaptein) library and challenge with R. prowazekii, R. rickettsii, and O. tsutsugamushi; 2) To determine the role of NF-kB, cytokines, ROS and NO in intracellular killing of rickettsia-infected monolayers containing adapteins and 3) To characterize signal transduction pathways modulating the cytoskeletal events responsible for the increased vascular permeability. During the fourth year of the project, rickettsial challenges performed with SV-HCEC cells were continued and expansion of the resistant colonies was not possible. We are currently conducting experiments with a murine and a human monocytic cell line that grow in suspension. Both cell lines have been infected with pantropic retroviruses and challenging experiments are underway. Experiments with SVHCEC cells have elucidated the role of rickettsiae and cytokines in modulating permeability across infected monolayers. Confocal microscopy studies also suggest that these changes might in part be due to changes in p120 distribution in adherens junctions. The role of nitric oxide and its derivative peroxinitrite in increased permeability across infected monolayers has also been elucidated.
ADA372427	The Imposition of Martial Law in the United States	JUDGE ADVOCATE GENERAL'S SCHOOL CHARLOTTESVILLE VA	Davies, Kirk L.	1/3/2000	63	AFIT-FY99-603	FY99-603,AFIT	U	A - 01	Approved for public release; distribution is unlimited.	Major rept.	Imagine the following frightening scenario: Members of an American militia group enter a major metropolitan airport and attach small aerosol-like devices in several restrooms * throughout the concourse. These devices release deadly amounts of smallpox bacteria into the air, infecting hundreds of Americans travelling through the airport. Within days, citizens around the country begin to display the horrific symptoms of smallpox. Soon public health workers determine the nature of the epidemic and release the information to the press. Widespread panic results. Civilian public health agencies attempt to educate the public on how to control the spread of the disease. But despite police efforts to control the populace by establishing quarantine areas, the civilian infrastructure is quickly overwhelmed. Chaos results. Finally, the President declares martial law in an attempt to restore order in the nation.
AD1063935	Bioactive Sphingolipids and Wound Healing	University of Kentucky Lexington United States	Nikolova-Karakashian, Mariana	9/1/2018	14	Not available	Not available	U	A - 01	Approved for public release; distribution is unlimited.	Technical Report,01 Aug 2016,31 May 2018	Difficult to heal wounds are of significant health concern for military personnel and their family, especially those linked to diabetes, since diabetes has reached epidemic proportions in the Western Society. Despite being linked to high mortality, low quality of life and other health complications, wounds that are difficult to heal are still a mystery, and most pharmacologic regimens are ineffective. One of the key finding of this this proposal is that sphingomyelinase, a protein that exhibit regulatory function and determines the extent of inflammation and proliferation at the wound site is defective during obesity and this insufficiency leads to exacerbation of TNF-alpha production by macrophages. More importantly we show that addition of the product of this protein, termed ceramide or its metabolites to the wounds helps wound repair and decreases pain-associated with these wounds in the mouse. Someone unexpectedly we also found that the mechanisms by which ceramide and its key metabolite, Sphingosine-1-phosphate facilitate wound repair are distinct, evident by a distinct temporal pattern of healing of wounds following the treatment with ceramide and with Sphingosine-1-phosphate. Overall, our experiments confirm the main hypothesis and indicate that ceramide, and sphingosine-1-phosphate are likely therapeutic tools to help the wound healing process in diabetic patients.

AD1018539	Defense Support of Civil Authorities: DOD Mission or Additional Duty	Air War College Air University Maxwell AFB United States	Walker,David W.	12/14/2010	28	Not available	Not available	U	A - 01	Approved for public release; distribution is unlimited.	Technical Report	The Special Congressional Committee report on Hurricane Katrina stated, [Katrina] was the most destructive natural disaster in American history, laying waste to 90,000 square miles of land, an area the size of the United Kingdom 1 More than 72,000 uniformed military members deployed in support of the Katrina response to save lives, mitigate human suffering, and prevent property damage.2 A Katrina lessons learned report highlighted DOD as one of the only Federal organizations able to rapidly put effective forces on the ground.3 However, despite having the most capability, DOD response during Katrina was significantly delayed and at times ineffective due to the limitations of both Federal Law and DOD policy.4 Hurricane Katrina might appear an isolated event, but natural disasters such as annual hurricanes, wild fires, earthquakes, and pandemic disease will are likely future occurrences requiring massive responses. This paper will illustrate how Defense Support of Civil Authorities (DSCA) is a DOD mission and while DOD routinely executes DSCA, it does not organize, train, or equip for this mission as it does for war fighting missions.
ADA253198	Response to the AIDS Epidemic. A Survey of Homosexual and Bisexual Men in Los Angeles County,	RAND CORP SANTA MONICA CA	Kanouse, David E.,Berry, Sandra H.,Gorman, E. M.,Yano, Elizabeth M.,Carson, Sally	1/1/1991	106	RAND/R-4031-LACH	XD	U	A - 01	Approved for public release; distribution is unlimited.	Not available	Not available
AD0782379	A Simpler Approach to Derivation of Some Results in Epidemic Theory,	PURDUE UNIV LAFAYETTE IND DEPT OF STATISTICS	Puri,Prem S.	6/1/1974	19	Mimeograph Ser-368	Not available	U	A - 01	Approved for public release; distribution is unlimited.	Not available	Not available
ADA595007	How Can Botnets Cause Storms? Understanding the Evolution and Impact of Mobile Botnets	NORTH CAROLINA STATE UNIV AT RALEIGH DEPT OF ELECTRICAL AND COMPUTER ENGINEERING	Lu, Zhuo,Wang, Wenye,Wang, Cliff	1/1/2014	11	Not available	ARO	U	A - 01	Approved for public release; distribution is unlimited.	Not available	A botnet in mobile networks is a collection of compromised nodes due to mobile malware, which are able to perform coordinated attacks. Different from Internet botnets mobile botnets do not need to propagate using centralized infrastructures, but can keep compromising vulnerable nodes in close proximity and evolving organically via data forwarding. Such a distributed mechanism relies heavily on node mobility as well as wireless links, therefore breaks down the underlying premise in existing epidemic modeling for Internet botnets. In this paper, we adopt a stochastic approach to study the evolution and impact of mobile botnets. We find that node mobility can be a trigger to botnet propagation storms: the average size \201i.e., number of compromised nodes\202 of a botnet increases quadratically over time if the mobility range that each node can reach exceeds a threshold; otherwise, the botnet can only contaminate a limited number of nodes with average size always bounded above. This also reveals that mobile botnets can propagate at the fastest rate of quadratic growth in size, which is substantially slower than the exponential growth of Internet botnets. To measure the denial-of-service impact of a mobile botnet, we define a new metric, called last chipper time, which is the last time that service requests, even partially, can still be processed on time as the botnet keeps propagating and launching attacks. The last chipper time is identified to decrease at most on the order of 1/pB, where B is the network bandwidth. This result reveals that although increasing network bandwidth can help with mobile services; at the same time, it can indeed escalate the risk for services being disrupted by mobile botnets.
ADA605893	Regional Disease Vector Ecology Profile: The Middle East	ARMED FORCES PEST MANAGEMENT BOARD WASHINGTON DC	Not available	10/1/1999	213	Not available	ODUSD(I/E)	U	A - 01	Approved for public release; distribution is unlimited.	Not available	Disease Vector Ecology Profiles (DVEPs) summarize unclassified literature on medically important arthropods, vertebrates and plants that may adversely affect troops in specific countries or regions around the world. Primary emphasis is on the epidemiology of arthropod-borne diseases and the bionomics and control of disease vectors. DVEPs have proved to be of significant value to commanders, medical planners, preventive medicine personnel, and particularly medical entomologists. These people use the information condensed in DVEPs to plan and implement prevention and control measures to protect deployed forces from disease, injury, and annoyance caused by vector and pest arthropods. Because the DVEP target audience is also responsible for protecting troops from venomous animals and poisonous plants, as well as zoonotic diseases for which arthropod vectors are unknown, limited material is provided on poisonous snakes, noxious plants, and diseases like hantavirus.



ADA516027	Department of Defense Position on Patient Movement During Influenza A (H1N1) Pandemic: Implications for Actions Now	ARMED FORCES HEALTH SURVEILLANCE CENTER SILVER SPRING MD	Otto, Jean L.,Barnett, Daniel J.,Fisher, Carol,Lipnick, Robert,DeFraites, Robert F.	3/1/2010	4	Not available	Not available	U	A - 01	Approved for public release; distribution is unlimited.	Journal article	To address concerns and issues related to transportation and public health management of contagious individuals in the context of an influenza pandemic, the Armed Forces Health Surveillance Center (AFHSC) and the Center for Disaster and Humanitarian Assistance Medicine (CDHAM) sponsored a one-day, Tri-Service workshop and tabletop exercise entitled U.S. Military's Management of Pandemic Influenza A (H1N1) and Beyond." A central focus of workshop presentations and discussions related to current USTRANSCOM policy on movement of highly contagious patients. This policy dictates that patients with known or suspected infection with a highly contagious disease will not be transported within the patient movement system
ADA606195	Immune Analysis of Brisbane and California H1N1 in Human Sera and the MIMIC System, and Correlating a H1N1 Pandemic Influenza Clinical Trial with a Clinical Trial in a Test Tube	VAXDESIGN CORP ORLANDO FL	Wittman, Vaughan,Kachurin, Anatoly,Warren, William L.	2/15/2013	42	ARO-57249-LS- DRP.1	57249-LS- DRP.1,ARO	U	A - 01	Approved for public release; distribution is unlimited.	Final rept. 1 Sep 2009-30 Nov 2013	This project extended over a three year period and focused on the use of the MIMIC system to assess the immunogenicity/efficacy of commercial influenza vaccine and a plant-produced recombinant hemagglutinin (HA) influenza vaccine, from the HA sequence of the pandemic A/California H1N1 strain, produced by the Fraunhofer Center for Molecular Biology. Initially the task was to evaluate Fraunhofer s vaccine for efficacy in vitro either formulated with adjuvant (alum) or with no adjuvant and to evaluate the cross-reactivity and A/California H1N1 strain. The second section of the project focused on the coupling of the MIMIC to a clinical trial involving the Fraunhofer antigen and a commercial vaccine and the characterization and comparison of the in vivo and in vitro responses.
ADA456094	Tools for Large Graph Mining	,CARNEGIE-MELLON UNIV PITTSBURGH PA DEPT OF COMPUTER SCIENCE"	Chakrabarti, Deepayan	6/1/2005	118	CMU-CALD-05- 107	NSF	U	A - 01	Approved for public release; distribution is unlimited.	Doctoral thesis	
AD0641747	PROBLEMS OF EPIDEMIOLOGICAL GEOGRAPHY. REPORT 4. ZONAL, REGIONAL AND RESIDUAL NOSOLOGICAL AREAS OF DISEASE	ARMY BIOLOGICAL LABS FREDERICK MD	Yelkin, I. I.,Yashkul, V. K.	7/1/1965	12	ABL-TRANS- 1463,TT66-62575	ABL/MD	U	A - 01	Approved for public release; distribution is unlimited.	Journal article	In report 3 it was indicated that many modern infectious and invasive diseases of man did not obtain global distribution. The causes of their limited distribution over territories of the world were diverse. Thus, certain naturally focal diseases could not be encountered on these or those territories only because they had not migrated there.
AD1058524	Supporting, Non-Standard Mission Role: U.S. Operations in Liberia, 2014-2015, that Enabled the U.S. and UN Response to the EVD Outbreak	Africa Center for Strategic Studies Washington United States	Boucher,Alix J.	1/1/2018	60	Not available	Not available	U	A - 01	Approved for public release; distribution is unlimited.	Technical Report	Operation UNITED ASSISTANCE (OUA), which deployed to Liberia between September 2014 and June 2015, provides an example of how a Joint Force can support a lead federal agency (LFA), in this case the U.S. Agency for International Development (USAID) and other interagency and international partners to end a raging epidemic of Ebola Virus Disease (EVD). This EVD outbreak began in late 2013, when Emile Ouamouno, a two year old from Meliandou, a village in Guinea, close to the border with Liberia and Sierra Leone, died of a hemorrhagic fever. Soon after, many of his relatives and their connections, who lived across the region, also became ill and died. In March 2014, a team from the Institut Pasteur in France confirmed that the hemorrhagic fever spreading through the region was EVD. By then, more than 2,400 people had died from the disease. By the time the epidemic ended, in Liberia alone, 15,227 cases of EVD had been confirmed through laboratory tests and 11,310 people had died. But in the spring and summer of 2014, clinics and treatment centers were soon overcrowded, turning people away, and people were dying in the streets, unable to get even the most basic medical care. The worsening situation led the World Health Organization (WHO) to declare the EVD epidemic a global health emergency on August 8, 2014. When affected populations began to protest the lack of medical care for their afflicted loved ones, as occurred in Liberia on August 16, 2014, the most affected countries political leaders (i.e., Guinea, Liberia, and Sierra Leone) realized they would need additional international assistance to stop the epidemic.

ADA612158	Private Security Contractors: A Way of Combating Piracy in the Horn of Africa	ARMY COMMAND AND GENERAL STAFF COLLEGE FORT LEAVENWORTH KS SCHOOL OF ADVANCED MILITARY STUDIES	Shouse, Michael J.	5/22/2014	53	Not available	USACGSC	U	A - 01	Approved for public release; distribution is unlimited.	Monograph	Private security contractors (PSC) are an integral part of the global effort in conducting counter-piracy operations in the Horn of Africa. Their previous use in Iraq, Afghanistan, Kosovo, and Somalia in support of military operations has been relevant to mission success. From 2008-2011, piracy in the Horn of Africa grew to astronomical numbers. A global effort ensued in 2009 with the creation of three maritime task forces, counter-piracy working groups, and an increase in the hiring of private security contractors. Private security contractors have bridged the gap between the shipping industry, maritime insurance agencies, and the nation's naval assets. Their involvement made immediate impacts to the piracy epidemic, successfully reducing piracy by more than 50 percent. This study centered on the role of private security contractors operating in the Horn of Africa through the framework of the theory of supply and demand. In a time when it appears piracy will continue to thrive, the importance of private security contractors cannot be overstated.
ADA101506	Immunological Characteristics of Influenza Precipitating Antibody as Demonstrated by Counterimmunoelectrophoresis.	NAVAL HEALTH RESEARCH CENTER SAN DIEGO CA	Edwards,Earl A.,Muehl,Pat M.,Sullivan,Elizabeth J.,Rosenbaum,Max J.	7/12/1978	15	NAVHLTHRSCHC-78-23	Not available	U	A - 01	Approved for public release; distribution is unlimited.	Final rept.,	Antibody to influenza infection was determined by counterimmunoelectrophoresis (CIE). The antibody resulting from influenza disease reacted to both related and distant strains of influenza A antigen but not to influenza B antigen. CIE antibody was not demonstrable following immunizations with inactivated influenza vaccine. While influenza antibody, as demonstrated by CIE, was always associated with elevated complement fixation antibody, the reverse was not the case. Since the precipitating antibody was only detected in those individuals with influenza disease, the test could serve as an early alert signal during surveillance of an impending influenza A epidemic. (Author)
AD0758728	A Stochastic Model of a Non-homogeneous Carrier-borne Epidemic.	DENVER RESEARCH INST COLO DIV OF MATHEMATICAL SCIENCES	Warren,Peter,Foster,James,Bleistein,Norman	2/1/1973	22	MS-R-7310	Not available	U	A - 01	Approved for public release; distribution is unlimited.	Technical rept.,	The paper investigates the stochastic behavior of a non-homogeneous, multitype carrier-borne epidemic in which there is a spatial distribution of carriers and susceptibles. Techniques are developed for formulating a suitable model and obtaining an exact analysis for the quantities which are of interest in an epidemic. The model also allows for consideration of movement among the carrier population. (Author)
ADA536897	Trust-Threshold Based Routing in Mobile Ad Hoc Delay Tolerant Networks	VIRGINIA POLYTECHNIC INST AND STATE UNIV BLACKSBURG DEPT OF COMPUTER SCIENCE	Chang, MoonJeong,Chen, Ing-Ray,Bao, Fenye,Cho, Jin-Hee	2/15/2011	17	Not available	ONR	U	A - 01	Approved for public release; distribution is unlimited.	Quarterly rept. 15 Nov 2010-14 Feb 2011	We propose a trust-threshold based routing protocol for delay tolerant networks, leveraging two trust thresholds for accepting recommendations and for selecting the next message carrier for message forwarding. We show that there exist optimal trust threshold values under which trust-threshold based routing performs the best in terms of message delivery ratio, message delay and message overhead. By means of a probability model, we perform a comparative analysis of trust-threshold based routing against epidemic, social-trust-based and QoS-trust-based routing. Our results demonstrate that trust-threshold based routing operating under proper trust thresholds can effectively trade off message delay and message overhead for a significant gain in message delivery ratio. Moreover, our analysis helps identify the optimal weight setting to best balance the effect of social vs. QoS trust metrics to maximize the message delivery ratio without compromising message delay and/or message overhead requirements.
ADA601783	Lessons from the 1918 Influenza Pandemic: Using Historical Examples to Inform the Department of Defense's Response to the Next Pandemic	MARINE CORPS COMMAND AND STAFF COLL QUANTICO VA	Grindel, Kevin S.	4/1/2013	43	Not available	USMC/CSC	U	A - 01	Approved for public release; distribution is unlimited.	Master's thesis	Pandemic influenza has had an impact on militaries and societies in the past, and will again, because the virus remains endemic worldwide and mutates rapidly, negating human immunity. Based on the lessons from the 1918 pandemic and the US National Strategy for Pandemic Influenza the Department of Defense should expand its implementation plan in order to enforce containment of a future pandemic and respond to humanitarian assistance needs of partner nations. The influenza pandemic of 1918 was the most rapidly lethal pandemic in history and provided lessons that should inform current policy. The National Strategy for Pandemic Influenza presents clear guidance on the priorities of protecting the United States through isolation and supporting allied and partner nations in the event of the next pandemic. In order to maintain a credible readiness, DOD should seek to align the Department of Defense Implementation Plan for Pandemic Influenza with the broader goals of the National Strategy.

AD1034551	Symposium Connects Government Problems with State of the Art Network Science Research	MIT Lincoln Laboratory Lexington United States	Miller,Benjamin A,Caceres,Rajmonda S	10/16/2015	3	Not available	Not available	U	A - 01	Approved for public release; distribution is unlimited.	Technical Report	Network science has grown significantly in the last several years as a field at the intersection of mathematics, computer science, social science, and engineering. Topics of interest include modeling and analysis of network phenomena, large-scale computation and data management, models for information and epidemic spreading through networks, and inference of information about entities based on observable connections. While basic researches focused on developing understanding in each of these areas, in a practical setting the ultimate goal is to exploit this understanding to achieve some application-specific objective.
ADA504808	2008 Annual Report: Department of Defense HIV/AIDS Prevention Program (DHAPP)	NAVAL HEALTH RESEARCH CENTER SAN DIEGO CA	Not available	3/1/2009	188	Not available	NHRC	U	A - 01	Approved for public release; distribution is unlimited.	Not available	As I read through the final draft of the 2008 Annual Report of the Department of Defense HIV/ AIDS Prevention Program, I am truly humbled by the outstanding and very important work represented in this document. As recounted in seven previous annual reports, this work represents the efforts of a genuine partnership between US Government agencies, partner militaries, nongovernmental organizations, universities, community-based organizations, faith-based organizations, and civil society. Although there are many partners, one goal still remains: to improve and protect the health and readiness of military members and their families through the prevention, care, and treatment of HIV/AIDS. Since the establishment of the Department of Defense HIV/AIDS Prevention Program in 2001 and the President's Emergency Plan for AIDS Relief in 2003, the US DoD has been proud to play a critical role in the single largest international health initiative dedicated to a single disease in US Government history. DHAPP, headquartered at the Naval Health Research Center in San Diego, California, now supports military HIV activities in 75 countries where our programs have a great impact on 5 million military members and at least that many dependent family members. Through PEPFAR and DoD resources, the US Department of Defense provides the world's largest single source of HIV assistance to militaries and works with a worldwide cadre of military HIV experts to combat the harm HIV inflicts on the health and readiness of the world's military populations. When we started DHAPP in 2001, we had three objectives: (1) assist militaries with their own HIV prevention programs, (2) advocate for militaries with national and international HIV programs, and (3) build internal HIV capacity in our partner militaries. While we have successfully been meeting all three objectives for years, I am most proud of our success in fostering the internal capability of partner militaries to address this epidemic.
ADA059475	Surveillance of Mosquito-Borne Viral Diseases in Thailand.	MAHIDOL UNIV BANGKOK (THAILAND) FACULTY OF PUBLIC HEALTH	Gunakasem,Pairatana,J atanasen,Sujarti,Chant rasri,Chalam,Simasath ein,Phinit,Chaiyanun,Si thipun	8/1/1977	30	Not available	Not available	U	A - 01	Approved for public release; distribution is unlimited.	Final rept. 1976-1977,	A long term surveillance system is very necessary for planning and evaluation of hemorrhagic fever control. The method of dry blood collection and use of dengue 2 antigen has proven to be an efficient method to detect low and high levels of HI antibody and to prove dengue infection (Top 1975). Use of the hemagglutination inhibition test for dengue infection revealed 52% of the cases from the 72 provinces were from dengue viruses. The number of cases of dengue infection discovered by blood testing during the 3 year study period did not exceed 52%. Cases of dengue infection also occur during non-epidemic periods with the lowest incidence of disease appearing in January. The majority of dengue-proved cases occurs in children aged 6 years. Chikungunya infection has been studied in the metropolitan area of Bangkok and in the 72 provinces. Results of the study, clinically and in the laboratory, indicates that chikungunya has no significance in the surveillance program. This study provides definite information for use in planning and in evaluating methods to control hemorrhagic fever. (Author)
AD0678251	CLINICS OF JAPANESE ENCEPHALITIS (FROM OBSERVATIONS OF THE SUMMER OF 1946 ON THE KUANTUNG PENINSULA)	ARMY BIOLOGICAL LABS FREDERICK MD	Sergeeva, U. S.,Drigo, E. V.	9/1/1968	10	TRANS-144	SMUFD	U	A - 01	Approved for public release; distribution is unlimited. Document partially illegible.	Not available	Observations were conducted on the clinics of Japanese encephalitis in the wake of an epidemic, the patients of which were located in three hospitals. Ordinarily the patients were examined neurologically; particular attention was also devoted to the pulse, breathing, blood pressure and eyebottom. Most of the observations were from the first 2-3 days of infection, thus giving a good picture of the dynamics of the clinical course of infection of this epidemic.

AD0779506	Present Concepts in Internal Medicine. Volume VII, Number 1, January-February 1974. Lung Cancer Symposium,	LETTERMAN ARMY MEDICAL CENTER SAN FRANCISCO CALIF	Mays,Edward E.,Applewhite,Lottie B.	2/1/1974	120	Not available	Not available	U	A - 01	Approved for public release; distribution is unlimited.	Not available	The symposium, a collection of eleven articles, was originally presented as a series of lectures in the autumn of 1973. The authors have refined them for a reading audience, updated some of the information, and added a summary article. The symposium addresses itself to the different types of lung cancer, the varied clinical and roentgenographic presentations, the surgical, radiation and chemotherapeutic techniques and finally a philosophical look at the overall problem. With a latent period of 30 to 40 years between onset of smoking exposure and onset of lung cancer, we are in the midst of an epidemic spawned among American men and women during World Wars I and II. With the Korean and Vietnamese Wars following closely, we as clinicians face an onset of lung cancers without foreseeable end. (Modified author abstract)
ADA468243	Next Generation Bioweapons: The Technology of Genetic Engineering Applied to Biowarfare and Bioterrorism	AIR UNIV MAXWELL AFB AL	Ainscough, Michael J.	4/1/2002	49	Not available	AU	U	A - 01	Approved for public release; distribution is unlimited.	Not available	The history of warfare and the history of disease are unquestionably interwoven. Throughout the history of warfare, disease and non-battle injury have accounted for more deaths and loss of combat capability than from actual battle in war itself. The most striking example is the great influenza pandemic during World War I that killed 20 million people or more worldwide in 1918. Although this was a naturally occurring event, what if a country could create a biological agent that could yield the same catastrophic loss of life on the enemy? That, in essence, is the potential effect of applying genetic engineering for biological warfare (BW) or bioterrorism (BT). Today, we face not only natural diseases (including emerging infectious diseases), but also threats of BW or BT, possibly with genetically engineered agents, that may resist known therapies. In simple terms, genetic engineering is the process of human%an intervention to transfer functional genes (DNA) between two biological organisms. In the BW/BT context, it is the manipulation of genes to create new pathogenic characteristics (increased survivability, infectivity, violence, drug resistance, etc). Organisms with altered characteristics are the new generation" biological weapons."
ADA077341	Korean Hemorrhagic Fever.	KOREA UNIV SEOUL DEPT OF MICROBIOLOGY	Lee,Ho Wang	3/31/1979	58	Not available	Not available	U	A - 01	Approved for public release; distribution is unlimited.	Final rept. 1 Jan-31 Dec 78,	This report presents the results on (1) isolation of Korean hemorrhagic fever (KHF) virus from patients (2) antibody responses in animals (3) the ratio of clinical and subclinical infection (4) cultivation of the virus in a tissue culture cells and (5) vertical transmission of KHF virus in Apodemus agrarius. Out of 943 tested US military personnel stationed in Korea during years 1977 and 1978, five were sero-positive to KHF virus. It was confirmed that KHF virus grows well in human lung cancer cells (A549 cells) by the IFA method. Antibodies of sera from patients with KHF, with epidemic hemorrhagic fever in Japan, and with nephropathia epidemica, as well as with sera from infected animals were titrated simultaneously against KHF virus antigen, which was prepared in both apodemus lung tissues and in A549 cells. This showed that infected Apodemus lung tissues were more sensitive antigen system than infected A549 cells. Results of a limited study indicates that there is no vertical transmission of KHF virus in Apodemus agrarius.

ADA430115	Interim Report of the Defense Science Board Task Force on SARS Quarantine	DEFENSE SCIENCE BOARD WASHINGTON DC	Not available	12/1/2004	17	Not available	OUSD(AT/L)	U	A - 01	Approved for public release; distribution is unlimited. Availability: This document is not available from DTIC in microfiche.	Not available	The Task Force established by the Defense Science Board (DSB) to assess Department of Defense (DoD) quarantining guidance for dealing with a Severe Acute Respiratory Syndrome (SARS) epidemic met on three occasions during 2003-2004 to review the status of current and planned DoD policies and procedures related to SARS outbreak response. The Task Force received a number of briefings describing SARS and other disease outbreak response and quarantine operations, Centers for Disease Control and Prevention SARS guidelines, lessons learned, DoD global surveillance systems, and military/civilian public health interfaces. The Task Force's initial findings and recommendations in six areas are included. Appendix A of this report contains the Terms of Reference given to the Task Force by the Under Secretary of Defense. To integrate public health needs, on behalf of national security, the Task Force was asked to review and assess the following: (a) Existing doctrine and process by which quarantine policy is generated as applied to all personnel in OCONUS as well as CONUS theaters, (b) Required cooperation with non-DoD agencies and non-U.S. government entities including other countries; (c) Capacity of local commanders to rapidly surveil disease status and establish need, ways, and means for quarantine in relation to their assigned missions; (d) Methods, technologies, and legal doctrine to allow safe transport of personnel through quarantined areas, and restriction of movement where needed; (e) Sample scenarios; (f) Coordination and allocation of DoD and non-DoD resources to combat SARS; and (g) identification and tracing of individuals potentially exposed to SARS. Appendix B contains references to documents reviewed by the Task Force. Appendix C contains recommendations to enhance two documents: DoD Directive Emergency Health Powers on Military Installations
ADA435458	Molecular Epidemiology of Epidemic Severe Malaria Caused by Plasmodium vivax in the State of Amazonas, Brazil	UNIFORMED SERVICES UNIV OF THE HEALTH SCIENCES BETHESDA MD DEPT OF PREVENTIVE MEDICINE AND BIOMETRICS	Santos-Ciminera, Patricia D.	1/1/2005	330	Not available	USUHS	U	A - 01	Approved for public release; distribution is unlimited., Availability: This document is not available from DTIC in microfiche.	Doctoral thesis	Malaria in South America is a major public health problem. In Brazil, most of the cases occur in the Amazon Region, particularly in the State of Amazonas. In Manaus, the capital of Amazonas, atypical cases of Plasmodium vivax infections, including patients presenting with severe thrombocytopenia and bleeding, led to the hypothesis that severe disease could be related to a particular, emergent, and more pathogenic genotype of P. vivax. The authors describe the epidemiology of malaria for the Amazonas State and city of Manaus by comparing patients admitted in the hospital to those treated as outpatients in the Fundacao de Medicina Tropical do Amazonas. Admissions due to vivax malaria increased significantly from 1997 through 2003, suggesting a change in clinical presentation. The admitted group presented higher mean parasite counts, lower platelet counts, and higher levels of liver enzymes, higher total and indirect bilirubin, and higher blood urea nitrogen when compared to the outpatient group. Clinical symptoms of severe disease, including hematuria, hemolytic anemia, and thrombocytopenia were only noted in the admitted group. Furthermore, the presence of a palpable liver was more frequent in admitted patients. Nucleic acid sequences of three genes from P. vivax, the 18S SSUrRNA Type A gene, CSP gene, and MSP-1 gene were determined. Strains from test samples were compared to each other, to the reference strains Salvador I and Belem, and to sequences retrieved from the Gene Bank. It was not possible to demonstrate the evolutionary relationship among our test samples by tests of phylogeny that incorporated sequence data for all three genes tested. The factors that may have limited the power of a combined analysis include small sample size and differences in the mechanisms and extent of variation among the genes. The retrospective study was unable to demonstrate that a particular strain of P. vivax was responsible for severe disease requiring hospitalization.

ADA475300	Biotechnology Industry, 2006	INDUSTRIAL COLL OF THE ARMED FORCES WASHINGTON DC	Not available	1/1/2006	31	Not available	ICAF	U	A - 01	Approved for public release; distribution is unlimited.	Not available	The United States leads the world in biotechnology, centered on genetic engineering at the cellular or molecular level, a process which applies across a range of products in diverse industries, just as computer engineering does. The biotech industry is becoming a major player in many sectors, including medicine, agriculture, energy, defense, the environment, and nanotechnology. Genetically modified (GM) foods are feeding millions. GM bacteria and plants are cleaning up pollution quietly and cheaply. The nation depends on biotechnology for defense against terrorist attacks and pandemic influenzas. Stem cells promise the miracle of tissue regeneration. As an industry, though, biotechnology is still emerging, driven by the promise of research which for many companies has yet to yield products or profits. The industry relies on government to a surprising degree for support of basic science and for regulations that can either free up or stifle growth: property rights (patents), clinical trials, litigation relief, and ethical guidelines. Only an informed public will allow biotechnology to flourish, because it leans so strongly on legislation, because it is pushing into ethical dilemmas no one has faced before, and because it can either develop or defend against biological weapons and environmental risks. However, the shortage of U.S. scientists and engineers with advanced degrees in biotechnology means the industry depends on foreign researchers, which could easily threaten future preeminence. Establishing a National Biotechnology Council would facilitate federal collaboration. Biotechnology has already had an impact on our lives on an unprecedented scale, and there is every indication the future holds much more.
AD1066460	Chemoprophylaxis Against Group A Streptococcus During Military Training	NAVAL HEALTH RESEARCH CENTER SAN DIEGO CA SAN DIEGO United States	Webber,Bryant J.,Kieffer,John W.,White,Brian K.,Hawksworth,Anthony W.,Graf,Paul C.,Yun,Heather C.	10/26/2018	9	NHRC-18-16,NMRC-NMRC/MD-18-390,BUMED/VA	NMRC/MD-18-390	U	A - 01	Approved for public release; distribution is unlimited.	Journal Article - Open Access,01 Jun 2017,31 Dec 2017	Chemoprophylaxis with intramuscular benzathine penicillin G has been used widely by the U.S. military to prevent epidemics of group A streptococcus infections during basic training. The recent global shortage of benzathine penicillin prompted a detailed analysis of this issue in 2017 by military preventive medicine and infectious disease authorities in San Antonio, Texas, and San Diego, California, USA. This paper explores the history of group A streptococcus and chemoprophylaxis in the U.S. military training environment, current policy and practice, and challenges associated with widespread chemoprophylaxis. In light of the history presented, preventive medicine authorities at basic training centers should be extremely cautious about discontinuing benzathine penicillin chemoprophylaxis.
ADA482425	From the New Middle Ages to a New Dark Age: The Decline of the State and U.S. Strategy	ARMY WAR COLL STRATEGIC STUDIES INST CARLISLE BARRACKS PA	Williams, Phil	6/1/2008	70	Not available	AWC/SSI	U	A - 01	Approved for public release; distribution is unlimited.	Monograph	This analysis offers key insights into what is a shifting security environment and considers how the United States can best respond to it. Dr. Williams argues that we have passed the zenith of the Westphalian state, which is now in long-term decline, and are already in what several observers have termed the New Middle Ages, characterized by disorder but not chaos. Dr. Williams suggests that both the relative and absolute decline in state power will not only continue but will accelerate, taking us into a New Dark Age where the forces of chaos could prove overwhelming. He argues that failed states are not an aberration but an indication of intensifying disorder, and suggests that the intersection of problems such as transnational organized crime, terrorism, and pandemics could intersect and easily create a tipping point from disorder into chaos. Dr. Williams suggests that analysts and policy makers are reluctant to acknowledge the pace and scope of state decline. He suggests that many of the problems which are proving particularly intractable in Iraq exemplify -- albeit on a small scale -- the kind of challenges associated with a New Dark Age. Against this background, Dr. Williams outlines the strengths and weaknesses of three major choices: preventive interventionism, disengagement and mitigation, and triage or selective interventionism. He suggests that for both a continuation of the current approach and for selective intervention, U.S. policy makers have to design a far more holistic approach to the exercise of power. In the future, for any substantial U.S. military intervention to have any chance of success will require what is termed in this monograph a transagency organizational structure. Military forces, diplomats, reconstruction specialists, and legal experts must be integrated into one organization designed to assist a target state in reestablishing its authority, legitimacy, and effectiveness.

ADA436727	On Computer Viral Infection and the Effect of Immunization	VIRGINIA UNIV CHARLOTTESVILLE DEPT OF COMPUTER SCIENCE	Wang, Chenxi,Knight, John C.,Elder, Matthew C.	1/1/2005	23	Not available	RL/HANSCOM	U	A - 01	Approved for public release; distribution is unlimited.	Not available	Viruses remain a significant threat to modern networked computer systems. Despite the best efforts of those who develop anti-virus systems, new viruses and new types of virus that are not dealt with by existing protection schemes appear regularly. In addition, the rate at which a virus can spread has risen dramatically with the increase in connectivity. Defenses against infections by known viruses rely at present on immunization yet, for a variety of reasons, immunization is often only effective on a subset of the nodes in a network and many nodes remain unprotected. Little is known about either the way in which a viral infection proceeds in general or the way that immunization affects the infection process. In this paper we present the results of a simulation study of the way in which virus infections propagate through certain types of network and of the effect that partial immunization has on the infection. The key result is that relatively low levels of immunization can slow an infection significantly.
ADA579901	Preventing School Shootings: A Public Health Approach to Gun Violence	NAVAL POSTGRADUATE SCHOOL MONTEREY CA DEPT OF NATIONAL SECURITY AFFAIRS	Not available	3/1/2013	171	Not available	NPS-NS	U	A - 01	Approved for public release; distribution is unlimited.		Gun violence in America must be addressed at the highest levels of society. Newtown, Aurora, and Virginia Tech were attacks on the very fabric of America. School shootings represent attacks on our nation's future. A public health approach to gun violence focuses on prevention. Public safety professionals, educators, and community leaders are squandering opportunities to prevent these horrific acts of extreme violence. Preparedness is derived by planning, which is critical to mobilizing resources when needed. Rational public policy can work. Sensible gun legislation, which is accessible through a public health approach to gun violence, neither marginalizes nor stigmatizes any one group. University administrators must fully engage the entire arsenal of resources available to them to confront this pernicious threat. The academic community can create powerful networks for research, collaboration, and information sharing. These collective learning environments are investments in the knowledge economy. For the police to remain relevant, they must actively engage the community they serve by developing the operational art necessary to cultivate knowledge, relationships, and expertise. Police departments must emphasize strategies that improve performance. Police officers must understand the mission and meaning of To Protect and Serve
ADA478212	1918 Flu Pandemic: Implications for Homeland Security in the New Millennium	ARMY WAR COLL CARLISLE BARRACKS PA	Kirkland, Stephen M.	5/9/2007	31	Not available	USAWC	U	A - 01	Approved for public release; distribution is unlimited.	Program research project	The National Strategy for Pandemic Influenza notes that pandemic flu could overwhelm the heath and medical capabilities of the United States, cause hundreds of thousands of deaths, millions of hospitalizations, and cost hundreds of billions of dollars. The consensus within scientific circles is that the nation will likely face one or more pandemics in this century, although there is disagreement as to the probable timing of such an event. Studying the 1918 pandemic will assist modern day planners in mitigating the effects of pandemic flu and the contingency planning will have widespread applicability to other events, both natural and manmade, that may significantly impact the nation's health and security. This paper reviews the 1918 pandemic, explores concerns about the avian influenza virus H5N1, and considers current planning for pandemic flu. Weaknesses in the current schema are examined and recommendations are offered to facilitate both enhanced pandemic planning efforts and Homeland Security.
ADA570771	Security Planning and Policies to Meet the Challenges of Climate Change	CENTER FOR NAVAL ANALYSES ALEXANDRIA VA	Espach, Ralph H.	7/1/2010	9	CNA-13878	AWC/CSL	U	A - 01	Approved for public release; distribution is unlimited.	Research rept.	Climate change poses challenges to societies and governments that go far beyond the alteration of our environment. The physical impacts of climate change, including gradual but steady increases in temperature, changing precipitation patterns, the reduction of glaciers and Arctic ice, rising sea levels and changes in coastlines, and more intense and frequent extreme weather events, will affect human lives in numerous ways. While climate change does not by itself create new security threats, it does act as a threat multiplier. It exacerbates existing political weaknesses and social tensions in countries around the world, and creates demands for state services and assistance -- including security -- which at times may exceed the capacity of governments to respond. In this sense, the growing likelihood of events such as mass migrations, crop failures, economic shocks, public riots and violence, floods and other natural disasters, widespread epidemics, and competition for resources pose serious challenges for governments and security forces worldwide.

ADB958702	Prevention of Influenza and Other Respiratory Diseases.	COLORADO UNIV AT DENVER MEDICAL CENTER	Meiklejohn, G.,Eickhoff, T. C.	9/1/1971	22	Not available	Not available	U	A - 01	Approved for public release, distribution unlimited.	Annual progress rept. 1 Jun 70-31 May 71,	The rates of febrile upper respiratory infection in students at Lowry Air Force Base were the lowest observed to date. Illness due to Type 4 adenovirus was eliminated by the use of oral love vaccine. Type 7 adenovirus, though repeatedly introduced the the Base by incoming troops, failed to cause a significant amount of illness in the student squadrons which had received Type 4 vaccine. Influenza A2 and B, through present over a long period in the Denver area, failed to cause significant illness in the student population which had received standard military vaccine. Coronavirus infections were demonstrated with considerable frequency during the early part of the 1970-71 respiratory disease season. Mycoplasma infections were very infrequent. Originator supplied keywords include: Adenovirus; Influenza; Vaccine; Hemagglutinin;l Neuraminidase; Coronavirus; Mycoplasma; Respiratory Disease.
ADA591796	Issues and Challenges in Self-Sustaining Response Supply Chains	NAVAL POSTGRADUATE SCHOOL MONTEREY CA GRADUATE SCHOOL OF BUSINESS AND PUBLIC POLICY	Apte, Aruna,Khawam, John,Regnier, Eva,Simon, Jay,Nussbaum, Daniel	9/28/2013	32	NPS-LM-13-107	NPS-GSBPP	U	A - 01	Approved for public release; distribution is unlimited.	Research rept.	The most basic representation of a supply chain has three elements: supply, demand, and the flow between the two. A humanitarian response supply chain (RSC) tends to have unknown demand and, at best, uncertain supply with disrupted flow. A self-sustaining supply chain requires that the supply chain itself provide all resources consumed while transporting supplies, thus complicating the operations with numerous challenges and unfamiliar issues. If an RSC is self-sustaining, it will reduce some of the uncertainties in supply. However, self-sustaining response supply chains (SSRSC) generate significant additional cost. We explore the issues and challenges of SSRSC that arise in logistics networks to understand the costs associated with SSRSC observed in special operations and humanitarian assistance and disaster relief.
ADA439639	Neighborhood-Consistent Transaction Management for Pervasive Computing Environments	MARYLAND UNIV BALTIMORE DEPT OF COMPUTER SCIENCE AND ELECTRICAL ENGINEERING	Perich, Filip,Joshi, Anupam,Yesha, Yelena,Finin, Timothy	1/1/2005	11	Not available	DARPA	U	A - 01	Approved for public release; distribution is unlimited. This document is not available from DTIC in microfiche.	Technical rept.	This paper examines the problem of transaction management in pervasive computing environments and presents a new approach to address them. We represent each entity as a mobile or static semi-autonomous device. The purpose of each device is to satisfy user queries based on its local data repository and interactions with other devices currently in its vicinity. Pervasive environments, unlike traditional mobile computing paradigm, do not differentiate between clients and servers that are located in a fixed, wired infrastructure. Consequently, we model all devices as peers. These environments also relax other assumptions made by mobile computing paradigm, such as the possibility of reconnection with a given device, support from wired infrastructure, or the presence of a global schema. These fundamental characteristics of pervasive computing environments limit the use of techniques developed for transactions in a mobile computing environments. We define an alternative optimistic transaction model whose main emphasis is to provide a high rate of successful transaction terminations and to maintain a neighborhood-based consistency. The model accomplishes this via the help of active witnesses and by employing an epidemic voting protocol. The advantage of our model is that it enables two or more peers to engage in a reliable and consistent transaction while in a pervasive environment without assuming that they can talk to each other via infrastructure such as base stations. The advantage of using active witnesses and an epidemic voting protocol is that transaction termination does not depend on any single point of a failure. Additionally, the use of an epidemic voting protocol does not require all involved entities to be simultaneously connected at any time and, therefore, further overcomes the dynamic nature of the environments. We present the implementation of the model and results from simulations.
AD0834637	THE INTERFERENCE PHENOMENON IN DENGUE VIRUS AND VEE VIRUS ON KB STABLE CELLS AND CHICK EMBRYO FIBROBLASTS	ARMY BIOLOGICAL LABS FREDERICK MD	Rossi, A. L.	1/1/1968	11	TRANS-1906	SMUFD	U	A - 01	Approved for public release; distribution is unlimited. Document partially illegible.	Not available	During a dengue epidemic in Venezuela, a virus diagnosis was obtained with the help of hemagglutination inhibition tests, using dengue '2' as the viral antigen. Sera taken during the acute period were compared with convalescent sera in order to get an idea of the increase in antibodies between the two sera.



AD1053359	Comparative Analysis of Disruption Tolerant Network Routing Simulations in the One and NS-3	NAVAL POSTGRADUATE SCHOOL MONTEREY CA MONTEREY United States	Mauldin,Andrew N.	12/1/2017	349	Not available	Not available	U	A - 01	Approved for public release; distribution is unlimited.	Technical Report	This thesis studies the performance of Disruption Tolerant Networking (DTN) routing protocols, and the effect of simulator selection. Research into the Geo-location Assisted Predictive Routing (GAPR), and GAPR2 protocols at NPS used the ONE Simulator. The ONE abstracts everything below the routing layer to simplify the development of DTN protocols. In contrast, Network Simulator 3 (ns-3) simulates the entire network stack. ns-3 includes packet headers and existing link-layer protocols that the ONE abstracts away. The inclusion of link-layer overhead and packet headers reduces message delivery by 31% and increases average latency by 119%. Packets used to share routing information consume up to 33% of all transmitted data. Effective throughput between connected nodes decreases by 40%-70% of the equivalent ONE bandwidth. These penalties vary significantly depending on routing protocol design choices. This thesis implements Epidemic, Vector, Centroid, GAPR, and GAPR2 protocols in ns-3. It also combines Centroid with GAPR to create a new protocol called GAPR2a. The protocols are extensively simulated in three mobility scenarios in ns-3 and the ONE: one urban scenario and two military scenarios. GAPR2a provides the best overall performance in the urban scenario, and Vector provides the best overall performance in the military scenarios. Future DTN protocol development should continue in ns-3 because the ONEs abstractions may not reflect real-world performance.
ADA090397	Experimental Chemotherapy: A Rapid and Simple Screening Method for Drug Binding to DNA	WALTER REED ARMY INST OF RESEARCH WASHINGTON DC	Hahn, Fred E.	6/1/1980	13	Not available	WRAIR	U	A - 01	Approved for public release; distribution is unlimited.	Not available	Histories of wars and of infectious diseases have been interwoven since the time of antiquity. In World War II, some 500,000 American servicemen acquired malaria with an attending loss of 6.6 millions of man days. During 1965, the number of American soldiers evacuated from Vietnam because of chloroquine-resistant malaria, equaled the number evacuated because of wounds. The invasion of Taiwan from mainland China, planned in 1949, had to be abandoned because of a catastrophic outbreak of schistosomiasis which the assembled troops acquired while practicing landing maneuvers on inland lakes in Fukien province. Earlier, the campaign of Napoleon in Egypt faltered because of schistosomiasis and trachoma in the expeditionary force. Drugs for the treatment of those communicable diseases against which there exists no effective immunoprophylaxis are a military necessity when the troops must be deployed in unsanitary parts of the world. The Russian Civil War (1917-1924) was accompanied by 25,000,000 cases of epidemic typhus. Today, such patients would be treated successfully with chloramphenicol or tetracyclines.
AD0630730	DATA ON EPIDEMIC PROCESSES. 3. COMMUNICATION. EPIDEMIOLOGIC PECULIARITIES OF THE PLAGUE AND TULAREMIA CAUSED BY DIFFERENT WAYS OF INFECTION	ARMY BIOLOGICAL LABS FREDERICK MD	Dyadichev, N. R.	1/1/1957	1	TRANS-106	ABL/MD	U	A - 01	Approved for public release; distribution is unlimited.	Not available	The existence of all blood infections in nature, transmitted by blood sucking Arthropodes, and including plague and tularemia, is insured in each individual case by some determined specific vector, in the organism of which the agent of the respective disease lives for some time. Plague and tularemia, existing in nature as infectious diseases of rodents, very seldom differ one from another according to epizootology. These differences are stipulated mainly by the biological and ecological peculiarities of the specific vectors of the said infections in their natural (enzootic) centers, which, consequently, reflects on the epidemiology of these infections. The basic specific method of transmitting the agent of tularemia from the organism of one warm-blooded animal to another is by means of the tick, which determines the more important peculiarities of existence of the said infections in its natural center. This is also true of plague in its retention and transmission by fleas. (Document quoted in its entirety.)
AD1088292	Chemoprophylaxis Against Group A Streptococcus During Military Training	USAFSAM/PHR Wright-Patterson AFB United States	Webber,Bryant J.,Kieffer,John W.,White,Brian K.,Hawksworth,Anthony W.,Graf,Paul C.F,Yun,Heather C.	10/26/2018	9	AFRL-SA-WP-JA-2017-0037	AFRL-SA-WP-JA-2017-0037	U	A - 01	Approved for public release; distribution is unlimited.	Journal Article - Open Access	Chemoprophylaxis with intramuscular benzathine penicillin G has been used widely by the U.S. military to prevent epidemics of group A streptococcus infections during basic training.

ADA239913	Low Prevalence of HIV Infection in Djibouti - Has the AIDS Epidemic Come to a Stop at the Horn of Africa?	NAVAL MEDICAL RESEARCH UNIT NO 3 FPO NEW YORK 09527	Fox, Emile,Abbatte, E. A.,Wassef, Habiba H.,Woody, James N.,Salah, Said	1/1/1989	7	NAMRU-3-41/89-90,NAMRU-3-1559	Not available	U	A - 01	Approved for public release; distribution is unlimited. Document partially illegible.	Not available	To determine if the HIV-epidemic had reached Djibouti by autumn 1987, we investigated 645 subjects belonging to various risk groups; 150 were patients with a disease compatible with acquired immune deficiency or with a mycobacterial infection, 115 were young males having a sexually transmitted disease, 295 were female prostitutes, and 69 were villagers from a rural area; the remaining 16 belonged to other groups. All subjects answered an epidemiological questionnaire and had their serum tested for evidence of HIV antibodies. Eight sera were HIV-antibody positive by both ELISA and Western blot. Of these, 2 were from young mem while 6 were from young women who admitted to prostitution. This accounts for an HIV seropositivity rate of 2.0%+1.6% in the prostitute population. Also, one antibody-positive subject was positive for circulating HIV antigen. Seven of the seropositive individuals had no general complaints or abnormal clinical signs. The eighth subject was a 28 year old man in hospital for pneumonia.
ADA381738	Should the U.S. Direct More Law Enforcement Effort at XTC?	RAND CORP SANTA MONICA CA	Caulkins, Jonathan P.	6/1/2000	10	XD	Not available	U	A - 01	Approved for public release; distribution is unlimited.	Not available	The question has arisen as to whether this is a good time to direct additional law enforcement effort at XTC. Or, might other interventions, such as treatment and prevention, be better alternatives? One constructive way to approach this question is by stepping back and asking, for what types of drugs and at what point in an epidemic of drug use is law enforcement likely to be the preferred intervention? Then one can ask whether XTC is likely to fit that description. Levels and patterns of drug-use rise and fall over time in modest ways as do all sorts of phenomena, but drug use patterns can also change explosively. In particular, drug epidemics" can begin with low rates of use being replaced by exponential growth up to some plateau
AD0758054	Certain Conditions Which Influence the Stability of a Viral Aerosol	FOREIGN TECHNOLOGY DIV WRIGHT-PATTERSON AFB OH	Yakovleva, G. S.,Shandurin, S. B.	3/13/1973	8	FTD-HT-23-143-73	FTD	U	A - 01	Approved for public release; distribution is unlimited.	Not available	The report is concerned with the question of how humidity and temperature influence the retainability of influenza virus in an aerosol. The study of this question is of great significance also because analyses of influenza epidemics revealed a definite connection between a reduction in temperature and increase in humidity with a growth in morbidity of influenza. However, the nature of the influence of these factors has not been clarified at present. The effect of temperature and humidity on virus in an aerosol under conditions close to natural was studied.
ADA357554	Chinese Research Related to Infectious Hepatitis in the Past Decade - Communist China.	JOINT PUBLICATIONS RESEARCH SERVICE ARLINGTON VA	Not available	4/4/1960	30	JPRS-2467	FBIS	U	A - 01	Approved for public release; distribution is unlimited.	Not available	The articles in this Report are translations of selected articles from Chung-Hua Nei-K'o Tsa-chih (Chinese Journal of International Medicine) Peiping, Volume 3, Number 11. The articles are Results of Chinese Research Related to Infectious Hepatitis in the past decade, Break through the obstacles to infectious Hepatitis Research and Results of the Etiology of Infectious Hepatitis.
AD1040015	An Extensible NetLogo Model for Visualizing Message Routing Protocols	US Army Research Laboratory, Computational and Information Sciences Directorate Aberdeen Proving Ground United States	Winkler ,Robert P,Metu,Somiya	8/1/2017	22	ARL-SR-0380	Not available	U	A - 01	Approved for public release; distribution is unlimited.	Technical Report	We have developed an extensible NetLogo model for visualizing the operation of different routing protocols in the NetLogo environment. The model can accommodate a wide variety of message routing algorithms by providing methods to answer 2 questions: When 2 couriers come in contact, for each message not already shared, should this particular message be copied and transmitted to the other? If so, how many copies? To demonstrate the generalizability of the model, we present 3 different message-routing protocols: epidemic routing and the source and binary versions of Spray and Wait.
ADA224206	The Armed Forces Epidemiological Board: Its First Fifty Years, 1940-1990	CENTER OF EXCELLENCE IN MILITARY MEDICAL RESEARCH AND EDUCATION WASHINGTON DC	Woodward, Theodore E.	2/1/1990	379	Not available	CEMMRE	U	A - 01	Approved for public release; distribution is unlimited. Document partially illegible.	Not available	The cause of preventive medicine was served by the concept and formation of the Armed Forces Epidemiology Board. There were many contributors, but four men were directly responsible for the Board/s genesis. The war in Europe (1938-1940) raised the specter of epidemic diseases such as influenza, typhus fever, malaria, and yellow fever, ancient diseases that had ravaged mankind, military and civilian alike. Brigadier General James S. Simmons, MC, U. S. Army, Chief of Preventive Medicine in the Office of the Surgeon General during World War II, and his deputy, Colonel Stanhope Bayne-Jones, MC, U.S. Army, were well aware of the medical handicaps that previous military officers had faced, in particular, their inability to control infectious diseases. General Simmons conceived the idea of a board of civilian medical advisors to the military. Colonel Bayne-Jones agreed; there was an urgent need to prevent infectious diseases in the army. Their careful planning choice of civilian leaders were crucial to the success of the fledgling Board.
ADA348997	JPRS Report, Epidemiology.	JOINT PUBLICATIONS RESEARCH SERVICE ARLINGTON VA	Not available	9/28/1989	33	JPRS-TEP-89-016	XD	U	A - 01	Approved for public release; distribution is unlimited.	Not available	Partial Contents: Subsaharan Africa, AIDS, Typhoid, Death, Cholera, Tuberculosis, Epidemic Diseases, Diarrhea case, Fatal Livestock Virus, Chicken Pox, Rubella Vaccination, Medical services, Catarrhal Fevers, Measles, Mumps/

ADA192208	New Approaches to Attenuated Hepatitis a Vaccine Development: Cloning and Sequencing of Cell-Culture Adapted Viral cDNA.	NORTH CAROLINA UNIV AT CHAPEL HILL	Lemon, Stanley M.	10/13/1987	34	Not available	Not available	U	A - 01	Approved for public release; distribution is unlimited.	Annual rept. 15 Sep 86-14 Sep 87,	Hepatitis A virus (HAV) is a human picornavirus with a worldwide distribution. It poses a considerable threat to military forces of the United States due to its capacity for epidemic spread, and the fact that acute hepatitis A associated with primary infection with HAV is a protracted illness with a prolonged convalescence. No vaccine is currently available for prevention of infection with this medically important virus. Three general approaches to HAV vaccines have been considered, including development of an inactivated, cell-culture derived vaccine, an attenuated vaccine derived by extensive passage of virus in vitro, and more novel vaccines based on synthetic peptide or recombinant DNA technology. A detailed discussion of these approaches, all of which are beset with difficulties may be found in Report 1 of this contract, or in the review by Lemon. This contract has focused on understanding the molecular basis of attenuation of HAV, as such an understanding might open new approaches to development of an economic and effective HAV vaccine. The molecular mechanisms underlying either adaptation of HAV to growth in cell culture results in profound changes in the biologic characteristic of the virus and with continued passage of virus has been associated with a reduction in virulence in several different species of primates. A primary effort under support of this contract has therefore been the cloning and sequencing of the genome of a cell culture-adapted variant of HM175 strain HAV, and the identification of mutations in this virus that were associated with adaptation of this virus to growth in vitro.
ADA191301	Hemorrhagic Fever with Renal Syndrome (Korean Hemorrhagic Fever).	KOREA UNIV SEOUL COLL OF MEDICINE	Lee, Ho W.	9/1/1987	51	HFRS-1	Not available	U	A - 01	Approved for public release; distribution is unlimited.	Annual summary rept. 10 Feb 86-9 Feb 87,	Hantavirus is ubiquitous in the world but total number of reported HFRS patient in Euro-Asia is about 200,000 with 5-7% mortality annually. Hemorrhagic fever with renal syndrome (HFRS) was an important military problem since large epidemics of HFRS occurred among soldiers in the many past wars and although predominantly associated with field mice in rural areas, it is now being recognized that urban rats and laboratory rates are also reservoirs of HFRS in many parts of the world. Therefore, seroepidemiological survey of distribution of hantaviruses and surveillance of occurrence of HFRS in the world are important for prevention of this highly fatal disease. It is also important to investigate antigenic differences of strains of Hantavirus isolated from rats caught in non-endemic areas of the world because HFRS patient had never been documented in many areas despite our finding of positive rats there. A near global distribution of Hantavirus was demonstrated. HFRS patients infected with Seoul virus occurred in endemic and non-endemic ares of HFRS and the most characteristic clinical features are fever, headache, strong abdominal symptoms, hepatic dysfunction and mild renal dysfunction. Five strains of Seoul virus were isolated from urban rats caught in Hong Kong and Singapore and the strains are a little different antigenically from prototype Seoul virus 80/39 by monoclonal antibody assay. Keywords: ELISA, Bioassay; Laboratory tests; Diagnosis(Medicine).
ADA475052	Biotechnology Industry	INDUSTRIAL COLL OF THE ARMED FORCES WASHINGTON DC	Campbell, Kyle D.,Clemen, Gene,Denham, Paul,Dodson, Greg,Flanagan, Denise,Goble, Dale,Mahon, Deirdre,Martin, Joanne,Merrill, Rick,Milford, Mike	1/1/2007	31	Not available	NDU/ICAF	U	A - 01	Approved for public release; distribution is unlimited.	Final rept.	Biotechnology is a diverse and promising industry, but it is not without challenges. The impact on our lives is already being felt, and all indications point to a future of unprecedented changes. Genetically modified (GM) organisms are being used to increase crop production, bacteria to remediate contaminated areas, and even fetal calf skin to grow human soft tissues. Concurrently our nation is seeking biotechnology answers for a variety of national security issues, including the defense of biological or chemical attack and pandemic influenzas. Biotechnology is rapidly impacting multiple industries including medicine, defense, energy, and agriculture. This paper addresses four general biotechnology areas: medical, emerging technology, biodefense, and agriculture. These discussions range from personalized medicine, pandemics and vaccines to biofuels and Project BioShield. The potential economic impact of the industry is tremendous and leads directly to many of the challenges our nation will face in the future. These challenges include globalization, government regulation, ethical concerns and societal acceptance. As the biotechnology industry continues to mature, we expect to see a bright future where the benefits of biotechnology will outweigh the risks involved in its application.

ADA562841	Influenza-like Illness Surveillance on the California-Mexico Border, 2004-2009	NAVAL MEDICAL RESEARCH CENTER SILVER SPRING MD	Kammerer, Peter E.,Montiel, Sonia,Kriner, Paula,Bojorquez, letza,Ramirez, Veronica B.,Vazquez-Erlbeck, Martha,Azziz-Baumgartner, Eduardo,Blair, Patrick J.	1/1/2011	11	NHRC-11-15	NMRC/MD	U	A - 01	Approved for public release; distribution is unlimited.	Journal article	Region-spanning national borders are conducive to the migration of infectious diseases. Since 2004, the Naval Health Research Center, in concert with health officials of San Diego and Imperial counties, has collaborated with the Secretary of Health, Mexico and the US Centers for Disease Control and Prevention to conduct respiratory disease surveillance in the US-Mexico border region. Demographic and symptom information and respiratory swabs were collected from enrollees who met the case definition for influenza-like illness (ILI). Between 2004 and 2009, 1855 individuals were sampled at clinics near the US-Mexico border in California and Baja California. The most frequent pathogen identified was influenza (25% of ILI cases), with those aged 6?15 years the most frequently affected. In April 2009, a young female participant from Imperial County, California, became among the first documented cases of pandemic influenza A/H1N1. A number of other viral and bacterial respiratory pathogens were identified from submitted samples, including adenovirus, parainfluenza viruses, respiratory syncytial virus, Streptococcus pneumoniae, S. pyogenes, Haemophilus influenzae and beta-hemolytic streptococci. These findings illustrate the importance of disease surveillance in areas near national borders.
ADA265711	Emerging Infections: Microbial Threats to Health in the United States	NATIONAL ACADEMY OF SCIENCES WASHINGTON DC	Lederberg, Joshua,Shope, Robert E.,Oaks, Stanley C., Jr	1/1/1992	309	Not available	USAMRDC	U	A - 01	Approved for public release; distribution is unlimited.	Not available	Not available
ADA366075	Do Miracle Cures" Exist? - USSR -"	JOINT PUBLICATIONS RESEARCH SERVICE ARLINGTON VA	Rozhnov, V.,Rozhnova, M.	11/8/1960	8	JPRS-4170	FBIS	U	A - 01	Approved for public release; distribution is unlimited.	Not available	Not available
ADA547282	Do Frogs Get Their Kicks on Route 66? Continental U.S. Transect Reveals Spatial and Temporal Patterns of Batrachochytrium dendrobatidis Infection	NAVAL FACILITIES ENGINEERING COMMAND NORFOLK VA ATLANTIC DIV	Lannoo, Michael J.,Petersen, Christopher,Lovich, Robert E.,Nanjappa, Priya,Phillips, Christopher,Mitchell, Joseph C.,Macallister, Irene	7/21/2011	11	Not available	NAVFAC/AD	U	A - 01	Approved for public release; distribution is unlimited.	Journal article	The chytrid fungus Batrachochytrium dendrobatidis (Bd) has been devastating amphibians globally. Two general scenarios have been proposed for the nature and spread of this pathogen: Bd is an epidemic, spreading as a wave and wiping out individuals, populations, and species in its path; and Bd is endemic, widespread throughout many geographic regions on every continent except Antarctica. To explore these hypotheses, we conducted a transcontinental transect of United States Department of Defense (DoD) installations along U.S. Highway 66 from California to central Illinois, and continuing eastward to the Atlantic Seaboard along U.S. Interstate 64 (in sum from Marine Corps Base Camp Pendleton in California to Naval Air Station Oceana in Virginia). We addressed the following questions: 1) Does Bd occur in amphibian populations on protected DoD environments? 2) Is there a temporal pattern to the presence of Bd? 3) Is there a spatial pattern to the presence of Bd? and 4) In these limited human-traffic areas, is Bd acting as an epidemic (i.e., with evidence of recent introduction and/or dieoffs due to chytridiomycosis), or as an endemic (present without clinical signs of disease)? Bd was detected on 13 of the 15 bases sampled. Samples from 30 amphibian species were collected (10% of known United States? species); half (15) tested Bd positive. There was a strong temporal (seasonal) component; in total, 78.5% of all positive samples came in the first (spring/early-summer) sampling period. There was also a strong spatial component -- the eleven temperate DoD installations had higher prevalences of Bd infection (20.8%) than the four arid (.60 mm annual precipitation) bases (8.5%). These data support the conclusion that Bd is now widespread, and promote the idea that Bd can today be considered endemic across much of North America, extending from coast-to-coast, with the exception of remote pockets of naive populations.

ADA536473	Mexico and the Cocaine Epidemic: The New Colombia or a New Problem	NAVAL POSTGRADUATE SCHOOL MONTEREY CA	Michel, Kenneth	12/1/2010	127	Not available	NPS	U	A - 01	Approved for public release; distribution is unlimited.	Master's thesis	Recently, there has been an increasing amount of attention paid to Mexico and its struggle with drug cartels. The drug war in Mexico has cost the lives of 28,000 people since 2006, leading to a growing concern that Mexico may become a narco-state. Although the situation in Mexico seems uncontrollable, this is not the first time drug trafficking organizations (DTO) have threatened the livelihood of a state. Colombia from the 1980s through the mid- 1990s was dominated by cartels that ruled with violence and almost brought Colombia to its knees. Colombia today continues with its fight against DTOs; however, the security of the state is no longer directly threatened by cartels. This thesis will discuss the history of the cocaine trade and explain why Mexico was able to supplant Colombia as the cocaine epicenter. Likewise, we will discuss the U.S. strategy to combat DTOs and identify shortcomings in order to implement a better strategy to defeat the cartels. We have seen an increase in violence in Mexico and it is critical for the U.S. to act in order to prevent the U.S. homeland from coming under siege by the bloody Mexican drug war fueled by the cartels.
ADA588783	Social Media Influencing C2 in Underdeveloped and Degraded Operational Environments	EVIDENCE BASED RESEARCH INC MCLEAN VA	Hayes, Margaret D.,Manso, Barbara,Hayes, Richard E.,Manso, Marco	6/1/2013	54	Not available	XD	U	A - 01	Approved for public release; distribution is unlimited.	Conference paper	The ubiquity of online and mobile technologies across the World and their rapid adoption by citizens in the face of emergencies and crises is rapidly changing the C2 operational environment for responses to natural disasters, terrorist threats, and social upheavals. Equipped with sophisticated smartphones, citizens embrace their role as the first in situ sensors, displaying an active producer-consumer behavior by capturing high-definition images and videos, sharing the contents with others, and commenting on information posted by others. Similarly, when information is scarce, social media have been elected by citizens as valuable instruments for identifying and locating victims, assisting search and rescue operations, accessing crisis-related information on open community-based repositories, and influencing specific cliques and groups in society, especially in the organization and coordination of mob protests. This new digital social arena has been brought to C2 operational environments and organizations are under pressure to understand and cope with this new reality. In this paper, we analyze documented case studies of emergency and crisis events characterized by underdeveloped and degraded operational environments that involved strong military or security-related intervention and generated significant social media dynamics. Ranging from natural disasters to terrorist events to social turmoil and upheavals, these cases highlight social media as a fundamental information source in the support of actionable Intelligence and effective connecting and collaboration.
ADA447968	Phenotypic Profiles of Enterotoxigenic Escherichia coli Associated With Early Childhood Diarrhea in Rural Egypt	NAVAL MEDICAL RESEARCH UNIT NO 3 FPO NEW YORK 09527	Shaheen, Hind I.,Khalil, Sami B.,Rao, Malla R.,Elyazeed, Remo A.,Wierzba, Thomas F.,Peruski, Jr., Leonard F.,Putnam, Shannon,Navarro, Armando,Morsy, Badria Z.,Cravioto, Alejandro,Dlemens, John D.,Svennerholm, Ann-Mari,Savarino, Stephen J.	12/1/2004	9	Not available	NAMRU-3	U	A - 01	Approved for public release; distribution is unlimited.	Journal article	Enterotoxigenic Escherichia coli (ETEC) causes substantial diarrheal morbidity and mortality in young children in countries with limited resources. We determined the phenotypic profiles of 915 ETEC diarrheal isolates derived from Egyptian children under 3 years of age who participated in a 3-year population-based study. For each strain, we ascertained enterotoxin and colonization factor (CF) expression, the O:H serotype, and antimicrobial susceptibility. Sixty-one percent of the strains expressed heat-stable enterotoxin (ST) only, 26% expressed heat-labile enterotoxin (LT) alone, and 12% expressed both toxins. The most common CF phenotypes were colonization factor antigen I (CFA/I) (10%), coli surface antigen 6 (CS6) (9%), CS14 (6%), and CS1 plus CS3 (4%). Fifty-nine percent of the strains did not express any of the 12 CFs included in our test panel. Resistance of ETEC strains to ampicillin (63%), trimethoprim-sulfamethoxazole (52%), and tetracycline (43%) was common, while resistance to quinolone antibiotics was rarely detected. As for the distribution of observed serotypes, there was an unusually wide diversity of O antigens and H types represented among the 915 ETEC strains. The most commonly recognized composite ETEC phenotypes were ST CS14 O78:H18 (4%), ST (or LTST) CFA/I O128:H12 (3%), ST CS1 CS3 O6:H16 (2%), and ST CFA/I O153:H45 (1.5%). Temporal plots of diarrheal episodes associated with ETEC strains bearing common composite phenotypes were consistent with discrete community outbreaks either within a single or over successive warm seasons. These data suggest that a proportion of the disease that is endemic to young children in rural Egypt represents the confluence of small epidemics by clonally related ETEC strains that are transiently introduced or that persist in a community reservoir.

ADA417598	Policies for Biodefense Revisited: The Prioritized Vaccination Process for Smallpox	NAVAL POSTGRADUATE SCHOOL MONTEREY CA DEPT OF OPERATIONS RESEARCH	Kress, Moshe	9/1/2003	35	NPS-OR-03-008	NPS-OR	U	A - 01	Approved for public release; distribution is unlimited.	Technical rept.	Handling bioterror events that involve contagious agents is a major concern in the war against terror, and is a cause for debate among policymakers about the best response policy. At the core of this debate stands the question which of the two post-event policies to adopt: mass vaccination--where maximum vaccination capacity is utilized to uniformly inoculate the entire population, or trace (also called ring or targeted) vaccination--where mass vaccination capabilities are traded off with tracing capabilities to selectively inoculate only contacts (or suspected contacts) of infective individuals. We present a dynamic epidemic-intervention model that expands previous models by capturing some additional key features of the situation and by generalizing some assumptions regarding the probability distributions of inter-temporal parameters. The model comprises a set of difference equations. The model is implemented to analyze alternative response policies. It is shown that a mixture of mass and trace vaccination policies-the prioritized vaccination policy-is more effective than either of the two aforementioned policies.
ADA614670	Dengue Virus in Sub-tropical Northern and Central Viet Nam: Population Immunity and Climate Shape Patterns of Viral Invasion and Maintenance	ARMY INST OF SURGICAL RESEARCH FORT SAM HOUSTON TX	Rabaa, Maia A.,Simmons, Cameron P.,Fox, Annette,Le, Mai Q.,Nguyen,, Thuy T.,Le, Hai Y.,Gibbons, Robert V.,Nguyen,, Xuyen T.,Holmes, Edward C.,Aaskov, John G.	12/5/2013	13	Not available	USAISR	U	A - 01	Approved for public release; distribution is unlimited.	Journal article	Dengue virus transmission occurs in both epidemic and endemic cycles across tropical and sub-tropical regions of the world. Incidence is particularly high in much of Southeast Asia, where hyperendemic transmission plagues both urban and rural populations. However, endemicity has not been established in some areas with climates that may not support yearround viral transmission. An understanding of how dengue viruses (DENV) enter these environments and whether the viruses persist in inapparent local transmission cycles is central to understanding how dengue emerges in areas at the margins of endemic transmission. Dengue is highly endemic in tropical southern Vietnam, while increasingly large seasonal epidemics have occurred in northern Viet Nam over the last decade. We have investigated the spread of DENV-1 throughout Vietnam to determine the routes by which the virus enters northern and central regions of the country. Phylogeographic analysis of 1,765 envelope (E) gene sequences from Southeast Asia revealed frequent movement of DENV between neighboring human populations and strong local clustering of viral lineages. Long-distance migration of DENV between human population centers also occurred regularly and on short time-scales, indicating human-mediated viral invasion into northern Vietnam. Human populations in southern Vietnam were found to be the primary source of DENV circulating throughout the country, while central and northern Vietnam acted as sink populations, likely due to reduced connectedness to other populations in the case of the central regions and to the influence of temperature variability on DENV replication and vector survival and competence in the north. Finally, phylogeographic analyses suggested that viral movement follows a gravity model and indicates that population immunity and physical and economic connections between populations may play important roles in shaping patterns of DENV transmission.
ADA355767	Intervention to Decrease Risk for Sexually Transmitted Diseases (STDs) and the Associated Negative Reproductive Health Outcomes in Women Aboard Ships: A Biopsychosocial Approach.	CALIFORNIA UNIV SAN FRANCISCO	Shafer, Mary A.	9/1/1998	212	Not available	USAMRMC	U	A - 01	Approved for public release; distribution is unlimited.	Annual rept.,	Unintended pregnancies (UIPs) and STDs with their sequelae of ectopic pregnancy continue to be epidemic among active duty enlisted women. Such reproductive health problems result in major morbidity among affected women as well as posing a potential threat to combat readiness. UIPs and STDs result from complex interactions between biological and behavioral factors in military women. The ultimate control in preventing such morbidities must rely on both behavioral and biologic strategies. The primary aim of the project is to develop, implement and evaluate an intervention which emphasizes correct information, motivation and behavioral skills building (IMB Model) coupled with non-invasive screening using urine-based amplified DNA techniques to detect C. trachomatis and N. gonorrhoeae and urine based pregnancy testing. A pre-test, post-test experimental design was employed to evaluate the impact of the behavioral intervention on the experimental group using both self-report questionnaires (UIP/STD psychosocial and behavioral risk factors) and results from the STD and pregnancy screening tests as measures. The control intervention will consist of a prevention program focusing on nutrition breast cancer, fitness and injury prevention. Questionnaires and urine testing will be done at pre-test, mid-study and post-test 6-12 months later. Subjects will include junior enlisted Marine women with N=100 in the experimental group and N=100 in the control group.

AD0780960	Investigation of a Dengue Fever Epidemic in Colombia.	PAN AMERICAN HEALTH ORGANIZATION WASHINGTON D C	Horwitz, Abraham	5/1/1974	19	Not available	Not available	U	A - 01	Approved for public release; distribution is unlimited.	Final rept. 1 Jun 72-31 Dec 73,	During 1971-72 an epidemic of dengue fever occurred in Colombia, S. America. The magnitude, geographic extent, and epidemiological progression of the epidemic is described. Over 400,000 persons in a population of 2.1 million were estimated to have suffered dengue during a 12 months period. The virus, recovered from both man and mosquitoes, was identified as dengue serotype 2. The epidemic was clearly related to a re-infestation of the coastal area with A. aegypti mosquitoes. Surveillance for both the disease and the mosquito, supported in part by the grant, was used to guide control activities. (Modified author abstract)
ADA470528	High-Fidelity Modeling of Computer Network Worms	GEORGIA INST OF TECH ATLANTA GA CENTER FOR EXPERIMENTAL RESEARCH IN COMPUTER SCIENCE	Perumalla, Kalyan S., Sundaragopalan, Srikanth	6/22/2004	12	GIT-CERCS-04-23	DARPA	U	A - 01	Approved for public release; distribution is unlimited.	Technical rept.	Abstract modeling, such as using epidemic models, has been the general method of choice for understanding and analyzing the high-level effects of worms. However, high-fidelity models, such as packet-level models, are indispensable for moving beyond aggregate effects, to capture finer nuances and complexities associated with known and future worms in realistic network environments. Here, we first identify the spectrum of available alternatives for worm modeling, and classify them according to their scalability and fidelity. Among them, we focus on three high-fidelity methods for modeling of worms, and study their effectiveness with respect to scalability. Employing these methods, we are then able to, respectively, achieve some of the largest packet-level simulations of worm models to date; implant and attack actual worm monitoring/defense installations inside large simulated networks; and identify a workaround for real-time requirement that fundamentally constrains worm modeling at the highest fidelity levels.
ADA485701	HIV/AIDS: A Nontraditional Security Threat for AFRICOM	ARMY COMMAND AND GENERAL STAFF COLL FORT LEAVENWORTH KS SCHOOL OF ADVANCED MILITARY STUDIES	Letcher, Kenneth W.	5/22/2008	68	Not available	Not available	U	A - 01	Approved for public release; distribution is unlimited.	Monograph	The purpose of this study is to analyze the effectiveness of the militaries of southern Africa given the nature of the HIV/AIDS epidemic and the complexities through which U.S. Africa Command must navigate. The study will draw on research of the HIV/AIDS epidemic and its effect on the effectiveness of the militaries of southern Africa, leaning heavily on the research of Stefan Elbe and a small cadre of associated scholars that focused their academic attention on this specific issue. Prior to the discussion of the effect the epidemic has had on these militaries, the study discusses military effectiveness, utilizing the model of effectiveness prescribed by Allan Millett, Williamson Murray, and Kenneth Watman in their article The Effectiveness of Military Organizations." The monograph then analyzes HIV/AIDS as a security issue
ADA244721	Some Problems in Density Estimation, Modeling and Time Series Analysis	RICE UNIV HOUSTON TX DEPT OF STATISTICS	Thompson, James R.	9/26/1991	7	ARO-26108.1-MA	26108.1-MA, ARO	U	A - 01	Approved for public release; distribution is unlimited.	Final rept. 1 Aug 1988-31 Jul 1991,	Work in density estimation resampling has been carried out with Dr. Malcolm Taylor of BRL. Simulation based estimation has been applied to problems ranging from marketing to oncology. Two doctoral dissertations were written on the subject of nonparametric regression. The effects of more active public health intervention to halt the AIDS epidemic were considered. New algorithms for density estimation in several dimensions were developed. The estimation of the parameters characterizing a time series was pursued using both frequency and time domain techniques. The possibility that chaos is an artifact of inappropriate modeling was investigated.
ADA429747	Microevolution and History of the Plague Bacillus, Yersinia pestis	ARMY MEDICAL RESEARCH INST OF INFECTIOUS DISEASES FORT DETRICK MD	Achtman, Mark, Morelli, Giovanna, Zhu, Peixuan, Wirth, Thierry, Diehl, Ines	12/21/2004	7	Not available	USAMRIID	U	A - 01	Approved for public release; distribution is unlimited. Availability: This document is not available from DTIC in microfiche.	Journal article	The association of historical plague pandemics with Yersinia pestis remains controversial, partly because the evolutionary history of this largely monomorphic bacterium was unknown. The microevolution of Y. pestis was therefore investigated by three different multilocus molecular methods, targeting genomewide synonymous SNPs, variation in number of tandem repeats, and insertion of IS100 insertion elements. Eight populations were recognized by the three methods, and we propose an evolutionary tree for these populations, rooted on Yersinia pseudotuberculosis. The tree invokes microevolution over millennia, during which enzootic pestoides isolates evolved. This initial phase was followed by a binary split 6,500 years ago, which led to populations that are more frequently associated with human disease. These populations do not correspond directly to classical biovars that are based on phenotypic properties. Thus, we recommend that henceforth groupings should be based on molecular signatures. The age of Y. pestis inferred here is compatible with the dates of historical pandemic plague. However, it is premature to infer an association between any modern molecular grouping and a particular pandemic wave that occurred before the 20th century.

ADA0845949	Psittacosis and Ornithosis	ARMY BIOLOGICAL LABS FREDERICK MD	Vieuchange, Jean	7/1/1968	28	TRANS-391	ABL/MD	U	A - 01	Approved for public release; distribution is unlimited. Document partially illegible.	Not available	The disease of parrots, psittacosis is present in animals as generalized infections with a predominance of digestive symptoms. Transmissible to man it takes on the characters of an infection of a typhoid type, during which in general pulmonary complications set in. One always finds at the beginning of human epidemics a contact with sick birds. It was essentially this epidemiological character which allowed the clinical identification of the disease. The experimental research taken up as a consequence of the great pandemic of 1929-1930 resulted in a complete revision of our knowledge of ediology of psittacosis. It was demonstrated that the agent of this disease was an ultravirus.
ADA036056	Concerning the Mode of Infection in Epidemic Encephalitis,	ARMY MEDICAL RESEARCH INST OF INFECTIOUS DISEASES FREDERICK MD	Inada,R.	2/22/1977	9	USAMRIID-MUL-0529	Not available	U	A - 01	Approved for public release; distribution is unlimited.	Not available	Two hypotheses exist on the mode of infection in epidemic encephalitis: infection by the intranasal (IN) route and by the beit of a mosquito. Experimental studies carried out on the mode of infection of epidemic encephalitis are discussed.
ADA510888	Redefining HHS International Response: Challenges and Recommendations for Interagency Partnerships	Not available	Bovill, Maria E.	4/1/2009	32	Not available	HHS	U	A - 01	Approved for public release; distribution is unlimited.	Civilian Research Paper, Aug 2008-Aug 2009	The world's population is growing by approximately 60 million people annually, estimated to reach eight billion by 2030; 95 percent of the increase is in the developing world. Where economic growth fails to support population increases, the potential for instability or war will be considerable. Lessons learned from stability operations (SO) in Afghanistan and Iraq have resulted in transformed U.S. national security strategies for an increased whole of government" approach. In 2006
ADA019033	Clinical and Epidemiological Studies on Rickettsial Infections in Ethiopia.	MARYLAND UNIV BALTIMORE DEPT OF MICROBIOLOGY	Wisseman,Charles L. , Jr	10/1/1975	45	Not available	Not available	U	A - 01	Approved for public release; distribution is unlimited.	Annual rept.,	Contents: Ethiopian Studies: The Ecology of Murine Typhus -- Areas and habitats studied, Mammals collected, Ectoparasites, Serological data on murine typhus infection in rodents, R. mooseri infection in fleas, and R. mooseri infection in ticks, mites, and lice; The Ecology of Spotted Fever and Other Rickettsial Infections -- Infections of the spotted fever group, and Chigger-borne rickettsiosis; Implications of the Zoogeographical Findings; and Clinical Studies on Epidemic Typhus; Studies Undertaken Originally when in Cairo, Egypt -- Background; Results; and Extrapolation; Summary of Progress Report -- Field Studies on Rickettsial Infections, and Clinical Studies on Epidemic Typhus.
ADA529132	Genome Sequences of Human Adenovirus 14 Isolates from Mild Respiratory Cases and a Fatal Pneumonia, Isolated during 2006-2007 Epidemics in North America	WALTER REED ARMY INST OF RESEARCH SILVER SPRING MD	Houng, Huo-Shu H.,Gong, Heping,Kajon, Adriana E.,Jones, Morris S.,Kuschner, Robert A.,Lyons, Arthur,Lott, Lisa,Lin, Kuei-Hsiang,Metzgar, David	1/1/2010	9	Not available	WRAIR/MD	U	A - 01	Approved for public release; distribution is unlimited.	Journal article	Human adenovirus 14 (HAdV-14) is a recognized causative agent of epidemic febrile respiratory illness (FRI). Last reported in Eurasia in 1963, this virus has since been conspicuously absent in broad surveys, and was never isolated in North America despite inclusion of specific tests for this serotype in surveillance methods. In 2006 and 2007, this virus suddenly emerged in North America, causing high attack rate epidemics of FRI and, in some cases, severe pneumonias and occasional fatalities. Some outbreaks have been relatively mild, with low rates of progression beyond uncomplicated FRI, while other outbreaks have involved high rates of more serious outcomes. Methodology and Findings: In this paper we present the complete genomic sequence of this emerging pathogen, and compare genomic sequences of isolates from both mild and severe outbreaks. We also compare the genome sequences of the recent isolates with those of the prototype HAdV-14 that circulated in Eurasia 30 years ago and the closely related sequence of HAdV-11a, which has been circulating in southeast Asia. Conclusions: The data suggest that the currently circulating strain of HAdV-14 is closely related to the historically recognized prototype throughout its genome, though it does display a couple of potentially functional mutations in the fiber knob and E1A genes. There are no polymorphisms that suggest an obvious explanation for the divergence in severity between outbreak events, suggesting that differences in outcome are more likely environmental or host determined rather than viral genetics.
ADA536870	Diagnosis of 2009 Pandemic Influenza A (pH1N1) and Seasonal Influenza Using Rapid Influenza Antigen Tests, San Antonio, Texas, April-June 2009	SCHOOL OF AEROSPACE MEDICINE BROOKS AFB TX	Lucas, Pauline M.,Morgan, Oliver W.,Gibbons, Thomas F.,Guerrero, Alicia C.,Maupin, Genny M.,Butler, Jenny L.,Canas, Linda C.,Fonseca, Vincent P.,Olsen, Sonja J.,MacIntosh, Victor H.	1/1/2009	9	Not available	USAFSAM	U	A - 01	Approved for public release; distribution is unlimited.	Journal article	Clinicians frequently use influenza rapid antigen tests for diagnostic testing. We tested nasal wash samples from 1 April to 7 June 2009 from 1538 patients using the QuickVue Influenza A1B (Quidel) rapid influenza antigen test and compared the results with real-time reverse transcription polymerase chain reaction (rRTPCR) assay (gold standard). The prevalence of 2009 pandemic influenza A (pH1N1) was 1.98%, seasonal influenza type A .87%, and seasonal influenza type B 2.07%. The sensitivity and specificity of the rapid test for pH1N1 was 20% (95% CI, 8-39) and 99% (95% CI, 98-99), for seasonal influenza type A 15% (95% CI, 2-45) and 99% (95% CI, 98-99), and for influenza type B was 31% (95% CI, 9-61) and 99% (95% CI, 98-99.7). Rapid influenza antigen tests were of limited use at a time when the prevalence of pH1N1 and seasonal influenza in the United States was low. Clinicians should instead rely on clinical impression and laboratory diagnosis by rRT-PCR.



ADA556984	Double-Edged Innovations: Preventing the Misuse of Emerging Biological/Chemical Technologies	MONTEREY INST OF INTERNATIONAL STUDIES CA JAMES MARTIN CENTER FOR NONPROLIFERATION STUDIES	Tucker, Jonathan B.,Flanagan, Meg	7/1/2010	345	ASCO-2010 018	DTRA/ASCO	U	A - 01	Approved for public release; distribution is unlimited.	Not available	Several areas of rapid technical innovation, such as biotechnology, nanotechnology, and neuroscience, offer great promise for human health and welfare but could also be exploited for the development and production of biological or chemical weapons. Such technologies pose a dual-use dilemma" because it is difficult to prevent misuse without foregoing beneficial applications. Indeed
ADA540653	Old Glory and the Jolly Roger: The Cultural Constraints and Strategic Imperatives of Modern Piracy	AIR UNIV MAXWELL AFB AL SCHOOL OF ADVANCED AIR AND SPACE STUDIES	Birch, Paul R.	6/1/2009	112	Not available	AU-SAASS	U	A - 01	Approved for public release; distribution is unlimited.	Master's thesis	This thesis discusses piracy on the open seas. It describes acts of piracy, puts the practice into historical perspective, and shows how a recent surge in maritime piracy incidents differs from other maritime piracy afflicting the world's oceans at the turn of the twentyfirst century. This is half of the reason for writing. The second purpose for is to examine the US military response to the dramatic increase in piracy near Somalia that occurred in 2008. The thesis examines the US response through the theoretical lenses of strategic culture and structural realism. These theories seldom appear alongside each other in security studies literature; their juxtaposition explains the US behavior toward the contemporary African piracy epidemic and provides a framework for examining other national security issues. This thesis concludes that although certain national security elites push US strategic culture toward interventionist or isolationist extremes, some world events elicit foregone responses best described by the ideas of structural realism. Tacit realization by national security actors that these events exist in spite of what elite groups profess or desire in turn defines strategic culture in a fundamentally different way. Given its place in the existing world order, the United States had little choice but to respond to piracy, even though its strategic preference was to ignore the problem. The valuable lesson from piracy represents in microcosm many problems of national strategy. If US cultural preference is again at odds with a strategic imperative to use force, and elites indulge the former, the nation may forfeit its structural role as the world's existing hegemon. This is historically significant, as ceding the role of hegemon at this time would be a voluntary act, not forced by a stronger nation or an altered balance of power. The United States would become the first suAlthough US foreign
ADA551032	The Effect of the Assessment of Recruit Motivation and Strength (ARMS) Program on Army Accessions and Attrition	RAND ARROYO CENTER SANTA MONICA CA	Loughran, David S.,Orvis, Bruce R.	1/1/2011	80	Not available	DA	U	A - 01	Approved for public release; distribution is unlimited.	Technical rept.	In February 2005, the U.S. Army allowed six Military Entrance Processing Station (MEPS) locations Atlanta, Buffalo, Chicago, Sacramento, San Antonio, and San Diego to enlist Army applicants who did not meet applicable weight-for-height and body fat percentage standards but who passed a test known as the Assessment of Recruit Motivation and Strength (ARMS) test.1 ARMS has two components: a step test and a pushup test (initially, it also had a lift component). Successfully completing these tests is meant to indicate that a recruit has the physical and motivational endurance needed to serve in the Army. The Army expanded the use of the ARMS test to eight additional MEPS in February 2006 and to the remaining 51 MEPS in April 2006. The decision to allow ARMS waivers nationwide was made in a difficult recruiting environment and at a time when the Army was seeking to grow active-duty end strength. The decision was also made with the knowledge that America s obesity epidemic was adversely affecting the supply of eligible recruits and with the belief that ARMS complements existing physical fitness tests used to identify individuals who will and will not fare well in the military. According to data available from the Military Entrance Processing Command, between 1988 and 2007, the mean body mass index (BMI) of Army male applicants increased from 23.8 to 24.9, and the mean BMI of female applicants increased from 22.3 to 23.9 (Figures S.1 and S.2). Even-larger increases in BMI are apparent among the heaviest applicants. For example, BMI at the 75th percentile of the applicant BMI distribution increased from 26.1 to 27.7 for males and from 23.8 to 25.9 for females. BMI in the overall U.S. youth population increased by even more during this period (Asch et al., 2009). The Army granted waivers to overweight and over body fat applicants who passed the ARMS test, hoping that this would increase enlistments without adversely affecting attrition and other measures of recruit readiness

AD0474990	EPIDEMIOLOGICAL AND GENETICAL STUDY ON THE DRUG-RESISTANCE OF SHIGELLAE AND STAPHYLOCOCCI.	GUNMA UNIV MAEBASHI (JAPAN)	Mitsuhashi, Susumu	5/14/1965	4	ARDG(FE)-J-183	J-183	U	A - 01	Approved for public release; distribution is unlimited.	Final rept. no. 1, 15 May 64-14 May 65,	The strains of Staphylococcus aureus were collected from the in-patients in the 17 hospitals dispersed geographically in Japan. According to the determination of their drug-resistance and phage typing patterns, it was found that the multiple resistance and restricted phage type were predominant in the epidemic strains of St. aureus. There are two types in the degree of drug-resistance, i.e., high- and meso-resistance and the degree of resistance is extremely high in the multiple resistant strains carrying TC resistance. Three types of the resistance to macrolide antibiotics were presented. By the artificial elimination and transductional analysis, it was concluded that the determinants of penicillinase production and of the resistance to macrolide antibiotics are located together on a single genetic element. (Author)
ADA493275	Exploration of the Effectiveness of Social Distancing on Respiratory Pathogen Transmission Implicates Environmental Contributions	NAVAL HEALTH RESEARCH CENTER SAN DIEGO CA DEPT OF RESPIRATORY DISEASE RESEARCH	Broderick, Michael P.,Hansen, Christian J.,Russell, Kevin R.	9/1/2008	9	NHRC-08-02	NMRC/MD	U	A - 01	Approved for public release; distribution is unlimited.	Major article	Respiratory pathogen transmission is multifactoral with person-to-person aerosolized fomite and environmental contribution is usually difficult to determine the effect of each of these on disease transmission dynamics and on interventions. The high controllable military recruit training environment is an ideal setting for further exploration and understanding of these dynamic respiratory illness (FRI) rates consistently hover at epidemic levels. The living space population size introduction of potent individuals and pathogen environmental burden in a military recruit training environment were measured relative to FRI rat not affected by closing distinct populations to potentially infectious convalescents. A positive association was found between FRI rates. We also found that the units and the local medical clinic were heavily environmentally contaminated with adenovirus imply that the endemic source of the pathogen is primarily environmental rather than person to person but population size rates by maintaining both the environmental reservoir and opportunities for person-to-person transmission. Continued diligence environmental sources in civilian populations is warranted and it is suggested that the rationale and strategies for social distance sources into account.
ADP007197	Some Results in the Simulation and Analysis of the Shape of Spread of Epidemics on a Grid,	HERIOT-WATT UNIV EDINBURGH (UNITED KINGDOM)	Lloyd, Michael	1/1/1992	4	Not available	Not available	U	A - 01	Approved for public release; distribution is unlimited.	Not available	Models concerned with the spatial features of epidemic spread are often defined in terms of a nearest-neighbour grid network (Mollison and Kuulasmaa 1985). It is strongly conjectured, and can be proved in certain cases (eg Cox and Durrett 1988), that the infected area has (asymptotically) a well-defined shape. The present work concerns computer analysis of the shape of spread of a discrete-time single-parameter infection process on an eight neighbour lattice. Data from such simulations can be fitted with a particular group of three parameters which reveal features of the shape of the expanding epidemic.
ADA424300	Potential Influenza Effects on Military Populations	INSTITUTE FOR DEFENSE ANALYSES ALEXANDRIA VA	Bombardt, John N., Jr,Brown, Heidi E.	12/1/2003	106	IDA-P-3786,IDA/HQ-03-001931	03-001931,JCS	U	A - 01	Approved for public release; distribution is unlimited.	Not available	This paper begins with a historical review of the 1918 influenza pandemic as it affected military populations and operations. Our review then serves as a point of departure for the analytical reconstruction of certain influenza epidemics in stateside training camps and overseas units of the American Expeditionary Forces (AEF) in World War I. The main quantitative thrusts are to (a) derive time-varying rates of influenza transmission in unstructured and structured historical military populations and (b) assess potential natural or unnatural influenza effects on modern military populations. The explosiveness and severity of 1918 influenza epidemics in military populations obstructed the implementation of even rudimentary medical countermeasures (patient isolation, supportive care and quarantine). Neither a vaccine nor drugs were available then to prevent influenza, alter its natural course and deal with sequelae.
ADA400319	Collective Behaviors: Mass Panic and Outbreaks of Multiple Unexplained Symptoms	ARMY MEDICAL RESEARCH INST OF INFECTIOUS DISEASES FORT DETRICK MD	Pastel, Ross H.	2/20/2002	4	Not available	USAMRIID	U	A - 01	Approved for public release; distribution is unlimited.	Not available	The general public, the mass media, and many government officials believe that the use of weapons of mass destruction (WMD) will inevitably lead to mass panic and/or mass hysteria. However, studies of disasters and wars show that disorganized flight in the presence of a real or perceived danger (i.e., mass panic) is rare. On the other hand, in a real or perceived WMD scenario, outbreaks of multiple unexplained symptoms (i.e., mass psychogenic illness, mass sociogenic illness, mass hysteria, or epidemic hysteria) may be prevalent. Many of the symptoms (fatigue, nausea, vomiting, headache, dizziness/lightheadedness, and anorexia) are common in combat and after toxic chemical exposure, chemical weapon exposure, prodromal infectious illness, and acute radiation sickness.

AD0759580	Results of the All-Union Congress of Epidemiologists, Microbiologists, and Specialists in Infectious Diseases (15th).	ARMY FOREIGN SCIENCE AND TECHNOLOGY CENTER CHARLOTTESVILLE VA	Not available	2/14/1973	6	FSTC-HT-23-1608-72	Not available	U	A - 01	Approved for public release; distribution is unlimited.	Not available	The congress stipulated for the next few years the following basic directions for scientific-research activity: The improvement of systems of obtaining, transmitting and analyzing data concerning infectious illnesses and measures used in combating them, on the basis of utilizing modern means of communication and computer equipment; deep and systematic study of epidemiological conjunctures of the USSR with purposes of scientific establishment of complex plans for preventive and anti-epidemic measures and epidemiological prognosis; further growth of virology both in the region of working on the problem of interrelation of the virus and the cell, and also in the region of immunization prophylactics and chemical prophylactics; the study of the morphology and physiology of pathogenic and conditionally pathogenic microorganisms and questions of their taxonomy; improvement of clinical and laboratory methods of diagnostics of infectious diseases.
ADM002177	DTIC Review: Pandemics. Volume 10, Number 2 (CD-ROM)	DEFENSE TECHNICAL INFORMATION CENTER FORT BELVOIR VA	Not available	6/1/2009	1	DTIC-BR-2009/06	DTIC/FB	U	A - 01	Approved for public release; distribution is unlimited.	Not available	ELECTRONIC FILE CHARACTERISTICS: 149 files; Adobe Acrobat (.PDF) and HTML. PHYSICAL DESCRIPTION: 1 CD-ROM; 4 3/4 in.; 333 MB. ABSTRACT: The fear of worldwide pandemics has intensified in recent years. The world has become hot and crowded, travel is relatively easy and cheap and interaction between people, animals, plants and the micro-organisms they carry is higher than any time in the past. Much of this activity is of questionable legitimacy or outright illegal, and thus outside the control of health authorities. Then there is the added threat of bioterrorism. Even tools developed to address the threat, like bioengineering and nanotechnology, often carry their own risk. Dealing with this threat requires new treatments, an improved medical infrastructure and the ability to communicate essential information to the public. The DTIC (registered trademark) Review is compiled from recent technical reports in DTIC's database, and the selected documents and bibliography are representative of information available in DTIC's extensive collection. Additional references, including electronic resources, can be found at the end of the volume.
AD1028592	Deterministic and Stochastic Models for Recurrent Epidemics	UNIVERSITY OF MANCHESTER MANCHESTER United Kingdom	Bartlett,M. S.	1/1/1956	30	Not available	Not available	U	A - 01	Approved for public release; distribution is unlimited.	Conference paper	
ADA489742	Obesity and Obstructive Sleep Apnea: Or is it OSA and Obesity?	ARMY RESEARCH INST OF ENVIRONMENTAL MEDICINE NATICK MA THERMAL AND MOUNTAIN MEDICINE DIVISION	Carter, R.,Watenpugh, D. E.	1/1/2008	8	Not available	USARIEM/TMMD	U	A - 01	Approved for public release; distribution is unlimited.	Journal article	Obstructive sleep apnea (OSA) consists of repetitive choking spells due to sleep-induced reduction of upper airway muscle tone. Millions of adults and children live unaware of this condition, which can have a profound affect on their health and quality of life. Obesity, gender, genetic, and hormonal factors mediate risk for OSA and interact in a multifaceted manner in the pathogenesis of this disease. Obesity is the most established and primary risk factor given that body mass index, visceral fat, and neck circumference are major predictors in the clinical expression of OSA. Many studies have and their sequelae with shown weight loss or gain significantly impacts OSA severity. More recently, accumulating evidence indicates OSA promotes weight gain, obesity, and type II diabetes in a variety of ways, such that obesity and OSA form multiple interleaved vicious cycles. Thus, creative strategies to increase physical activity, improve diet, and otherwise facilitate weight management become particularly vital given the epidemics of obesity and OSA in the United States. In this regard, the American College of Sports Medicine recently launched the Exercise is Medicine (initiative exerciseismedicine.org). In the future, medications may emerge to treat obesity, OSA, and their sequelae with minimal side effects. However, there are effective ways to approach these problems now without waiting for the magic pill""
AD0833520	STAPHYLOCOCCUS EPIDEMIC WITH A STRAIN OF THE LYSIS FORM 81 AT A SURGICAL WARD	ARMY BIOLOGICAL LABS FREDERICK MD	Guenther-Haack, Annelore,Sprossig, Martin	5/1/1966	10	TRANS-1752	ABL/MD	U	A - 01	Approved for public release; distribution is unlimited.	Not available	A staphylococcus epidemic which concerned seven patients is described, which occurred at a surgical ward. A Staph. aureus with the lysis form 81 (RTD) was discovered to be the source of the epidemic. The epidemic had been started, almost certainly, by a patient who came to the ward with a furunculosis.

ADA509841	Interrogation of Detainees: Requirements of the Detainee Treatment Act	LIBRARY OF CONGRESS WASHINGTON DC CONGRESSIONAL RESEARCH SERVICE	Garcia, Michael J.	8/26/2009		CRS-RL33655	CRS/DC	U	A - 01	Approved for public release; distribution is unlimited.	Congressional rept.	U.S. treatment of enemy combatants and terrorist suspects captured in Afghanistan, Iraq, and other locations has been a subject of long-standing debate, including whether such treatment complies with U.S. statutes and treaties such as the 1949 Geneva Conventions and the U.N. Convention Against Torture (CAT). In response to this controversy, Congress approved additional guidelines concerning the treatment of detainees via the Detainee Treatment Act (DTA), which was enacted pursuant to both the Department of Defense, Emergency Supplemental Appropriations to Address Hurricanes in the Gulf of Mexico, and Pandemic Influenza Act, 2006 (P.L. 109-148, Title X), and the National Defense Authorization Act for FY2006 (P.L. 109-163, Title XIV). Among other things, the DTA contains provisions that (1) require Department of Defense (DOD) personnel to employ United States Army Field Manual guidelines while interrogating detainees, and (2) prohibit the cruel
ADA494436	Molecular Determinants of Estrogen Receptor Alpha Stability	DUKE UNIV DURHAM NC	DuSell, Carolyn	7/1/2008	11	Not available	USAMRMC	U	A - 01	Approved for public release; distribution is unlimited.	Annual summary rept. 1 Jul 2007-30 Jun 2008	We have identified a novel endogenous ligand for the estrogen receptor, that being 27-hydroxycholesterol (27HC). 27HC mimics the effects of estrogen when assayed on multiple endpoints, including target gene regulation, inducing receptor turnover in an AIB1-dependent manner, and increasing breast cancer cell proliferation. Current studies are now focused on two main areas. First, we aim to determine whether macrophages produce 27HC in sufficient quantities to affect breast cancer cell behavior. Infiltrating macrophages are associated with reduced survival from breast cancer, and we hypothesize that one explanation for this is local production of 27HC, which acts as a mitogen. Second, we are interested in identifying proteins that bind specifically to 27HC-bound ER, and then to ascertain the biological significance of these proteins as they impact ER signaling. Previous studies had determined that levels of 27HC are positively correlated to that of cholesterol. Given the current epidemic of obesity/hypercholesterolemia, our studies on the impact of 27HC on ER are crucial for our understanding of how the physiological impact of this epidemic.
ADA100070	Epidemic Typhus Infection in Cynomolgus Monkeys (Macaca fascicularis)	ARMY MEDICAL RESEARCH INST OF INFECTIOUS DISEASES FORT DETRICK MD	Gonder, Janet C.,Kenyon, Richard H.,Pedersen, Jr., Carl E.	10/1/1980	5	Not available	USAMRIID	U	A - 01	Approved for public release; distribution is unlimited.	Journal article	A nonhuman primate model of clinical Rickettsia prowazekii infection ws developed in cynomolgus monkeys (Macaca fascicularis). Monkeys infected intravenously with 10 (expn 7) plaque-forming unit developed clinical signs of illness and pathological changes characteristic of epidemic typhus infection in humans. Increases in total leukocyte counts, serum alkaline phosphatase, blood urea nitrogen, and serum glutamic pyruvate transaminase values were observed. Microscopic examination revealed typical typhus nodules in the brains of two monkeys that died. These data indicated that the cynomolgus monkey is a suitable model for study of the pathogenesis of epidemic typhus infection and may prove valuable in the evaluation of candidate R. prowazekii vaccines.
AD0748842	Ecology Studies in Western Utah	ECODYNAMICS INC SALT LAKE CITY UT	Olsen, Peter F.	5/31/1972	113	ES-72-1	DTC	U	A - 01	Approved for public release; distribution is unlimited.	Annual rept. 1 Jan-31 Dec 1971	An extensive survey of zoonotic diseases was conducted in the desert region of western Utah. Native mammals, birds and bloodsucking vectors were tested for evidence of tularemia, plague, Q fever and Rocky Mountain spotted fever. Positive findings were correlated with ecological parameters. Two epidemics of human tularemia were investigated. Ecological investigations of the native fauna were also conducted with primary emphasis on lagomorphs and rodents. Various aspects of their ecology were studied including basic breeding biology, habitat relationships, population fluctuations, population density, age structure and general population dynamics.
AD0605238	MILITARY EPIDEMIOLOGY,	FOREIGN TECHNOLOGY DIV WRIGHT-PATTERSON AFB OHIO	Daal'-berg,I. I.	7/28/1964	136	FTD-MT-64-245	Not available	U	A - 01	Approved for public release; distribution is unlimited.	Not available	The study of the peculiarities of the epidemic process and the active influence on its course not only in troops, but also among the population surrounding the troops is discussed. This need is described as urgent in contemporary conditions, when in the case of unleashing war, the enemy can use bacterial means of attack. Military epidemiology is viewed as a division of epidemiology and a branch of military medicine which studies the peculiarities of the course of the epidemic process in wartime, and in military groups in peacetime. An essential division of military epidemiology is the division, dedicated to the study of the peculiarities of the origin, spread and liquidation of epidemic diseases in wartime with the creation of an artificial epidemic process by the enemy. On the basis of the learned regularities, military epidemiology has developed prophylactic and antiepidemic measures in troops, and in wartime, frequently among the surrounding population, and has determined the form and methods of activity of the militarymedical service for the protection of troops from epidemic diseases.

ADA594748	Pandemic Influenza Virus 2009 H1N1 and Adenovirus in a High Risk Population of Young Adults: Epidemiology, Comparison of Clinical Presentations, and Coinfection	SAN ANTONIO MILITARY MEDICAL CENTER FORT SAM HOUSTON TX	Yun, Heather C.,Fugate, William H.,Murray, Clinton K.,Cropper, Thomas L.,Lott, Lisa,McDonald, J. M.	1/8/2014	8	Not available	SAMMC/TX	U	A - 01	Approved for public release; distribution is unlimited.	Journal article	In 2009, pandemic H1N1 influenza virus (2009 H1N1) emerged worldwide, causing morbidity and mortality that disproportionately affected young adults. Upper respiratory infection (URI), largely due to adenovirus, is an endemic cause of morbidity in military training. Whether clinical presentations differ or excess morbidity results from coinfection is unclear.
ADA528148	Acquisition Reforms" for the New Administration: Creating a 21st Century Transformation"	Naval Postgraduate School		5/13/2009	22	Not available	NPS	U	A - 01	Approved for public release; distribution is unlimited.	Briefing charts	CHANGES DRIVING SECURITY TRANSFORMATION: Holistic View of Security * World-wide terrorism; pandemics; weapons proliferation; rogue nuclear states; energy dependence; insurgencies; environment; mass migration; regional conflicts; transnational threats; resource access (i.e., water, critical materials) * New Missions * Homeland defense; missile defense; counterinsurgency; stability and reconstruction; civilian cybersecurity; nonkinetic situational influence of operations * Unpredictability * Requiring agility, rapid responsiveness, broad-based capability * Defense Budget Changes * From Equipment to Personnel, O&M and Homeland Security; frequent changes cloud spending outlook and planning * Technological Changes * Info. tech, biotech, nano-tech, robotics, high-energy lasers, etc. - and every warfighter and platform a node" in a system-of-systems * Warfighting Changes * Net-Centric Warfare; Asymmetric warfare (bio
ADA433644	Technology Opportunities: Implementation of Deployment Health Policy in Operational Theaters	USAMRMC	Martinez-Lopez, Lester	6/1/2004	11	USAMRMC	Not available	U	A - 01	Approved for public release; distribution is unlimited.	Conference paper	It is U.S. policy that medical and personnel information systems be designed, integrated, and utilized with military medical surveillance to protect the physical and mental health of Service members throughout their military service. Within the last several years, new applications of information technology have vastly expanded the military's capabilities for surveillance, and these technologies are now starting to move out of hospitals and other fixed facilities into forward-deployed settings. Surveillance technology must evolve toward an integrated system of systems" that can comprehensively address future needs to identify acute and chronic exposures of military personnel to health threats over the course of their entire military career. Many of the necessary component technologies are now available or will soon be available. Some of these applications have already been integrated
ADA501084	The Role of the Department of Defense During A Flu Pandemic	LIBRARY OF CONGRESS WASHINGTON DC CONGRESSIONAL RESEARCH SERVICE	Kapp, Lawrence,Jansen, Don J.	6/4/2009	19	CRS-R40619	CRS/DC	U	A - 01	Approved for public release; distribution is unlimited.	Congressional rept.	A flu pandemic is a worldwide epidemic of an influenza virus. As such, the United States response to a flu pandemic would have both international and domestic components. Additionally, the domestic response effort would include contributions from every governmental level (local, state, tribal, and federal), non-governmental organizations, and the private sector. This report will focus largely on the role of the Department of Defense (DOD) in supporting the nation's domestic response effort, although it will also touch on DoD's international role. The Department of State would lead the federal government's international response efforts, while the Department of Homeland Security and the Department of Health and Human Services would lead the federal government's domestic response. The Department of Defense would likely be called upon to support both the international and domestic efforts. An analysis of the tasks assigned by the National Strategy for Pandemic Influenza Implementation Plan indicates that DoD's role during a flu pandemic would center on the following objectives: assisting in disease surveillance; assisting partner nations, particularly through military-to-military assistance; protecting and treating US forces and dependents; and providing support to civil authorities in the United States With respect to providing support to civil authorities in the United States, the types of defense support which would likely be in greatest demand during a flu pandemic include: providing disease surveillance and laboratory diagnostics; transporting response teams, vaccines, medical equipment, supplies, diagnostic devices, pharmaceuticals and blood products; treating patients; evacuating the ill and injured; processing and tracking patients; providing base and installation support to federal, state, local, and tribal agencies; controlling movement into and out of areas, or across borders, with affected populations; supporting law enforcement.
AD0501572	Lessons Learned, Headquarters, 269th Combat Aviation Battalion	ADJUTANT GENERAL'S OFFICE (ARMY) WASHINGTON DC	Not available	2/1/1969	39	OACSFOR-OT-UT-691151	OT-UT-691151,OACSFOR	U	A - 01	Approved for public release; distribution is unlimited.	Operational rept. for quarterly period ending 31 Jan 1969	Recommendations discussed are: Operations - Marking of landing zones, Supported unit C and C party changes; Selection of landing zones, Utilization of Pathfinders; Training - Position of cargo ramp in flight; Treatment of gonorrhea, Epidemic pruritis, Neoprene landing pads.

ADA333224	JPRS Report, Epidemiology.	JOINT PUBLICATIONS RESEARCH SERVICE ARLINGTON VA	Not available	1/15/1993	34	Not available	XD	U	A - 01	Approved for public release; distribution is unlimited.	Not available	Partial Contents: Ghana - Program Successful in Reducing Guinea Worm and Sigatoka Disease Affecting Plantain Production; Mozambique - Health Situation in Inharrime District Reviewed; Namibia - Windhoek Hardest Hit by Measles Epidemic, Immunization Gaining Against Measles Cases, and Canal System in Owambo May Spread Bilharzia; Uganda - Sleeping Sickness Afflicting Adjumani; Zambia - Scabies Epidemic in South, West, Dysentery Cases Blamed on Water Problems, Dysentery Cases in Solwezi Area, Dysentery Has Spread From Solwezi Area, Gweembe District Facing Dysentery Outbreak, Three Children Die of Cholera in Ndola, Nchelenge District Reports Cholera Cases, Minister: Cholera Tragedy Used for Political Debate, Cholera Outbreak in Copperbelt, and Anthrax Outbreak in National Park; and Zimbabwe - Scabies Outbreak Hits Northeast Area.
ADA545103	The Effect of Post Traumatic Stress Disorder on Military Leadership: An Historical Perspective	ARMY COMMAND AND GENERAL STAFF COLL FORT LEAVENWORTH KS SCHOOL OF ADVANCED MILITARY STUDIES	Baker, Karen A.	5/19/2011	54	Not available	USACGSC/SAMS	U	A - 01	Approved for public release; distribution is unlimited.	Monograph rept. Jun 2010-Mar 2011	This monograph examines the effects of Post Traumatic Stress Disorder (PTSD) on military leadership. For over twenty years, the United States Army has used the Be, Know, Do leadership model to describe what Army leadership is and does. The BKD leadership model addresses the personal values, competence, and actions of a leader that influence others to achieve successful mission accomplishment. Ongoing operations demonstrated shortcomings in current doctrine, which are clarified using recent leadership theories and historical experience. World War I, World War II, and Vietnam provide historical experiences that illustrate how American military leadership encountered PTSD, or one of its predecessors, on a large scale. The American experience in World War I began with a baseline understanding of war neurosis by observing and working with the British military. As the United States entered World War II, military leaders were determined to reduce psychiatric losses of the scale suffered in the previous World War. The military relied on personnel screening as a discriminator for service and believed that soldier selection would serve as the solution to mental health problems. The Vietnam experience showcased the effects of combat stress on a military organization. A new epidemic of delayed stress response surfaced in the military, and leaders were once again left with an emerging problem during operations. Transformational, leader-member, and situational leadership theories can best augment the leadership model's shortfalls and address multi-leader collaboration towards PTSD, the relationship between the leader and follower with PTSD, and practice of leading social change within an organization comprised of PTSD diagnosed members.
ADA526827	Worldwide Emerging Environmental Issues Affecting the U.S. Military. June 2010 Report	FEDERATION OF UN ASSOCIATIONS WASHINGTON DC MILLENNIUM PROJECT	Not available	6/1/2010	16	Not available	AEPI/VA	U	A - 01	Approved for public release; distribution is unlimited.	Not available	This report is comprised of summaries and analysis of environmental issues affecting the U.S. military. Topics include: environmental security, energy, biodiversity, natural resources, emissions, energy security, malaria epidemics, climate change, food and water security, computer modeling, and nanotechnology safety issues.
ADA137998	A Cultural Resource Survey of Placentia Canal, Chatham County, Georgia.	SOUTHEASTERN ARCHEOLOGICAL SERVICES INC ATHENS GA	DePratter,C. B.,Doyon,R. R.	2/6/1984	44	Not available	Not available	U	A - 01	Approved for public release; distribution is unlimited.	Final rept.,	Research on the Placentia Canal project, Chatham County, Georgia, consisted of an historic documents search and an archaeological survey. The project is on the eastern fringes of the City of Savannah and on the western margin of Thunderbolt, Georgia. A two-hundred-foot-wide corridor along the existing 2.5-mile-long canal right-of-way was surveyed. No significant archaeological sites were identified within the field through either field survey or a check of the State of Georgia Archaeological Site Files. Historic documentation indicates that Placentia Canal was constructed through or near the Placentia Plantation between 1877 and 1887. Construction of this and other related canal systems was stimulated by the Savannah yellow fever epidemic of 1876. Future excavation or construction within the Placentia Canal corridor will not impact significant archeological or historical cultural resources. (Author)
ADA263317	Drug Abuse: The Crack Cocaine Epidemic Health Consequences and Treatment.	GENERAL ACCOUNTING OFFICE WASHINGTON DC HUMAN RESOURCES DIV	Not available	1/1/1991	45	GAO/HRD-91-55FS	GAO/HRD	U	A - 01	Approved for public release; distribution is unlimited.	Not available	The use of crack cocaine reached epidemic proportions in this country at the end of the 1980s. Due to the unique characteristics associated with crack addition and the populations that use it, the epidemic created a host of new problems for the public health and drug treatment communities. In view of the devastating social and health effects created by the crack epidemic, you requested that we obtain information on the (1) health consequences of the epidemic and (2) types of treatment available for crack addicts.

ADA434626	International Biodefense Enhancement Capabilities from a Policy Perspective	DREXEL UNIV PHILADELPHIA PA	Onaral, Banu	5/1/2005	91	Not available	USAMRMC	U	A - 01	Approved for public release; distribution is unlimited.	Final rept. 18 Dec 2003-30 Apr 2005	Civilian populations across the world have a great deal to accomplish in the effort to enhance preparedness against potential mass casualty incidents. Strategies for Incident Preparedness: A National Model and the online Hospital Self-Assessment Tool (developed by CIMERC) will be made available in the Spanish language to address this global need. The need to provide strategic assessment and preparedness enhancement tools in diverse language sets was further underscored at the 2003 American Telemedicine Association meeting in Orlando, Florida. Major General Martinez-Lopez, during his speech at the International Day meeting, requested and encouraged international partnerships and ventures in the spirit of advancement. A partnership between CIMERC and eSalud Americas (formerly ERA Digital) to provide the Hospital Self-Assessment Tool and the Strategies for Incident Preparedness: A National Model for an international community represents one such opportunity. The proposed translation and adaptation effort and the implementation networking effort by eSalud Americas and CIMERC complements present efforts within Argentina. This collaboration and interaction with the Pan-American Health Organization will provide a major dissemination window starting with Argentina to the rest of Latin American cultures. Provision of the identified strategic tool will have an immediate impact on domestic and international preparedness for mass casualty incidents. CIMERC, presently a national biodefense repository, will begin to develop an international component that will invariably serve to complement both domestic and international emergency response practices.
ADA528223	Role of CCL3L1-CCR5 Genotypes in the Epidemic Spread of HIV-1 and Evaluation of Vaccine Efficacy	UNIFORMED SERVICES UNIV OF THE HEALTH SCIENCES BETHESDA MD	Kulkarni, Hemant, Marconi, Vincent C., Agan, Brian K., McArthur, Carole, Crawford, George, Clark, Robert A., Dolan, Matthew J., Ahuja, Sunil K.	8/1/2008	11	Not available	USUHS	U	A - 01	Approved for public release; distribution is unlimited.	Journal article	Polymorphisms in CCR5, the major coreceptor for HIV, and CCL3L1, a potent CCR5 ligand and HIV-suppressive chemokine, are determinants of HIV-AIDS susceptibility. Here, we mathematically modeled the potential impact of these genetic factors on the epidemic spread of HIV, as well as on its prevention. Methods and Results: Ro, the basic reproductive number, is a fundamental concept in explaining the emergence and persistence of epidemics. By modeling sexual transmission among HIV+/HIV2 partner pairs, we find that Ro estimates, and concordantly, the temporal and spatial patterns of HIV outgrowth are highly dependent on the infecting partners? CCL3L1- CCR5 genotype. Ro was least and highest when the infected partner possessed protective and detrimental CCL3L1-CCR5 genotypes, respectively. The modeling data indicate that in populations such as Pygmies with a high CCL3L1 gene dose and protective CCR5 genotypes, the spread of HIV might be minimal. Additionally, Pc, the critical vaccination proportion, an estimate of the fraction of the population that must be vaccinated successfully to eradicate an epidemic was ,1 only when the infected partner had a protective CCL3L1-CCR5 genotype. Since in practice Pc cannot be .1, to prevent epidemic spread, population groups defined by specific CCL3L1-CCR5 genotypes might require repeated vaccination, or as our models suggest, a vaccine with an efficacy of .70%. Further, failure to account for CCL3L1-CCR5-based genetic risk might confound estimates of vaccine efficacy. For example, in a modeled trial of 500 subjects, misallocation of CCL3L1-CCR5 genotype of only 25 (5%) subjects between placebo and vaccine arms results in a relative error of ,12% from the true vaccine efficacy. Conclusions: CCL3L1-CCR5 genotypes may impact on the dynamics of the HIV epidemic and, consequently, the observed heterogeneous global distrib
ADA476111	Avian Flu Pandemic: Potential Impact of Trade Disruptions	LIBRARY OF CONGRESS WASHINGTON DC CONGRESSIONAL RESEARCH SERVICE	Langton, Danielle	1/3/2008	7	CRS-RS22453	CRS/DC	U	A - 01	Approved for public release; distribution is unlimited.	Congressional rept.	Concerns about potential disruptions in U.S. trade flows due to a global health or security crisis are not new. The possibility of an avian flu pandemic with consequences for global trade is a concern that has received attention recently, although some experts believe there is little cause for alarm. Experts disagree on the likelihood of an avian flu pandemic developing at all. This report considers possible trade disruptions, including possible impacts on trade between the United States and countries and regions that have reported avian influenza infections. These trade disruptions could include countries banning imported goods from infected regions at the onset of a pandemic, de facto bans due to protective health measures, or supply-side constraints caused by health crises in exporting countries.

ADA484151	Changing Homeland Security: What Should Homeland Security Leaders Be Talking About?	NAVAL POSTGRADUATE SCHOOL MONTEREY CA CENTER FOR HOMELAND DEFENSE AND SECURITY	Not available	7/1/2006	11	Not available	NPS-CHD/S	U	A - 01	Approved for public release; distribution is unlimited.	Journal article	Homeland security has spiraled into Stage Five of the Issue Attention Cycle. Stage Five -- the post-problem stage -- means homeland security again operates principally behind the public apron. Stakeholders sedulously sift through the grist of homeland security's congressional, industrial, academic, and bureaucratic complex. The professionals who populate that complex spend their days calibrating the strategies, programs, and institutions disjunctively formed in the earlier stages of the Cycle. Except for an occasional 15 minutes of public attention to dead terrorists, disrupted plots, and grant cuts, homeland security is not an issue high on the public's agenda. It could leap back on top in an instant. But for now most conversations about homeland security take place within a comparatively small community. The issues are largely the same ones talked about for the last 5 years: funding, threats, hazards, borders, interoperability, intelligence, response, transportation, equipment, and recently, pandemics. Unarguable progress has been made in all these domains. We clearly are better prepared for some things than we were in the autumn of 2001. Equally as certain, there are miles to go before most of the nation's jurisdictions get a Sufficient" rating in future national preparedness assessments. Stage Five in the Issue Attention Cycle means there is little political will to substantially alter the hodgepodge federalism that characterizes U.S. homeland security. The system we have is the one we have to work with
AD1027536	The Simulation of Stochastic Epidemics in Two Dimensions	CORNELL UNIVERSITY ITHACA United States	Bailey,Norman T.	1/1/1967	22	Not available	Not available	U	A - 01	Approved for public release; distribution is unlimited.	Conference Paper	The real purpose of epidemic theory is not to develop interesting and elegant mathematics, though this may be a delightful incidental byproduct, but is to facilitate the practical prevention or control of actual outbreaks of serious contagious disease. This purpose is still a long way from being achieved to any appreciable extent. The developed countries are today free from disasters of the magnitude of the Black Death in the 14th century when perhaps as much as 25 per cent of the population in Europe perished. Nevertheless, widespread epidemics on a massive scale are still common in Africa and the Far East. As the volume and speed of modern travel continue to increase there is an ever growing risk of the transmission of virulent infections to regions where natural immunity may be low though public health control is, for ordinary purposes, more or less adequate. Even within a developed country there are possible dangers from such factors as the appearance of new strains of infectious organisms resistant to standard drugs and antibiotics, or increases in the contact rate between individuals due to greater population densities or changes in social behavior. The current increase in venereal infections in many countries could be a case in point. It follows therefore that it is eminently worth considering in what directions research should proceed in order to have an improved chance of attaining its object.
AD0744588	Susceptibility of Rodents to Oral Plague Infection: A Mechanism for the Persistence of Plague in Inter-Epidemic Periods	WALTER REED ARMY INST OF RESEARCH WASHINGTON DC	Rust, James H., Jr.,Harrison, Daniel N.,Marshall, John D., Jr.,Cavanaugh, D. C.	9/7/1971	7	Not available	WRAIR	U	A - 01	Approved for public release; distribution is unlimited.	Not available	Oral infection of rodents with Pasteurella pestis has been demonstrated with both fully virulent and avirulent strains. Sustained rodent plague epizootics have been initiated and maintained in the absence of the classical flea vector. Transmission was due to cannibalism of the dying rodents by their healthy cagemates. Oral infection is considered to provide a plausible mechanism for the persistence of plague in an area where conditions are temporarily unsuitable for flea transmission.



ADA561612	Strategies for Enhancing Military Physical Readiness in the 21st Century	ARMY WAR COLL CARLISLE BARRACKS PA	Nindl, Bradley C.	3/22/2012	36	Not available	USAWC	U	A - 01	Approved for public release; distribution is unlimited.	Research paper	Military readiness is negatively affected by the near-epidemic incidence rate of musculoskeletal injuries (MSIs) in service members. MSIs represent a major threat to the health and fitness of our Soldiers and a risk to our Nation's ability to project military power. MSIs affect both the military's finances (i.e., economic burden from medical, healthcare, and disability costs) and personnel readiness (i.e., Soldiers medically unable to optimally perform their duties and to deploy). For example, MSIs represent 45% of the medically not-ready, non-deployable population; the major cause of medical evacuation from a combat theater -- the majority resulting from physical training; and an annual cost of half a billion dollars for diagnosing and treating more than 1 million Soldiers with MSIs and 6 billion dollars in salary. Annual Department of Veterans Affairs compensation paid for musculoskeletal disabilities is \$5.5 billion (26% of total paid compensation). It is imperative for military leaders to understand that physical-training related MSIs are largely preventable. There is a need for a paradigm shift in the military's approach to physical readiness policies. Minimizing injuries among military personnel and continued reductions in injury rates depend on institutionalizing existing best practices and establishing stronger linkages across commands, operators, researchers, medical providers, public health, and safety officials.
ADA534584	Digital Radio-Telemetry Monitoring of San Nicolas Island Foxes	LEGACY RESOURCE MANAGEMENT PROGRAM ARLINGTON VA	Hudgens, Brian R.,Ferrara, Francesca J.,Garcelon, David K.	12/1/2008	22	LRMP-07-308	LRMP-VA	U	A - 01	Approved for public release; distribution is unlimited.	Final rept.	The island fox has been designated a conservation focus by the U.S. Navy. Because of the species unique evolutionary history, it is highly susceptible to threats from novel predators and disease. High fox densities on San Nicolas Island make this population particularly vulnerable to disease epidemics. Since an epidemic or novel predator can effect populations over a short time period, annual surveys and monitoring may not be enough alert managers about onset of potentially catastrophic declines. Daily, weekly, or monthly survival monitoring of wildlife populations is typically conducted using radio telemetry. Though telemetry is quite effective, it is also quite expensive, particularly in terms of labor costs. Even the most intensive monitoring, however, is only effective if results are tied to management actions. Appropriate responses to monitoring results must balance the need to respond to real threats against the cost of false alarms. This balance is best achieved through the use of a tiered response system based on observed increases in mortalities during a short time period.
ADA420439	Operation Nigerian Angel: Fighting Aids To Fight Terrorism	NAVAL WAR COLL NEWPORT RI JOINT MILITARY OPERATIONS DEPT	Kendall, Julie A.	5/29/2003	24	Not available	NWC/JMO	U	A - 01	Approved for public release; distribution is unlimited. Availability: This document is not available from DTIC in microfiche.	Final rept.	Human Immunodeficiency Virus/Acquired Immune Deficiency Syndrome (HIV/AIDS) continues to ravage the African continent, threatening already fragile states by creating chaos and disorder. Some states risk losing more than a third of their populations while having to provide for millions of orphans left behind. The resulting instability creates opportunities for terrorist recruitment and refuge. The US has significant national interest in Nigeria for its vast natural resources and its position as a regional anchor in West Africa. In the coming years, as the pandemic overwhelms countries' abilities to function effectively, the US may likely be called upon to respond to the crisis. OPERATION NIGERIAN ANGEL provides a model for a multinational force to address key issues and provides the COCOM a means to restore regional stability and order.
AD0639402	INSTRUCTION IN EPIDEMIOLOGY AT THE DONETS MEDICAL INSTITUTE	ARMY BIOLOGICAL LABS FREDERICK MD	Shteinbakh, N. Kh.	12/25/1963	8	TRANS-1392	ABL/MD	U	A - 01	Approved for public release; distribution is unlimited. Availability: Document partially illegible.	Not available	Not available

ADA580206	Nonlinear Markov Control Processes and Games	WARWICK UNIV COVENTRY (UNITED KINGDOM)	Kolokoltsov, Vassili N.	11/15/2012	23	R.STAA.3024	AFOSR	U	A - 01	Approved for public release; distribution is unlimited.	Final technical rept. 1 Sep 2009-31 Aug 2012	The project was devoted to the analysis of a new class of stochastic games, nonlinear Markov games, as they arise as a (competitive) controlled version of nonlinear Markov processes, which can be characterized by the property that the future depends on the past via present position and its distribution. This class of games can model a variety of situations for economics and epidemics, statistical physics and pursuit- evasion processes. Another key motivation arises from the steady increase in complexity of the modern technological development requires an appropriate (or better optimal) management of complex stochastic systems consisting of large number of interacting components (agents, mechanisms, vehicles, subsidiaries, species, police units, etc) , which may have competitive or common interests. Under rather general assumptions, the limiting problem as the number of components tends to infinity can be described by a nonlinear evolution on measures, and its controlled version is given precisely by a nonlinear Markov control process or (in case of competitive interests) a nonlinear Markov game that we are investigating.
ADA595017	Global Behavior in Large Scale Systems	CARNEGIE-MELLON UNIV PITTSBURGH PA OFFICE OF SPONSORED RESEARCH	Moura, Jose M.	12/5/2013	20	1150088,AFRL-OSR-VA-TR-2013-0622	TR-2013-0622,AFOSR/VA	U	A - 01	Approved for public release; distribution is unlimited.	Final rept. 15 Jun 2010-14 Jun 2013	We study the emergence of global behavior in large scale networks. The underlying motivating application is epidemics like computer virus spreading, for example, in wide campus local networks. We consider multiple classes of viruses, each type bearing their own statistical characterization -- exogenous contamination, contagious propagation, and healing. The network state (distribution of nodes infected by each class in the network) is a jump Markov process, not necessarily reversible, making it a challenge to obtain its invariant distribution. By suitable renormalization, in the limit of a large network (number of nodes), we describe the macroscopic or emergent behavior of the network by the solution of a set of deterministic nonlinear differential equations. These nonlinear differential equations are obtained by mean field analysis of the microscopic random dynamics. We study the qualitative behavior of the nonlinear differential equations describing the mean field dynamics.
AD1059875	The Adjuvant GLA-AF Enhances Human Intradermal Vaccine Responses	Infectious Diseases Research Institute Seattle United States	Carter,Darrick,van Hoeven,Neal,Baldwin,S usan,Levin,Yotam,Koch ba,Efrat,Magill,Al,Charl and,Nathalie,Landry,N athalie,Nu,Khin,Frevol, Aude,Ashman,Jill,Saga wa,Zachary K.,Beckmann,Anna M.,Reed,Steven G.	9/12/2018	9	DARPA	Not available	U	A - 01	Approved for public release; distribution is unlimited.	Journal Article - Open Access	Adjuvants are key to shaping the immune response to vaccination, but to date, no adjuvant suitable for human use has been developed for intradermal vaccines. These vaccines could be self-administered and sent through the mail as they do not require long needles or technical expertise in immunization. In the event of a pandemic outbreak, this approach could alleviate the congregation of patients in health centers and thus reduce the potential of these centers to enhance the spread of lethal infection. A reliable and potent vaccine system for self-administration would provide an effective countermeasure for delivery through existing product distribution infrastructure. Were port results from preclinical and clinical trials that demonstrate the feasibility of an adjuvanted, intradermal vaccine that induced single shot protection in ferrets and seroprotection in humans against one of the more lethal strains of pandemic flu, Indonesia H5N1. In the human trial, the vaccine was safe and clinical responses were above approvable endpoints for a protective flu vaccine. Inclusion of a modern TLR4 (Toll-like receptor 4) agonist based adjuvant was critical to the development of the response in the intradermal groups. In humans, this is the first report of a safe and effective intradermal adjuvant, GLA-AF (aqueous formulation of glucopyranosyl lipid adjuvant),and provides a future path for developing a vaccine-device combination for distribution by mail and self-administration in case of a pandemic.
ADA542906	Distinct Circulating Recombinant HIV-1 Strains Among Injecting Drug Users and Sex Workers in Afghanistan	WALTER REED ARMY INST OF RESEARCH ROCKVILLE MD US MILITARY HIV RESEARCH PROGRAM/DIVISION OF RETROVIROLOGY	Sanders-Buell, Eric,Bose, Meera,Nasir, Abdul,Todd, Catherine S.,Stanekzai, M. R.,Tovanabutra, Sodsai,Scott, Paul T.,Strathdee, Steffanie A.,Tjaden, Jeffrey,Michael, Nelson L.,McCutchan, Francine E.	5/1/2010	5	Not available	USAMRMC	U	A - 01	Approved for public release; distribution is unlimited.	Journal article	Little information is available regarding a circulating HIV genotype among high-risk groups in Afghanistan; we describe HIV genotypes among injecting drug users (IDUs) and sex workers (SWs) in four Afghan cities. Participants completed behavioral questionnaires and HIV testing. Western blot-confirmed specimens had peripheral mononuclear blood cells isolated for genotyping. Analysis of recombinants was done by bootscanning and manual sequence alignment. The single SW sample harbored a CRF01_AE strain. Of 10 IDUs available for analysis, all were CRF35_AD and from Hirat. Analyzed subregions (gag p17 and env C1-C5) revealed close homology between the Hirat specimens. Three distinct subclusters comprising two or three strains were identified whereas two other strains were generally equidistant from previously identified Kabul strains. Results suggest that the nascent HIV epidemic among IDUs in Hirat is largely, if not entirely, subtype CRF35_AD, and the close homology suggests recent infection; harm reduction should be supported to avert further transmission.

ADA419500	Intervention to Decrease Risk for Sexually Transmitted Diseases (STDs) and the Associated Negative Reproductive Health Outcomes in Women Aboard Ships: A Biophysical Approach	CALIFORNIA UNIV SAN FRANCISCO	Boyer, Cherrie B.,Shafer, Mary-Ann	9/1/2002	71	Not available	USAMRMC	U	A - 01	Approved for public release; distribution is unlimited.	Annual rept. 7 Aug 2001-6 Aug 2002	Unintended pregnancies (UIPs) and STDs with their sequelae of ectopic pregnancy continue to be epidemic among active duty enlisted women. Such reproductive health problems result in major morbidity among affected women as well as posing a potential threat to combat readiness. UIPs and STDs result from complex interactions between biological and behavioral factors. The ultimate control in preventing such morbidities must rely on both behavioral and biologic strategies. The primary aim of the project is to develop, implement, and evaluate an intervention which emphasizes correct information, motivation and behavioral skills building (IMB Model) coupled with non-invasive screening using urine- based amplified DNA techniques to detect C. trachomatis and N. gonorrhoeae and urine-based pregnancy testing. A randomized controlled trial design was employed to evaluate the impact of the intervention on the experimental group using both self-report questionnaires (psychosocial and behavioral risk factors) and results from the STD and pregnancy screening tests as measures. The control intervention consisted of a prevention program focusing on nutrition, breast cancer, fitness and injury prevention Questionnaires and biologic testing were completed at baseline, 24 weeks, 9-12 months post intervention. Participants (N=2157) were women enrolled in recruit training for the U.S. Marine Corps.
ADA475235	Honduran-U.S. Relations	LIBRARY OF CONGRESS WASHINGTON DC CONGRESSIONAL RESEARCH SERVICE	Sullivan, Mark P.,Olhero, Nelson	5/31/2007	18	CRS-RL34027	CRS/DC	U	A - 01	Approved for public release; distribution is unlimited.	Congressional rept.	The Central American nation of Honduras, one of the hemisphere's poorest countries, faces significant challenges in the areas of crime, human rights, and improving overall economic and living conditions. While traditional agricultural exports of coffee and bananas are still important for the economy, nontraditional sectors, especially the maquiladora, or export-processing industry, have grown significantly over the past decade. Among the country s development challenges are a poverty rate over 70%, high infant mortality, and a significant HIV/AIDS epidemic. Despite these challenges, increased public spending on health and education have reaped significant improvements in development indicators over the past decade. Current President Manuel Zelaya of the Liberal Party won a four-year term in the November 2005 elections. The country has enjoyed 25 years of uninterrupted elected civilian democratic rule. Public support for the Zelaya government remains firm, buoyed by a strong economy that grew an estimated 6% in 2006. The economy has benefitted from significant debt reduction by the international financial institutions that is freeing government resources to finance poverty-reduction programs. A key challenge for the government is curbing violent crime and the growth of youth gangs. The Zelaya government initially vowed to focus on reintegrating gang members into society, but it subsequently has resorted to more traditional law enforcement actions to crack down on the gangs. The United States has a close relationship with Honduras, characterized by an important trade partnership, a U.S. military presence in the country, and cooperation on a range of transnational issues.
AD0810277	COMMISSION ON EPIDEMIOLOGICAL SURVEY	ARMED FORCES EPIDEMIOLOGICAL BOARD WASHINGTON DC	Alevizatos, Aristides C.,McKinney, Robert W.,Feigin, Ralph D.,McGann, Virginia G.,Carozza, Jr, Frank A.	3/1/1967	123	Not available	DA	U	A - 01	Approved for public release; distribution is unlimited.	Annual rept. for fiscal year 1966	Contents: Clinical Studies of Venezuelan Equine Encephalomyelitis Vaccine Studies in Man; Venezuelan Equine Encephalomyelitis Vaccine Viremia Studies in Man; Changes in Whole Blood Amino Acids during Infection; Serological Studies on Staphylococcal Enterotoxin B; Mechanisms of Pyrogenicity of Staphylococcal Enterotoxin B; Recent Studies on Anthrax Toxin; Influence of Pneumococcal Infection on a Host Enzyme System; Alterations of Host Cellular Ribonucleic Acid Metabolism during Infection; Mechanisms of Endotoxin Tolerance; Typhoid Fever: Pathogenesis and Prevention; Studies on Rocky Mountain Spotted Fever: Serologic Response in Man to Vaccination with Combined Epidemic Typhus, Rocky Mountain Spotted Fever and Q Fever Vaccine; and Influence of Tularemia on Insulin Secretion.

ADA508323	DoD Global Emerging Infections System -- Partnering in the Fight Against Emerging Infections, Fiscal Year 2005	ARMED FORCES HEALTH SURVEILLANCE CENTER SILVER SPRING MD	Not available	3/1/2005	78	Not available	AFHSC	U	A - 01	Approved for public release; distribution is unlimited.	Annual rept.	The Department of Defense Global Emerging Infections Surveillance and Response System (DoD-GEIS) activities and accomplishments for FY 2005 are detailed by DoD-GEIS supported partners throughout the remainder of this annual report. The DoD-GEIS mission is to support and coordinate DoD global surveillance, training, public health research and outbreak response capabilities for microbial threats impacting force health protection and national security. Specifically, DoD-GEIS projects support outbreak response preparation, detection, clinical investigation, microbial agent identification, and communicable disease control and prevention. The DoD-GEIS has four goals outlined in Appendix A: 1) surveillance, 2) outbreak response, 3) integration and innovation activities, and 4) capacity building and training. The surveillance priorities for DoD-GEIS are for microbial agents capable of causing serious outbreaks in military populations. These are: a) respiratory illnesses (especially influenza and pandemic influenza); b) febrile illnesses (especially malaria, dengue and viral hemorrhagic fevers); c) diarrheal illnesses; d) sexually transmitted infections, and e) agents with antimicrobial resistance. In FY 2005, DoD-GEIS partnered with hundreds of Army, Navy and Air Force medical professionals working in fourteen military medical research laboratories and medical treatment facilities on many cooperative projects in over thirty countries (Appendices B, C, and D). The most important activities of DoD-GEIS were influenza surveillance and pandemic response preparation, and the most important products in FY 2005 were timely medical information and medical expertise that were provided for the military medical leadership. DoD-GEIS built surge capacities into the planning, budgeting, and project execution of its global systems in FY 2005, and optimized flexibility and emergency response of DoD-GEIS partners in public health emergencies.
ADA418983	DoD HIV/AIDS Prevention Program: April 2002 Country Progress Report	NAVAL HEALTH RESEARCH CENTER SAN DIEGO CA	Larson, Gerald E.,Booth-Kelley, Stephanie,Bakhireva, Lioudmila,Shaffer, Richard A.,Kelley, Kevin	1/1/2002	79	NHRC-02-16	BUMED	U	A - 01	Approved for public release; distribution is unlimited.	Final rept. Oct 2000-Apr 2002	The Naval Health Research Center serves as the U.S. Department of Defense (DoD) Executive Agent for the DoD HIV/AIDS Prevention Program in Africa. This joint services program focuses on African uniformed personnel and complements US Agency for International Development and Centers for Disease Control initiatives to mitigate the African HIV/AIDS pandemic. The current report summarizes in-country progress for the 22 African nations engaged by the program as of April 2002.
AD1067843	MERS-CoV and H7N9 Influenza Assay Development on NGDX	Center for Advanced Molecular Detection JBSA-Lackland United States	Caballero,Manuel,Arm strong-Spenrath,La'Quita	7/1/2018	35	Not available	Not available	U	A - 01	Approved for public release; distribution is unlimited.	Technical Report,01 May 2016,01 Jul 2018	Deadly infectious diseases pose a prevalent danger to war fighters and warrior medics in remote, hostile areas. Infectious agents inevitably hinder the war fighters duty performance, even potentially cause mission failures. Therefore a crucial military need is to acquire the capabilities to rapidly detect the threat agents, and to expeditiously devise strategies to counter the threats. The Biomeme two3 (Biomeme, Inc., Philadelphia, PA) is a light (1.2 lb.), hand-held, field-deployable real-time polymerase chain reaction (PCR) device that could meet these needs. The device is coupled to an iPhone with unique software for data analysis and transmission to intended recipients. This work reports a comparative research testing and evaluation of this system, focusing on detection of the Middle East Respiratory Syndrome Coronavirus (MERS-CoV) and Influenza A virus H7N9 for this assessment. Three Biomeme two3 instruments were purchased for this work. The reagents specifically designed and set in the appropriate format for Biomeme two3 and the target templates were also purchased from the manufacturer of the instrument. For MERS-CoV, the detection targets were an orf1a segment and a segment upstream of gene E (termed upE). For H7N9, the target amplicons were in the H7 and N9 genes. The instrument performance was evaluated for template copy numbers that varied from 50 to 500,000 per reaction. Our results show that Biomeme two3 can detect the tested targets at various copy numbers,down to 50 copies per reaction. We also tested the MERS-CoV detection reagents for their capacity to amplify the corresponding genomic segments from two nontarget coronaviruses, OC43 and 229E. These tests yielded no amplicons. Likewise, we tested the H7N9 detectionreagents to see whether they would amplify the corresponding gene segments from the nontarget influenza A virus H1N1. These PCR reactions also did not produce any amplicons.

ADA444312	History of U.S. Military Contributions to the Study of Viral Hemorrhagic Fevers	ARMY MEDICAL RESEARCH INST OF INFECTIOUS DISEASES FORT DETRICK MD	Thomas, Stephen J.,Lawler, James V.,Endy, Timothy P.	4/1/2005	17	Not available	USAMRIID	U	A - 01	Approved for public release; distribution is unlimited.	Not available	The viral hemorrhagic fever viruses represent a unique group of viruses that can produce large outbreaks of both animal and human disease and produce severe, highly fatal, human illnesses. The viral hemorrhagic fever viruses display a great deal of diversity in their genetic organization. vectors for transmission, and geographic distribution. They share common features in being able to induce a great deal of cellular damage and to elicit an immune response among humans that can result in severe hemorrhage, coagulopathy, shock, and death. The characteristics of the viral hemorrhagic fever viruses as arthropod or rodent-borne viruses that can result in human illnesses with high morbidity and mortality rates make these viruses a unique threat, historically, currently, and in the future, to deployed soldiers around the world. In response to this threat, U.S. military scientists have been world leaders in the development of knowledge on the viral hemorrhagic fever viruses, from extensive fieldwork in areas in which these viruses are endemic, outbreak investigations of epidemics, and careful clinical studies elucidating the pathogenesis of severe disease. Defining the disease threat and creating practical countermeasures through the development of drugs and vaccines has been the major mission of military scientists and has resulted in numerous candidate vaccines currently in animal and human clinical trials.
AD0846829	Burnet's Rickettsia Disease (Q Fever)	ARMY BIOLOGICAL LABS FREDERICK MD	Maldolesi, G.	7/1/1968	110	TRANS-388	SMUFD	U	A - 01	Approved for public release; distribution is unlimited. Availability: Document partially illegible.	Not available	This diagnostic study on subacute infiltrates of rickettsia Burneti proves that, in this field, a final decision can only be reached through steady and prolonged clinical examination, not only based on radiological, seriological and microbiological data, but also on a complete examination of the patient. In this connection, one must not forget the most important fact, that only radiological or just one serological report is never sufficient; that one should always exclude the less infrequent possibilities; that it is always useful to note the therapeutic effect of aureomycin, without being limited to just one administration and mainly giving great weight to the eventual joint report of the regression of the infiltrate and of the negativation of the complement fixation.
ADA432234	Agent-Based Simulation of Disease Spread Aboard Ship	NAVAL POSTGRADUATE SCHOOL MONTEREY CA	Gutierrez, Louis M.	3/1/2005	65	Not available	NPS	U	A - 01	Approved for public release; distribution is unlimited. Availability: This document is not available from DTIC in microfiche.	Master's thesis	Extreme examples like the Spanish Flu pandemic of 1918 make clear the devastating impact that communicable diseases can have on military readiness. It is highly desirable to have models and tools that can be used to evaluate the course of a disease over time. These tools can help assess the effectiveness of strategies employed to contain the outbreak such as constraining movement, wearing protective gloves or masks, closing high traffic areas, etc. Armed with these tools, a medical practitioner can better assess the right course of action in a time critical situation. The primary difficulty with creating models and simulations for this purpose is that disease spread depends upon the details of human behavior and environmental variables which are not accounted for in current mathematical models. The likelihood that a particular individual will catch a given disease depends upon such specifics as where he works, whom he interacts with, where he sleeps, what he eats, his habits of personal hygiene, etc. It is hypothesized that a software disease simulation can combine agents that mimic human behavior, a ship specific environment, and disease specific attributes to more accurately model the spread of disease aboard ship than a mathematical model.
ADA501731	The 2009 Influenza A(H1N1) 'Swine Flu' Outbreak: U.S. Responses to Global Human Cases	LIBRARY OF CONGRESS WASHINGTON DC CONGRESSIONAL RESEARCH SERVICE	Salaam-Blyther, Tiaji	5/26/2009	20	CRS-R40588	CRS/DC	U	A - 01	Approved for public release; distribution is unlimited.	Congressional rpt.	

ADA449480	Health Care: A Report on the Industry	INDUSTRIAL COLL OF THE ARMED FORCES WASHINGTON DC	Alabdali, Mohammed,Blanco, Minerva,Berk, Rodney,Coleman, Antonio,Hawes, Samuell,Hill, Vivian,Lederer, Elizabeth,Lewis, Stuart,Martinson, Wendy,Peppers-Citizen, Marilyn	6/1/2005	29	Not available	NDU/ICAF	U	A - 01	Approved for public release; distribution is unlimited.	Not available	Health care matters to everyone. At the most basic level, every American has an obvious personal stake in developing and maintaining a robust health and medical system. Beyond personal health, however, the nation has a stake in a healthy, productive population. Sick people can't work. Unfit soldiers cannot defend us. With more than 15 percent of the nation's Gross Domestic Product (GDP) now devoted to health care, the health care system affects the strategic health of our nation and world. For the Department of Defense (DoD), the issue is not only keeping a healthy fighting force, but finding a way to pay for and control the growth of the rapidly rising health care bill. In the wake of 9/11 and the Global War on Terrorism (GWOT), health care has taken on an increased relevance as a national security issue. Attention is on our health care network's ability to surge for consequence management, and our recognition of the political and economic consequences of global pandemics. At its core, the debate over health care comes down to three competing interests: improving quality, assuring access, and controlling costs. Unfortunately, current trends are discouraging. As we spend more we improve our ability to treat people, but the overall health of our population does not improve significantly and access to care appears to be decreasing. The system is out of balance. A holistic approach to addressing imbalances in the industry is crucial, but the very breadth of the industry and competing interests makes any move toward a systemic solution daunting. The solution likely will have to be a uniquely American blend of free enterprise and government intervention borne out of compromise and tradeoffs.
ADA419643	Intervention to Decrease Risk for STDs and Unintended Pregnancies Among Navy Women Aboard Ships: A Biopsychosocial Approach	CALIFORNIA UNIV SAN FRANCISCO	Boyer, Cherrie B.	10/1/2003	115	Not available	USAMRMC	U	A - 01	Approved for public release; distribution is unlimited.	Final rept. 7 Aug 1995-6 Sep 2003	Unintended pregnancies (UIPs) and STDs with their sequelae of ectopic pregnancy continue to be epidemic among active duty enlisted women. Such reproductive health problems result in major morbidity among affected women as well as posing a potential threat to combat readiness. UIPs and STDs result from complex interactions between biological and behavioral factors. The ultimate control in preventing such morbidities must rely on both behavioral and biologic strategies. The primary aim of the project is to develop, implement and evaluate an intervention which emphasizes correct information, motivation and behavioral skills building (IMB Model) coupled with non-invasive screening using urine-based amplified DNA techniques to detect C. trachomatis and N. gonorrhoeae and urine-based pregnancy testing. A randomized controlled trial design was employed to evaluate the impact of the intervention on the experimental group using both self-report questionnaires (psychosocial and behavioral risk factors) and results from the STD and pregnancy screening tests as measures. The control intervention consisted of a prevention program focusing on nutrition, breast cancer, fitness and injury prevention. Questionnaires and biologic testing were completed as baseline, 2-4 weeks, 9-12 months post intervention. Participants (N=2157) were women enrolled in recruit training for the U.S. Marine Corps. Results show that the intervention has had a significant impact on decreasing STDs over the study period.

ADA456963	Southeast Asian Security Challenges: America's Response? Strategic Forum, Number 222. October 2006	NATIONAL DEFENSE UNIV WASHINGTON DC INST FOR NATIONAL STRATEGIC STUDIES	Ott, Marvin C.	10/1/2006	9	Not available	NDU/INSS	U	A - 01	Approved for public release; distribution is unlimited. This document is not available from DTIC in microfiche.	Not available	Transnational and geopolitical challenges are shaping the security environment in Southeast Asia. Rapid economic change, actual and potential disease epidemics, and a growing sense of shared interest and grievance among the region's Islamic populations are among the region's main transnational concerns. In its most extreme form, Islamist sentiment has manifested itself in jihadist movements, including some with connections to al Qaeda. Geopolitically, China's rise poses a multifaceted strategic challenge to the region. For China, Southeast Asia is an arena of opportunity; geographically proximate, economically attractive, and historically subordinate with influential resident Chinese populations. Southeast Asia sits astride sea lanes that are rapidly becoming China's energy lifeline. Moreover, Chinese security analysts see Southeast Asia as the weak link in any U.S. effort to contain China. Following 20 years of rapid economic development, Southeast Asia in the early 1990s was an increasingly vibrant, cohesive, and self-confident region. Regional institutions, notably the Association of Southeast Asian Nations (ASEAN), reflected the growing sense of regional identity and shared purpose. The Asian financial crisis of the late 1990s produced a sudden adverse shift in the region's economic and political climate; undercut ASEAN; triggered political upheaval in Indonesia, the region's largest and most important country; and created openings for militant Muslim groups as the fabric of political and social authority weakened. These same forces generated something akin to a power vacuum and provided a strategic opening for China that Beijing has moved skillfully to exploit. After a long period of post-Vietnam inattention, America's security planners rediscovered Southeast Asia as a second front in the war on terror and built productive counterterrorism cooperation with most governments.
ADA502212	FY2009 Spring Supplemental Appropriations for Overseas Contingency Operations	LIBRARY OF CONGRESS WASHINGTON DC CONGRESSIONAL RESEARCH SERVICE	Daggett, Stephen, Epstein, Susan B., Tarnoff, Curt, Margesson, Rhoda, Nakamura, Kennon H., Kronstadt, K. A., Lister, Sarah A.	6/15/2009		CRS-R40531	CRS/DC	U	A - 01	Approved for public release; distribution is unlimited.	Congressional rept.	On June 11, 2009, the House and Senate Appropriations Committees announced a conference agreement on H.R. 2346, a bill providing supplemental appropriations for the remainder of FY2009. Floor votes are expected the week of June 15. The agreement includes \$5 billion, as in the Senate bill, to support U.S. loans to the International Monetary Fund (IMF); does not include a Senate provision allowing the Secretary of Defense to exempt photos of military detainees from release under the Freedom of Information Act; does not include \$80 million requested for the Department of Defense and the Department of Justice to facilitate closure of the Guantanamo Bay prison; prohibits the release of Guantanamo detainees in the United States and prohibits transfers of prisoners except to be prosecuted; provides \$1.9 billion for pandemic flu preparedness, and \$5.8 billion more, contingent on the President determining it is needed; and adds \$1 billion for the Cash for Clunkers" program to provide payments to consumers who trade in inefficient vehicles. Including the contingent influenza funding
ADA250868	Investigations of Hemorrhagic Fever with Renal Syndrome (HFRS) in Yugoslavia.	INSTITUTE OF IMMUNOLOGY AND VIROLOGY BELGRADE (YUGOSLAVIA)	Gligic, Ana	11/7/1991	47	Not available	USAMRDC	U	A - 01	Approved for public release; distribution is unlimited.	Final rept. 7 Nov 88-6 Nov 91,	Five hundred and forty-four rodents and small mammals were trapped in various regions of Yugoslavia and examined. Antihantaviruses, immunofluorescent (IF) antibodies were detected in the blood samples of 129 animals. Antigens were detected in the lung samples of 139 animals. Sixty-seven animals tested positive for both the presence of antibodies in the sera and antigens in the lungs. Hantaviral antibodies and/or antigens were detected most in the yellow-necked mouse (Apodemus flavicollis) (88/189), the wood mouse (Apodemus sylvaticus) (28/146), the striped field mouse (Apodemus agrarius) (10/64), house mouse (Mus musculus) (14/29), and the Norway rat (Rattus norvegicus) (14/21). Five other species of rodents and insectivora were infrequently infected. Hantavirus infection in small mammals, according to age, gender, location and species indicated a disparity from region to region prior to and during the epidemic. RA 1; HFRS; Ecology; Human Disease; BD.

ADA545790	Influenza Vaccine: Federal Investments in Alternative Technologies and Challenges to Development and Licensure	GOVERNMENT ACCOUNTABILITY OFFICE WASHINGTON DC	Not available	6/1/2011	59	GAO-11-435	GAO	U	A - 01	Approved for public release; distribution is unlimited.	Congressonal rept.	Influenza, in both its seasonal and pandemic forms, is an ongoing public health concern. Seasonal influenza may begin as early as August and generally diminishes by April in the northern hemisphere. It has been associated with 3,000 to nearly 50,000 deaths each year in the United States in recent decades, according to the Department of Health and Human Services's (HHS) Centers for Disease Control and Prevention (CDC). Pandemic influenza, which periodically causes a global outbreak of serious illness with the potential for many more deaths than seasonal influenza, has occurred four times in the past 100 years. In the late 1990s and early 2000s, detection of the H5N1 avian influenza (also known as bird flu") virus in animals raised concerns among experts that it or another influenza virus might mutate into a strain that could lead to a human influenza pandemic. The recent 2009 H1N1 influenza pandemic reinforced the need to be prepared for future influenza pandemics."
ADA526153	Adaptive Gravitational Gossip: A Gossip-Based Communication Protocol with User-Selectable Rates	AIR FORCE INST OF TECH WRIGHT-PATTERSON AFB OH DEPT OF ELECTRICAL AND COMPUTER ENGINEERING	Hopkinson, Kenneth,Jenkins, Kate,Birman, Kenneth,Thorp, James,Toussaint, Gregory,Parashar, Manu	5/1/2007	15	Not available	AFIT	U	A - 01	Approved for public release; distribution is unlimited.	Journal article	Gossip-based communication protocols are attractive in cases where absolute delivery guarantees are not required due to their scalability, low overhead, and probabilistically high reliability. In earlier work, a gossip-based protocol known as gravitational gossip was created that allows the selection of quality ratings within subgroups based on workload and information update frequency. This paper presents an improved protocol that adds an adaptive component that matches the actual subgroup communication rates with desired rates coping with network variations by modifying underlying gossip weights. The protocol is designed for use in environments where many information streams are being generated and interest levels vary between nodes in the system. The gossip-based protocol is able to allow subscribers to reduce their expected workload in return for a reduced information rate. The protocol is a good fit for applications such as military information systems, sensor networks, and rescue operations. Experiments were conducted to compare the merits of different adaptation mechanisms. Experimental results show promise for this approach.
ADA501086	The 2009 Influenza A(H1N1) Swine Flu" Outbreak: An Overview"	LIBRARY OF CONGRESS WASHINGTON DC CONGRESSIONAL RESEARCH SERVICE	Lister, Sarah A.,Redhead, C. S.	5/5/2009	23	CRS-R40554	CRS/DC	U	A - 01	Approved for public release; distribution is unlimited.	Congressional rpt.	
AD1037365	Identification of a coumarin based antihistamine as an anti filoviral entry inhibitor	USAMRIID Ft Detrick	soloveva,veronica	6/20/2017	31	USAMRIID-TR-17-126,DTRA/JSTO	Not available	U	A - 01	Approved for public release; distribution is unlimited.	Journal Article - Open Access	Filoviruses, consisting of Ebola virus, Marburg virus and Cuevavirus, cause severe hemorrhagic fevers in humans with high mortality rates up to 90 . Currently, there is no approved vaccine or therapy available for the prevention and treatment of filovirus infection in humans. The recent 2013-2015 West African Ebola epidemic underscores the urgency to develop antiviral therapeutics against these infectious diseases. Our previous study showed that GPCR antagonists, particularly histamine receptor antagonists (antihistamines) inhibit Ebola and Marburg virus entry. In this study, we screened a library of 1,220 antihistamines, identified multiple compounds with potent inhibitory activity against entry of both Ebola and Marburg viruses in human cancer cell lines, and confirmed their anti-Ebola activity in human primary cells. These antihistamines target a late-stage of Ebola virus entry.
ADA135430	Biochemical Basis of Virulence in Epidemic Typhus.	UNIVERSITY OF SOUTH ALABAMA MOBILE COLL OF MEDICINE	Winkler,H. H.	1/1/1983	32	Not available	Not available	U	A - 01	Approved for public release; distribution is unlimited.	Annual rept. Aug 80-Apr 81, Final rept. 1 Feb 79-30 Apr 81,	The purpose of the project is to elucidate the biochemical basis of virulence in epidemic typhus. The basic method is a comparison of the E strain and BreninI strain (avirulent and virulent, respectively) of Rickettsia prowazekii in their interaction with the host defense system. Subsequent to the last annual report, work has focused on two areas (1) a study of the ability of virulent and avirulent Rickettsia prowazekii in the cytoplasm of macrophage-like cell lines which employed a fusion technology and (2) the preparation of a manuscript on the macrophage-like cell lines' ability to differentiate the virulent and avirulent typhus rickettsiae.



AD0141165	STUDIES ON THE PATHOGENICITY OF STREPTOCOCCUS PYOGENES IV. THE RELATION BETWEEN THE CAPACITY TO INDUCE FATAL RESPIRATORY INFECTIONS IN MICE AND EPIDEMIC RESPIRATORY DISEASES IN MAN	NORTHWESTERN UNIV CHICAGO IL MEDICAL SCHOOL	COBURN, A.F.,FRANK, P.F.,NOLAN, JEAN	1/4/1957	1	Not available	Not available	U	A - 01	Approved for public release; distribution is unlimited.	Not available	Not available
ADA528476	Worldwide Emerging Environmental Issues Affecting the U.S. Military. October 2006 Report	FEDERATION OF UN ASSOCIATIONS WASHINGTON DC MILLENNIUM PROJECT	Not available	10/1/2006	16	Not available	AEPI/VA	U	A - 01	Approved for public release; distribution is unlimited.	Not available	The New Zealand High Court has ruled that climate change factors can be considered during Greenpeace's upcoming appeal against the proposed Marsden B coal-burning power station. Greenpeace appealed the permission granted to the Marsden B power station to start burning coal, on grounds of environmental and mainly climate change consequences. Although this ruling is limited to New Zealand and to a specific industry, it creates a precedent with effects likely to be felt in other jurisdictions and sectors. In November, the U.S. Supreme Court will hear the case of Massachusetts v. Environmental Protection Agency (case 05-1120) filed by twelve states and several cities on EPA's role to regulate CO2 as a greenhouse gas pollutant under the Clean Air Act. Over 16 other litigations are pending in U.S. federal and state courts against companies whose emissions are linked to global warming; more are expected to come. Swiss Re, the world's largest reinsurance company, estimates that the annual liability costs of global warming will be \$150 billion dollars per year within ten years.
ADA218178	Hemorrhagic Fever with Renal Syndrome (Korean Hemorrhagic Fever)	KOREA UNIV SEOUL COLL OF MEDICINE	Lee, Ho-Wang	7/31/1989	43	HFRS-2	Not available	U	A - 01	Approved for public release; distribution is unlimited.	Annual summary rept. 10 Feb 1988-9 Feb 1989	Hantavirus is ubiquitous in the world and the total number of reported HFRS patient in Euro-Asia is about 200,000 with 5-7% mortality annually. Hemorrhagic fever with renal syndrome (HFRS) is an important military problem since large epidemics of HFRS occurred among soldiers in many past wars and although predominantly associated with field mice in rural areas, it is now being recognized that urban rats and laboratory rats are also reservoirs of HFRS in many parts of the world. Therefore, global surveys of the distribution of hantaviruses and surveillance of HFRS are important for prevention of this highly fatal disease. It is also important to investigate antigenic differences of strains of Hantavirus isolated from rodents caught in non-endemic areas of the world because HFRS patients have never been documented in many areas despite the finding of positive rodents there. Keywords: Hantavirus; Hantaan virus; Seoul virus; Puumala virus; Scrub typhus; Murine typhus; Spotted fever; Seroepidemiology; IFA; Elisa; PRNT; RA I.
AD1053548	Fast and Accurate Detection of Spread Source in Large Complex Networks	Center of Excellence for Complex Systems Research, Faculty of Physics, Warsaw University Warsaw Russia	Paluch, Robert,Lu,Xiaoyan,Suckhecki,Krzysztof,Szyman ski,Boleslaw K.,Holyst,Janusz A.	2/6/2018	10	Not available	Not available	U	A - 01	Approved for public release; distribution is unlimited.	Journal Article - Open Access	Spread over complex networks is a ubiquitous process with increasingly wide applications. Locating spread sources is often important, e.g. finding the patient one in epidemics, or source of rumor spreading in social network. Pinto, Thiran and Vetterli introduced an algorithm (PTVA) to solve the important case of this problem in which a limited set of nodes act as observers and report times at which the spread reached them. PTVA uses all observers to find a solution. Here we propose a new approach in which observers with low quality information (i.e. with large spread encounter times) are ignored and potential sources are selected based on the likelihood gradient from high quality observers. The original complexity of PTVA is O(N), where (3,4) depends on the network topology and number of observers (N denotes the number of nodes in the network). Our Gradient Maximum Likelihood Algorithm (GMLA) reduces this complexity to O (N2log (N)). Extensive numerical tests performed on synthetic networks and real Gnutella network with limitation that ids of spreaders are unknown to observers demonstrate that for scale-free networks with such limitation GMLA yields higher quality localization results than PTVA does.

ADA197172	Epidemiology of Hantavirus Infections in Baltimore	JOHNS HOPKINS UNIV BALTIMORE MD	Childs, James E., Gurri-Glass, Gregory E.	4/9/1988	27	Not available	USAMRDC	U	A - 01	Approved for public release; distribution is unlimited.	Annual rept. 9 Mar 1987-8 Mar 1988	The mammal fauna within Baltimore was surveyed for evidence of hantaviral infections, and the infecting viruses were characterized. Evidence of exposure was found in most species but Norway rats and meadow voles appeared to be the primary reservoirs. They were infected with Baltimore rat virus (BRV) and Prospect Hill virus (PHV), respectively. There was no evidence of cross- infection even in the same study sites. Seroprevalence in humans occurred at rates of 1.3-8.7%, depending on the population examined and the serological test that was used. Comparative serological testing indicated that an IgG ELISA coupled with a confirmatory Western blot provided excellent evidence of exposure to hantaviruses. By these criteria, exposure to hantaviruses in the human samples was 13/1000. Among this group a disproportionate number of individuals demonstrated chronic renal insufficiency or failure. Keywords: Hemorrhagic fever; Epidemic; Hantavirus; Disease reservoirs; Rattus Norvegicus; Immunoglobulin G.
ADA211765	Epidemiological Survey for Incidence of Shigellosis and Hepatitis to Evaluate Potential Field Test Sites for Vaccine Trials. Part 1. Shigellosis	ISRAEL DEFENCE FORCES TEL-AVIV MILITARY POST 02149	Green, Manfred S., Cohen, Dani, Block, Colin, Rouach, Tsvi	3/1/1988	29	Not available	USAMRDC	U	A - 01	Approved for public release; distribution is unlimited.	Final rept. 1 Jun 1986-31 May 1987	The aim of this study was to determine the incidence of shigellosis in selected units in the IDF and to evaluate the associa-homologous Shigella and the occurrence of disease. In this study, soldiers in five units were followed prospectively for the occurrence of diarrheal disease. Blood samples were taken at the beginning and end of the study period. In four of the units, both blood and stool samples were taken from cases of diarrhea at the time of the event. Serologic response was determined by enzyme linked immunosorbent assay (ELISA). Epidemic and sporadic morbidity due to Shigella organisms was identified using bacteriological and serological diagnostic methods. The presence or absence of specific antibodies against Shigella at the onset of disease, were compared in cases and healthy controls from the same units. The presence of specific antibodies of the IgG class was a significant marker of protection against shigellosis due to homologous organisms.
AD0836974	EXPERIMENTAL CONSERVATION OF PLAGUE IN THE SOIL	ARMY BIOLOGICAL LABS FREDERICK MD	Mollaret, H. H.	12/2/1964	12	TRANS-1236	ABL/MD	U	A - 01	Approved for public release; distribution is unlimited.	Not available	A plague strain was kept alive and virulent for sixteen months in sterilized garden earth, and for seven months in the same earth without sterilization. The document includes a historical report of previous research in the same area.
ADA213591	Immunologic Mechanisms of HTLV-3 Infection, Role of Autoimmunity in Aids	JOHNS HOPKINS ONCOLOGY CENTER BALTIMORE MD	Donnenberg, Albert D.	9/5/1989	22	Not available	USAMRDC	U	A - 01	Approved for public release; distribution is unlimited.	Rept. for 16 Dec 1987-15 Dec 1988	Infection with Human Immunodeficiency Virus type 1 (HIV-1), the etiologic agent of the acquired immune deficiency syndrome (AIDS), is increasing at an epidemic rate. The severity of immunologic impairment of infected individuals spans a broad range. It is not currently known whether this heterogeneity reflects distinct outcomes of infection or whether infection progress to a common endpoint at different rates. Developing closer knowledge of immunological events that precede the onset of frank AIDS, as well as the interplay between HIV, immunity and the hematopoietic elements that give rise to the attempts to develop better therapeutic approaches to AIDS. This proposal focuses on two primary areas. The first section, Interaction of HIV-1 and Bone Marrow, focuses on hematopoietic progenitor cells as possible reservoirs of virus. It is designed to explore the relationship between acquisition of lineage specific differentiated function and viral permissiveness, and examine the interaction of infected myeloid and lymphoid cells as they affect immune function and regulation of bone marrow growth. Our second research goal has been the Evaluation of Immunologic Changes Related to Progression of HIV Infection. This aspect of our research draws on the resources of two large prospective cohort studies of the natural history of HIV infection, one in gay/bisexual men (SHARE) and one in intravenous drug users (ALIVE).

ADA447939	National Strategy for Pandemic Influenza Implementation Plan	WHITE HOUSE COMMUNICATIONS AGENCY WASHINGTON DC	Not available	5/1/2006	233	Not available	XD	U	A - 01	Approved for public release; distribution is unlimited.	Not available	Influenza viruses have threatened the health of animal and human populations for centuries. Their diversity and propensity for mutation have thwarted our efforts to develop both a universal vaccine and highly effective antiviral drugs. A pandemic occurs when a novel strain of influenza virus emerges that has the ability to infect and be passed between humans. Because humans have little immunity to the new virus, a worldwide epidemic, or pandemic, can ensue. Three human influenza pandemics occurred in the 20th century, each resulting in illness in approximately 30 percent of the world population and death in 0.2 percent to 2 percent of those infected. Using this historical information and current models of disease transmission, it is projected that a modern pandemic could lead to the deaths of 200,000 to 2 million people in the United States alone. The animal population serves as a reservoir for new influenza viruses. Scientists believe that avian, or bird, viruses played a role in the last three pandemics. The current concern for a pandemic arises from an unprecedented outbreak of H5N1 influenza in birds that began in 1997 and has spread across bird populations in Asia, Europe, and Africa. The virus has shown the ability to infect multiple species, including long-range migratory birds, pigs, cats, and humans. It is impossible to predict whether the H5N1 virus will lead to a pandemic, but history suggests that if it does not, another novel influenza virus will emerge at some point in the future and threaten an unprotected human population. The economic and societal disruption of an influenza pandemic could be significant. Absenteeism across multiple sectors related to personal illness, illness in family members, fear of contagion, or public health measures to limit contact with others could threaten the functioning of critical infrastructure, the movement of goods and services, and operation of institutions such as schools and universities.
ADA506611	Defending the Military Food Supply Acquisition, Preparation, and Protection of Food at U.S. Military Installations	NATIONAL DEFENSE UNIV WASHINGTON DC CENTER FOR TECHNOLOGY AND NATIONAL SECURITY POLICY	Mara, Andrew,McGrath, Lynn	9/1/2009	29	Not available	NDU/CTNSP	U	A - 01	Approved for public release; distribution is unlimited.	Not available	As the world becomes smaller, the presence of U.S. military forces in foreign countries is likely to continue. The ongoing military engagements in both Iraq and Afghanistan have taught us that U.S. troops stationed abroad are attractive targets for hostile governments, organizations, and individuals. A safe food supply is a core capability required for sustaining a military presence in a foreign country. While there are limited examples of attempts to poison the military food supply, one cannot ignore the fact that contaminated food could rapidly and effectively reduce the combat readiness of American forces. Most Americans assume that the United States food supply is both safe and secure. However, in January 2009, 31 million pounds of peanut butter and peanut paste produced by the Peanut Corporation of America (PCA) were recalled due to over 600 confirmed cases of Salmonella. Not surprisingly, PCA filed for bankruptcy shortly thereafter. This incident, in addition to other recent outbreaks of pathogenic Escherichia coli and Salmonella has raised doubts about food safety. Moreover, these epidemics have highlighted the fact that food produced domestically (as was the case with PCA and with E. coli tainted spinach from California in the fall of 2006)4 and imported from abroad (Salmonella contaminated Serrano peppers from Mexico in the summer of 2008)5 can be an effective vector for illness.

ADA619411	Is Military Deployment a Risk Factor for Maternal Depression?	NAVAL HEALTH RESEARCH CENTER SAN DIEGO CA	Nguyen, Stacie,LeardMann, Cynthia A.,Smith, Besa,Conlin, Ava Marie S.,Slymen, Donald J.,Hooper, Tomoko I.,Ryan, Margaret A.,Smith, Tyler C.	1/1/2013	13	NHRC-11-44	NMRC/MD	U	A - 01	Approved for public release; distribution is unlimited.	Journal article	Depression is a growing epidemic that affects an estimated 17 million people each year in the United States. Postpartum depression is a specific type of depression, with symptoms starting within the first 4 weeks of delivery and affecting approximately 10%-22% of new mothers. Research has focused on postpartum depression in the general population; however, little research has been conducted on maternal depression among military mothers where unique occupational conditions often exist. Understanding depression after childbirth in this important subpopulation of US women is crucial for operational needs of the US military. The study included 1660 female Millennium Cohort participants who gave birth during active-duty service and completed baseline and follow-up questionnaires between 2001 and 2008. Maternal depression was assessed at follow-up using Primary Care Evaluation of Mental Disorders Patient Health Questionnaire criteria. Deployment prior to childbirth and deployment without combat experience after childbirth did not increase the risk of maternal depression. Women who deployed and reported combat experience after childbirth were at increased risk for maternal depression compared with nondeployed women who gave birth. However, among female combat deployers, women who gave birth did not have a significantly increased risk for depression compared with those who did not give birth. Among deployment-experienced women, those who had combat-like exposures and childbirth were at increased odds for depression compared with women who experienced combat and did not give birth. This suggests the increased rate of depression is primarily attributed to experiencing combat while deployed.
ADA501479	The 2009 Influenza Pandemic: An Overview	LIBRARY OF CONGRESS WASHINGTON DC CONGRESSIONAL RESEARCH SERVICE	Lister, Sarah A.,Redhead, C. S.	6/12/2009	31	CRS-R40554	CRS/DC	U	A - 01	Approved for public release; distribution is unlimited.	Congressional rpt.	
ADA501658	Avian Influenza/Pandemic Influenza Program	HENRY M JACKSON FOUNDATION FOR THE ADVANCEMENT OF MILITARY MEDICINE ROCKVILLE MD	Hapner, Ralph W.	10/1/2007	7	Not available	USAMRMC	U	A - 01	Approved for public release; distribution is unlimited.	Final addendum rept. 8 May 2006-19 Sep 2007	The Henry M. Jackson Foundation will provide space, personnel, equipment and to support surveillance and efforts in support of the Department of Defense Global Emerging Infections Surveillance and Response System (DoD-GEIS) research related to avian influenza and pandemic influenza preparedness and response.
ADA386486	Intervention to Decrease Risk for Sexually Transmitted Diseases (STDs) and the Associated Negative Reproductive Health Outcomes in Women Aboard Ships: A Biopsychosocial Approach	CALIFORNIA UNIV SAN FRANCISCO	Boyer, CHerrie,Shafer, Mary-Ann	9/1/2000	69	Not available	USAMRMC	U	A - 01	Approved for public release; distribution is unlimited.	Annual rept. 7 Aug 1999-6 Aug 2000	Unintended pregnancies (UIPs) and STDs with their sequelae of ectopic pregnancy continue to be epidemic among active duty enlisted women. Such reproductive health problems result in major morbidity among affected women as well as posing a potential threat to combat readiness. UIPs and STDs result from complex interactions between biological and behavioral factors in military women. The ultimate control in preventing such morbidities must rely on both behavioral and biologic strategies. The primary aim of the project is to develop, implement, and evaluate an intervention which emphasizes correct information, motivation and behavioral skills building (1MB Model) coupled with non-invasive screening using urine-based amplified DNA techniques to detect C trachomatis and N. gonorrhoeae and urine based pregnancy testing. A pre-test, post-test experimental design was employed to evaluate the impact of the behavioral intervention on the experimental group using both self-report questionnaires (UIP/STD psychosocial and behavioral risk factors) and results from the STD and pregnancy screening tests as measures. The control intervention will consist of a prevention program focusing on nutrition, breast cancer, fitness and injury prevention. Questionnaires and urine testing will be done at pre-test, mid-study, and post-test 6-12 months later. Subjects will include junior enlisted Marine women with N=1000 in the experimental group and N=1000 in the control group.

ADB254890	Addressing Emerging Infectious Disease Threats A Strategic Plan for the Department of Defense	WALTER REED ARMY INST OF RESEARCH WASHINGTON DC DIV OF PREVENTIVE MEDICINE	Not available	1/1/1998	53	Not available	WRAIR	U	A - 01	Approved for Public Release; Distribution Unlimited.	Not available	Historians in the next millennium may find that the 20th century's greatest fallacy was the belief that infectious diseases were nearing elimination. The resultant complacency has actually increased the threat. Both naturally occurring and bioterrorist infectious disease agents hold an increasing potential to destabilize international security. Failure to recognize and accept this concept will lead to disaster. Globally, infectious diseases remain the leading cause of death. The ability of microbes to adapt and breach our traditional defenses coupled with changes in society, technology and the environment sustain the likelihood that regional and global epidemics reminiscent of the worst in history will recur In addition, terrorists with some expertise in molecular biology and modest financing can now wage biological warfare on cities, regions, and even the entire planet. A responsible assessment indicates that national and global security requires a robust early warning system" for emerging infections."
AD0750378	Control of VEE Epizootic-Epidemic by Vaccine Developed at USAMRIID	ARMY MEDICAL RESEARCH INST OF INFECTIOUS DISEASES FORT DETRICK MD	Spertzel, Richard O.,Crozier, Dan	1/1/1972	16	Not available	USAMRIID	U	A - 01	Approved for public release; distribution is unlimited.	Not available	Venezuelan equine encephalomyelitis (VEE) is a zoonotic arbovirus disease affecting both Equidae and man. Infection in equine animals may be subclinical, but more often it assumes one of the following clinical forms: (a) mild illness consisting primarily of anorexia, fever, and depression; (b) severe illness characterized by anorexia, high fever, stupor, staggering, and blindness, followed by recovery with or without permanent sequellae; or (c) fatal disease with a similar sequence of signs, but terminating in death. Overall mortality rate in equines probably exceeds 75% of those infected. In man, VEE commonly occurs as an influenza-like illness characterized by generalized muscular pains, severe frontal headache and high fever; overt signs of encephalitis are rare, occurring primarily in children. Overall mortality in humans probably is no more than 1%. As part of the effort to control these epidemics a live attenuated virus vaccine (TC-83) developed at the U. S. Army Medical Research Institute of Infectious Diseases (USAMRIID) was administered to horses, burros, and mules. The TC-83 vaccine was originally developed for protection of laboratory personnel working in high-risk areas and subsequently has been administered to more than 6,000 human beings. During developmental studies, evidence suggested that the vaccine might be suitable for use in Equidae.
ADA634934	Coronavirus Attachment and Replication	UNIFORMED SERVICES UNIV OF THE HEALTH SCIENCES BETHESDA MD	Compton, Susan R.	3/28/1988	211	Not available	USUHS	U	A - 01	Approved for public release; distribution is unlimited.	Doctoral thesis	Coronaviruses are enveloped RNA viruses which show marked tissue and species tropisms. Mouse hepatitis virus (MHV) is one example of the coronaviruses. In this dissertation I will discuss two aspects of coronaviruses: 1) the RNA polymerase of the A59 strain of MHV; and 2) the role of coronavirus receptors in coronavirus species specificity. An in vitro replication system was developed to study the RNA dependent RNA polymerase of MHV-A59. Extracts of MHV-infected cells produced MHV-specific RNAs of genomic and subgenomic sizes. In vitro synthesized viral RNA became associated with the viral nucleocapsid protein to form ribonucleoprotein complexes. When cell lines of non-murine origin were inoculated with MHV, they produced no MHV RNAs or proteins. Therefore, species-specific host restriction for MHV may occur at the level of viral attachment or penetration. MHV receptors in mouse strains susceptible, semi-resistant or resistant to MHV infection were compared on hepatocyte and intestinal brush border membranes. All strains tested except the fully resistant SJL/J strain expressed a 100-120 kilodalton MHV receptor, but C57BL/ 6 mice expressed a larger receptor on the intestine. MHV3 bound to the same receptor as MHVA59 indicating that different MHV strains share a common receptor. The species specificity of the MHV receptor was also investigated. Intestinal brush border membranes from nine other species did not express any MHV binding activity. Therefore, the marked species specificity of MHV appears to be determined by absence of the MHV -specific receptor in other species. Solid phase assays to detect virus receptors on intestinal brush border membranes from normal host species were developed for canine (CCV), feline (FIPV), porcine (TGEV), human (HCV-229E), and bovine (BCV) coronaviruses. The antigenically related coronaviruses, CCV, FIPV, TGEV, and HCV-229E bound to intestinal brush border membranes of dog, cat, pig, and human.

AD0841600	SMALLPOX EPIDEMIC IN VANNES, FRANCE FROM DECEMBER, 1954 TO MARCH, 1955	ARMY BIOLOGICAL LABS FREDERICK MD	Leroux, M.,Amphoux, M.,Billaud,,Bouillaud,, Cadoret, G.	1/1/1956	28	TRANS-35	ABL/MD	U	A - 01	Approved for public release; distribution is unlimited.	Not available	The report states that during the epidemic at Vannes there was a rarity of indirect contamination. There was a grave incidence of non vaccination and of pre-existing affection on the severity and evolution of smallpox. There was also clinical and radiological pulmonary manifestations appearing on the occasion of abortive smallpox, even aneuruptive. Finally, revaccination did not appear to confer the immunity expected, by reason of the too-short interval between this and the contact with smallpox. It seemed most often to play a non negligible role in attenuation of the infection.
ADA505843	Rapid Genome Analyses of Emergent Human Adenovirus 14a Causing 2006-7 Febrile Respiratory Illness (FRI) Outbreaks in the US via High Throughput Next-Generation" Pyrosequencing Technique"	WALTER REED ARMY INST OF RESEARCH SILVER SPRING MD	Houng, Huo-Shu H.,Gong, Heping,Verratti, Kathleen,Lott, Lisa,Binn, Leonard N.,Kuschner, Robert A.,Metzgar, David,Russell, Kevin L.,Kajon, Adriana,Lin, Kuei-Hsiang,Lynch, Julia A.	12/1/2008	8	Not available	WRAIR/MD	U	A - 01	Approved for public release; distribution is unlimited.	Conference paper	During 2006-7, Ad14a was identified during a series of FRI outbreaks across the US, involving at least ten documented pneumonia fatalities. Leveraging sequence data from the prototype strain Ad14p (GenBank # AY803294), the full genome sequence of Ad14a was determined using the conventional, and very labor-intensive, Sanger sequencing method. The same genome was analyzed using Pyrosequencing, an emerging alternative genome sequencing technology offering much higher efficiency. This direct shotgun approach relies on random sequencing of small DNA fragments using adaptor sequences, rather than independent amplification of separate fragments using pre-determined pathogen-specific sequences. This new sequencing strategy is therefore ideally suited for the rapid sequencing of hitherto uncharacterized human pathogens. The Roche 454 FLX system was used to sequence and assemble multiple Ad14a viruses from recent US outbreaks, as well as closely related Ad11a isolates causing non-US ARD infections since the 1970s. The US Ad14a strain significantly diverges from the prototypical Eurasian strain, Ad14p, and shares greater than 98% genomic homology with Ad11a. Two genome types of Ad11, Ad11p and Ad11a display different tissue tropisms, causing renal and upper respiratory infections respectively. Ad14a and Ad11a share almost identical Fiber genes, which are known to be responsible for the adenoviruses' organ tropism, and both cause ARD infections. Both also share highly homologous Hexon genes, except for a 400 base pair (bps) region that allows these two viruses to be distinctly differentiated from each other based on serological cross reactivity.
ADA610957	Targeting the Adipocyte-Tumor Cell Interaction in Prostate Cancer Treatment	SANFORD-BURNHAM MEDICAL RESEARCH INST LA JOLLA CA	Diaz-Meco, Maria T.	10/1/2014	46	Not available	USAMRMC	U	A - 01	Approved for public release; distribution is unlimited.	Annual rept. 30 Sep 2013-29 Sep 2014	Prostate cancer (PCa) is one of the leading causes of death among men in the United States. Obesity is another growing epidemic health problem in Western societies and in developing nations, and represents one of the greatest threats to global human health. Several epidemiological studies during the last decade have pointed to an association between obesity and increased risk factor for PCa progression and aggressiveness. However, despite the relatively high amount of epidemiological data available, little is known about the molecular basis underlying the association between PCa progression, obesity and inflammation, and the role of the adipocyte-cancer cell interaction in this process. The goal of this project is to test the hypothesis that p62 is a molecular link in the cross-talk between obesity, inflammation and prostate cancer progression. Here, we have generated a new mouse model to address this question. Unveiling the molecular mechanisms governing obesity-induced prostate cancer progression will have a great impact in our understanding of this process, and its relevance for potential more targeted and efficacious therapies in PCa.
ADA192652	Anthrax - Pasteur to the Present	ARMY MEDICAL RESEARCH INST OF INFECTIOUS DISEASES FORT DETRICK MD BACTERIOLOGY DIV	Ezzell, John W., Jr.	1/1/1987	13	Not available	USAMRIID	U	A - 01	Approved for public release; distribution is unlimited.	Not available	Few microbial pathogens have had as great an impact on the early development of medical bacteriology and immunology as Bacillus anthracis. From studies on this etiologic agent of anthrax during the mid-1800s have stemmed many of the fundamental concepts of infection and immunity now generally accepted. Although anthrax has long been recognized as a disease primarily associated with herbivorous animals, it can occur in humans, usually as a result of incidental contact with infected animals or contaminated animal products. It was in response to the major epidemics of the mid-1800s, that the French Minister of Agriculture commissioned Pasteur to develop methods to control anthrax.
ADA556275	H1N1 Preparedness and Recent Lessons Learned	TRICARE MANAGEMENT ACTIVITY FALLS CHURCH VA	Hachey, Wayne,Jeffery, Diana D.,Gentilman, Mark F.	1/25/2011	44	Not available	TMA	U	A - 01	Approved for public release; distribution is unlimited.	Briefing charts	Not available

ADA212751	Detecting Dental Epidemics.	NAVAL DENTAL RESEARCH INST GREAT LAKES IL	Cohen, M. E.,Burcal, R. G.,Rodden, J. W.,Arthur, J. S.	4/1/1989	12	NDRI-PR-89-02	Not available	U	A - 01	Approved for public release; distribution is unlimited.	Progress rept.,	Dental diseases are typically regarded as if they were noncommunicable. For this reason, training in methods appropriate to the analysis of classical epidemics is not common during dental education. Recent emphasis on the control of cross contamination potentials would seem to enhance the importance of epidemiological monitoring of disease outbreaks. Monitoring allows for the identification of unusual clustering and perhaps eventually to the determination of causative agents. The purpose of this paper is to describe efficient methods for the statistical analysis of continuous time distributions of dental events. A single data example is chosen but the methods could apply in a variety of situations. The following data could conceivably represent post- surgical complications following removal of third molars, periapical infections following a first phase of endodontic treatment, and so forth. (KT)
ADA079283	The Biological Immune Response - A Review of Effect of Dietary Amino Acids.	ARMY MEDICAL RESEARCH INST OF INFECTIOUS DISEASES FREDERICK MD	Wannemacher,Robert W. , Jr	12/19/1979	35	Not available	Not available	U	A - 01	Approved for public release; distribution is unlimited.	Interim rept.,	Despite the complexity and interacting components of the immune system, a definite pattern is emerging as the effects of dietary amino acids and proteins on the immune response, which include: (a) T-lymphocyte function can be altered by dietary proteins and amino acids; (b) only minor alterations of B-cell function have been observed in the protein-calorie malnutrition in humans; (d) concentration and hemolytic activity of serum complement, as well as opsonic activity decrease during PCM; and (e) the metabolic response to infectious disease can increase the protein deficiency of the host and indirectly affect the immune response. These effects on the immune system are only observed during very severe PCM and would not account for the high incidence of infection that has been observed in the marginally malnourished child, which may be more related to the epidemic environment in which he lived. The consequence of altered immune response is not clearly defined and is largely circumstantial. During protein deprivation in experimental animals, most investigators have observed a decreased resistance to bacterial infections.s An increase in susceptibility to infectious disease with accompanied elevated rates of morbidity and mortality have been observed in children and adults with PCM.
ADA525173	U.S.-China Maritime Confidence Building. Paradigms, Precedents, and Prospects (China Maritime Study, Number 6)	NAVAL WAR COLLEGE NEWPORT RI CHINA MARITIME STUDIES INST	Not available	7/1/2010	39	Not available	NWC/CMSI	U	A - 01	Approved for public release; distribution is unlimited.		As two great powers that will influence much of the immediate future of our small and vulnerable planet, China and the United States are in a marriage of sorts-- united for the purpose of living together
ADA433577	Surveillance for Respiratory Infections in U.S. Military Populations Using Classic and Novel Diagnostic Techniques	NAVAL HEALTH RESEARCH CENTER SAN DIEGO CA	Russell, Kevin L.,Ecker, David J.	6/1/2004	11	Not available	NHRC	U	A - 01	Approved for public release; distribution is unlimited., Availability: This document is not available from DTIC in microfiche., NATO	Conference paper	Military populations are historically susceptible to outbreaks of acute respiratory disease. These epidemics disrupt training schedules, place a heavy burden on the military medical system, cause significant economic losses, and ultimately impact troop readiness and mission accomplishment. The U.S. Naval Health Research Center (NHRC) has provided population-based viral respiratory surveillance in select U.S. military populations since 1996. Although classical methods of diagnosis (culture) are the gold standard, these techniques are laborious and time-consuming. Novel diagnostic techniques were recently explored, and they show promise for providing rapid results for large numbers of specimens. This paper discusses the Naval Health Research Center's (NHRC) Respiratory Disease Laboratory; the NHRC respiratory infection surveillance network; the extension of surveillance to remote settings, such as combatant naval vessels and the Cobra Gold exercise in Thailand in 2003; the laborious and time-consuming nature of classic laboratory processing; the requirements of the ideal diagnostic test; and new diagnostic techniques, such as molecular polymerase chain reaction (PCR) and Triangulation Identification for the Genetic Evaluation of Risks (TIGER).
ADA528622	Worldwide Emerging Environmental Issues Affecting the U.S. Military. February 2006 Report	FEDERATION OF UN ASSOCIATIONS WASHINGTON DC MILLENNIUM PROJECT	Not available	2/1/2006	31	Not available	AEPI/VA	U	A - 01	Approved for public release; distribution is unlimited.	Not available	The UN Secretary-General has appointed a 15-member international high-level panel to explore how to improve the work and efficiency of the UN system in the areas of development, humanitarian assistance, and environment. The study's outcomes will be used for the comprehensive UN management reform, complementing such other major reform initiatives as the new Peacebuilding Commission and the new Human Rights Council. The study is expected to be completed by the summer and its recommendations formally presented to the UN General Assembly in September 2006, with possible implementation in 2007.

AD0678259	ON THE ROLE OF CAMELS IN THE EPIDEMIOLOGY OF ANTHRAX,	ARMY BIOLOGICAL LABS FREDERICK MD	Punskii,E. E.,Zheglova,D. V.	7/1/1968	6	Trans-179	Not available	U	A - 01	Approved for public release; distribution is unlimited.	Not available	In Central Asia camels are apt to become infected with anthrax. This fact must be borne in mind by veterinarians as well as medical workers. An infected camel may become a source of an epidemic of anthrax among humans. With the cutaneous form of anthrax, in certain instances, multiple cutaneous lesions may occur due to various ways of infection. (Author)
ADA055843	On the Normal Convergence of a Family of Simple Epidemics.	FLORIDA STATE UNIV TALLAHASSEE DEPT OF STATISTICS	Langberg,Naftali A.	6/1/1978	8	FSU-STATISTICS-M447,TR-7,AFOSR-TR-78-1112	TR-78-1112	U	A - 01	Approved for public release; distribution is unlimited.	Interim rept.,	Consider a family of simple epidemics not necessarily with exponential interinfection times. For this family of simple epidemics normal approximations are established to all finite joint state probabilities. Illustrating the applicability of this result is a class of simple epidemics used frequently for modeling purposes for which the normal approximations hold.
ADA554596	Threats without Threateners? Exploring Intersections of Threats to the Global Commons and National Security	RAND CORP ARLINGTON VA NATIONAL SECURITY RESEARCH DIV	Treverton, Gregory F.,Nemeth, Erik,Srinivasan, Sinduja	1/1/2012	74	Not available	DOD	U	A - 01	Approved for public release; distribution is unlimited.	Occasional paper	Could three global issues -- climate change, water scarcity, and pandemics -- be posed as national security challenges with interconnected threats to the global commons"? And
ADA433151	Great Communicating: Learning from Ronald Reagan's Public Appeals to Address the Obesity Epidemic in America	JOHN F KENNEDY SCHOOL OF GOVERNMENT CAMBRIDGE MA	Not available	5/4/2005	17	CI04-1056	AFIT	U	A - 01	Approved for public release; distribution is unlimited.		Presidents of the United States face the formidable challenge of executing their polices and programs, while balancing relationships with political actors that are outside of their control and with whom they must share power. The Congress, the Supreme Court the press, interest groups, and the public are five main actors whose needs and interests merit attention and who can significantly contribute to presidential power. This paper specifically addresses the dynamic relationship between President Reagan and the American public. It uses his success with the War on Drugs" and his failure to address the HIV/AIDS crisis as case studies to demonstrate' the potential power of this relationship. Building on this hypothesis
ADA370226	Intervention to Decrease Risk for Sexually Transmitted Diseases (STDs) and the Associated Negative Reproductive Health Outcomes in Women Aboard Ships: A Biopsychosocial Approach	CALIFORNIA UNIV SAN FRANCISCO	Shafer, Mary A.	9/1/1999	198	Not available	USAMRMC	U	A - 01	Approved for public release; distribution is unlimited.	Annual rept. 7 Aug 98-6 Aug 99,	Unintended pregnancies (UIPs) and STDs with their sequelae of ectopic pregnancy continue to be epidemic among active duty enlisted women. Such reproductive health problems result in major morbidity among affected women as well as posing a potential threat to combat readiness. UIPs and STDs result from complex interactions between biological and behavioral factors in military women. The ultimate control in preventing such morbidities must rely on both behavioral and biologic strategies. The primary aim of the project is to develop, implement and evaluate an intervention which emphasizes correct information, motivation and behavioral skills building (IMB Model) coupled with non-invasive screening using urine-based amplified DNA techniques to detect C. trachomatis and N. gonorrhoeae and urine based pregnancy testing. A pre-test, post-test experimental design was employed to evaluate the impact of the behavioral intervention on the experimental group using both self-report questionnaires (UIP/STD psychosocial and behavioral risk factors) and results from the STD and pregnancy screening tests as measures. The control intervention will consist of a prevention program focusing on nutrition, breast cancer, fitness and injury prevention. Questionnaires and urine testing will be done at pre-test, mid-study, and post-test 6-12 months later. Subjects will include junior enlisted Marine women with N=1000 in the experimental group and N=1000 in the control group.
AD0889231	Immunity of Villagers of La Guajira, Colombia, in April 1963 to the Virus of Venezuelan Encephalitis,	FORT DETRICK FREDERICK MD	Sanmartin, Carlos,Arbelaez, Normando	11/18/1971	13	Trans-2751	Not available	U	A - 01	Approved for public release; distribution is unlimited.	Not available	Blood samples were taken from 163 persons in La Guajira in April, 1963, about four to five months after an epidemic of Venezuelan encephalitis. It was found that 66.9% of those tested had antibodies against the virus. There was a significant difference between the proportion of immune persons among those who had the disease at the time of the epidemic (72.3%) and among those who had no symptoms of illness at that time (52.3%). The study of the hemagglutination inhibitor titre and of the proportion of position reactions to the complement-fixation test seems to confirm the Venezuelan etiology of the epizootic and epidemic of 1942. The results of tests made with antigens of eastern encephalitis and St. Louis encephalitis, and of six influenza antigens, indicate that these viruses had nothing to do with the 1962 epidemic. (Author)



ADB026357	Infectious Multiple Drug Resistance in the Enterobacteriaceae	WASHINGTON UNIV SEATTLE DEPT OF MICROBIOLOGY	Falkow, Stanley	9/1/1977	26	Not available	USAMRDC	U	A - 01	Approved for public release; distribution is unlimited.	Annual rept. Jun 1976-May 1977	Tobrymycin-resistant burn wound isolates from five different bacterial genera contained a common 68 x 10 to the 6th power dalton R plasmid that could be transmitted by conjugation to Escherichia coli K-12. It was possible by a variety of newly developed methods to detect, characterize and show molecular identity of this R plasmid in clinical isolates from patients. This study illustrates the usefulness of simple screening methods for studying the molecular epidemiology of R plasmids in the hospital setting or during an epidemic.
ADA371316	Conference Support: Physical Activity in the Prevention and Treatment of Obesity and its Co-Morbidities.	AMERICAN COLL OF SPORTS MEDICINE INDIANAPOLIS IN	Kuiper, Sandra	11/1/1999	182	Not available	USAMRMC	U	A - 01	Approved for public release; distribution is unlimited.	Final Proceedings rept. 15 Jun 99-14 Nov 99	Partial Contents: Physical Activity and Obesity: American College of Sports Medicine Consensus Conference, Introductory comments to the consensus on physical activity and obesity, Physical activity in the prevention and treatment of obesity and its comorbidities: evidence report of independent panel to assess the role of physical activity in the treatment of obesity and its comorbidities, The obesity epidemic in children and adults: current evidence and research issues, Overview of the determinants of overweight and obesity: current evidence and research issues, Assessment of physical activity level in relation to obesity: current evidence and research issues, Levels of physical activity and inactivity in children and adults in the United States: current evidence an research issues, Contribution of a sedentary lifestyle and inactivity to the etiology of overweight and obesity: current evil research issues, Physical activity in the prevention of obesity: current evidence and research issues.
ADA526939	Worldwide Emerging Environmental Issues Affecting the U.S. Military. Summarizing Environmental Security Monthly Scanning July 2007 - December 2007	FEDERATION OF UN ASSOCIATIONS WASHINGTON DC MILLENNIUM PROJECT	Not available	12/1/2007	110	Not available	AEPI/VA	U	A - 01	Approved for public release; distribution is unlimited.	Not available	The purpose of the monthly scanning reports is to assess worldwide environment-related events in order to identify and analyze issues that might trigger future international environmental regulations and/or modifications to the existing ones with potential implications for the miliraty. Environmental security continues to move up on national, regional, and international agendas due to increasing scientific evidence of climate change, extreme weather events, the number and intensity of natural disasters, pollution, potentials for pandemics, and nuclear-biological-chemical threats. The Army Strategy on the Environment reflects this new direction. Calls for improving international environmental governance are increasing. The technological ability to identify environmental threats and crimes is becoming cost-effective through new sensors and communications. The UN Security Council, the Organization for Security and Cooperation in Europe, and other international bodies are paying increased attention to problems of environmental security. Environmental damages that people and organizations got away with in the past are less likely to escape detection and punishment in the future. Environmental diplomacy is increasingly being used to support conflict prevention efforts and to build international confidence, while human security is gaining recognition in both military and diplomatic circles. Environmental security is a link between the two. The Millennium Project defines environmental security as environmental viability for life support, with three sub-elements: ? preventing or repairing military damage to the environment, ? preventing or responding to environmentally caused conflicts, and ? protecting the environment due to its inherent moral value. This summarizing paper presents the events and emerging environmental security?related issues identified since July 2007, organized around this definition.
AD0837848	EARLY SUMMER MENINGO-ENCEPHALITIS IN LOWER AUSTRIA, 1956-1958. EPIDEMIOLOGY AND CLINIC IN THE EPIDEMIC AREA OF NEUNKIRCHEN	ARMY BIOLOGICAL LABS FREDERICK MD	Moritsch, H.,Krausler, J.	7/1/1968	11	TRANS-401	SMUFD	U	A - 01	Approved for public release; distribution is unlimited.	Not available	Systematic investigations in the district of Neunkirchen during the period 1956-1958 led to the diagnosis of early summer meningo-encephalitis (ESME) in 89 cases (= 55%) of meningitis and meningo-encephalitis (partly with paralyses) among 162 patients with questionable viral infections of the CNS. ESME has a concentrated incidence in May to July and has clinical similarities with polio-virus infections. The differentiation of the two diseases, however, is possible only by means of aimed virologic-serological examinations (identification of the pathogen, CFR). Wild and domestic animals represent the natural viral reservoir; human infections cannot be explained completely by tick bites or the consumption of fresh milk, however. A direct infection from man to man does not occur.

AD1010160	Combining Surveillance Systems: Effective Merging of U.S. Veteran and Military Health Data	DEPARTMENT OF VETERANS AFFAIRS WASHINGTON DC WASHINGTON United States	Pavlin,Julie A.,Burkom,Howard S.,Elbert,Yevgeniy,Luce ro-Obusan,Cynthia,Winston,Carla A.,Cox,Kenneth L.,Oda,Gina,Lombardo,Joseph S.,Holodniy,Mark	8/4/2016	8	VA	Not available	U	A - 01	Approved for public release; distribution is unlimited.	Journal Article	Background: The U.S. Department of Veterans Affairs (VA) and Department of Defense (DoD) had more than 18 million healthcare beneficiaries in 2011. Both Departments conduct individual surveillance for disease events and health threats.Methods: We performed joint and separate analyses of VA and DoD outpatient visit data from October 2006 through September 2010 to demonstrate geographic and demographic coverage, timeliness of influenza epidemic awareness, and impact on spatial cluster detection achieved from a joint VA and DoD biosurveillance platform. Results: Although VA coverage is greater, DoD visit volume is comparable or greater. Detection of outbreaks was better in DoD data for 58% and 75% of geographic areas surveyed for seasonal and pandemic influenza, respectively, and better in VA data for 34% and 15%. The VA system tended to alert earlier with a typical H3N2 seasonal influenza affecting older patients, and the DoD performed better during the H1N1 pandemic which affected younger patients more than normal influenza seasons. Retrospective analysis of known outbreaks demonstrated clustering evidence found in separate DoD and VA runs, which persisted with combined data sets. Conclusion: The analyses demonstrate two complementary surveillance systems with evident benefits for the national health picture. Relative timeliness of reporting could be improved in 92% of geographic areas with access to both systems, and more information provided in areas where only one type of facility exists. Combining DoD and VA data enhances geographic cluster detection capability without loss of sensitivity to events isolated in either population and has a manageable effect on customary alert rates.
ADA488731	A 21st Century National Public Health System	NAVAL POSTGRADUATE SCHOOL MONTEREY CA	Jones, Mary J.	9/1/2008	145	Not available	NPS	U	A - 01	Approved for public release; distribution is unlimited.	Master's thesis	The attention that SARS created in 2003 has influenced public and political perceptions about the risks associated with infectious diseases and the role the public health system should play in national security. This comparative case study was conducted to examine the Canadian public health's system response to SARS in order to formulate recommendations for the U.S. public health system. This analysis demonstrated that the governmental organizational structure of the U.S. public health system does not support its current mission or its new responsibilities for public health security. A national public health system is needed to support dual missions: the traditional mission of tailoring public health programs specific to the social and demographic needs of the citizens; and the new mission of public health security. In order to transform the current U.S. public health system into a national public health system two critical components must be addressed at the federal, state, and local level: 1) organizational capacity and 2) service delivery. Recommendations are provided regarding the way forward at the federal level and work needing to be done at the state and local level towards building a national system capable of meeting the public health threats of the 21st century.
ADA555260	A Small-World Network Model of Disease Transmission	APPLIED RESEARCH ASSOCIATES INC ARLINGTON VA	Cheng, Karen,Crary, David,Rodriguez, J.,Oldson, Darren R.	12/1/2011	28	ARA-TR-10-SEASSP-17921-003,DTRA-TR-11-20	TR-11-20,DTRA/RD-CB	U	A - 01		Technical rept. May 2009-May 2011	The most well-known mathematical models for the investigation of the spread of transmissible infections are compartmental models. These compartments categorize the population according to disease status, susceptibility to infection, etc. and by using coupled differential equations the models can often be solved analytically. But these models assume uniform mixing, i.e. any individual in the population has the same probability of contacting any other individual. These models require very detailed contact networks, but the large data set necessary to run the model is usually incomplete. Recently two advances have been made: one incorporates realistic assumptions about transportation and demographics as they affect person-to-person contact. The second has provided tools for describing complex networks and understanding their dynamics. Small-world networks show a small average distance between nodes (measured as the least number of connections) compared with the size of the graph. These nodes can represent either persons or locations. In this paper complicated and unrealistic modeling based on uniform mixing is replaced by a simpler, less computationally extensive, and more realistic small world network model. With this model outbreaks in various geographical locations can be rapidly characterized, analyzed, and preventive measures for outbreak control recognized and recommended.

ADA432737	Rapid Identification and Strain Typing of Respiratory Pathogens for Epidemic Surveillance	NAVAL HEALTH RESEARCH CENTER SAN DIEGO CA	Ecker, David J.,Sampath, Rangarajan,Blyn, Lawrence B.,Samant, Vivek,Russell, Kevin,Freed, Nikki,Barrozo, Chris,Wu, Jianguo,Rudnick, Karl,Desai, Anjali	4/8/2003	13	BUMED-03-19	BUMED	U	A - 01	Approved for public release; distribution is unlimited.	Not available	Epidemic respiratory infections are responsible for extensive morbidity and mortality within both military and civilian populations. We describe a methodology to examine respiratory samples that simultaneously identifies broad groups of bacteria. The process uses electrospray ionization mass spectrometry and base composition analysis of broad-range PCK amplification products. The base composition analyses from a small set of broad-range primer pairs are used to triangulate" the identity of pathogenic organisms present in the sample. Once a species has been identified
ADA563475	Taking a Regional Healthcare Coalition Approach to Mitigating Surge Capacity Needs of Mass Casualty or Pandemic Events	NAVAL POSTGRADUATE SCHOOL MONTEREY CA	McElwee, Jill A.	6/1/2012	99	Not available	NPS	U	A - 01	Approved for public release; distribution is unlimited.	Master's thesis	Hospitals and healthcare facilities are not able to singularly mitigate the patient surge from a mass-casualty incident or pandemic health event. The potential volume of patients demands that regional healthcare communities be able to respond as a unified body to maintain the resiliency of their healthcare systems. The National Healthcare Preparedness Program advocates the establishment of fully functional, response-ready regional healthcare coalitions to meet this need. Establishing a regional healthcare coalition requires that an appropriate governance structure be established, a proper level of participation be solicited, and adequate funding mechanisms be put in place. This thesis offers a case study of how these factors influence the ability of three existing and distinctively different healthcare coalitions to prepare for a patient surge from a mass-casualty or pandemic health event. The thesis also shows the influence of each of the factors on a coalition's sustainability. The coalitions researched were Palm Beach County, Florida's Healthcare Emergency Response Coalition, King County, Washington's Healthcare Coalition, and Jacksonville, Florida's First Coast Disaster Council. These three coalitions highlight differences and similarities in the governance structure, participation needs, and funding mechanisms of existing regional healthcare coalitions and show how each influences catastrophic patient surge mitigation in their region.
ADA517526	Molecular Mechanisms and Treatment Strategies for Obesity-Associated Coronary Artery Disease, an Imminent Military Epidemic	COLUMBIA UNIV NEW YORK	Tabas, Ira	12/1/2009	128	Not available	USAMRMC	U	A - 01	Approved for public release; distribution is unlimited.	Final rept. 1 Jan 2006-30 Nov 2009	There is an epidemic of obesity in the military. Obesity leads to type 2 diabetes, the most dangerous consequence of which is atherothrombotic vascular disease. Over the 4-year grant period, we have made major progress on the Key Tasks. We have gained more in-depth understanding on how CaMKII, NADPH oxidase, and IP3Rs - all AngII targets - trigger apoptosis in ERstressed macrophages. Moreover, we have made new discoveries related to the AngII receptor adaptor, beta-arrestin. Our work with PPARs provided new insight into how these drugs for obese diabetics affect advanced plaque progression. The mechanism of obesity-associated adipokines was advanced by showing that LPS, as a model of adiponectin-LPS complex, can suppress a pro-apoptotic branch of the UPR in vivo by the exact same mechanisms elucidated in vitro. Importantly, we have completed the first comprehensive study of adiponectin effects on atherosclerosis in mice and found that adiponectin by itself does not suppress atherogenesis. Moreover, we found that another obesity-associated adipokine - eNampt - may promote macrophage-associated disease processes in obese subjects. Finally, we have continued our studies on how a specific molecular event that could promote plaque necrosis and likely occurs in obesity - cleavage of the efferocytosis receptor MerTK - occurs in advanced human plaques. In summary, we have made substantial progress in understanding how obesity leads to accelerated heart disease at a molecular-cellular level. Future work spurred by these discoveries is likely to suggest novel therapeutic targets to prevent obesity-associated vascular disease in military personnel and in the general public.
ADA228687	Japanese Encephalitis - A Plague of the Orient	WALTER REED ARMY INST OF RESEARCH WASHINGTON DC	Monath, Thomas P.	9/8/1988	3	Not available	WRAIR	U	A - 01	Approved for public release; distribution is unlimited.	Not available	Japanese encephalitis has attracted attention recently in the United States, Europe, and Australia because of a small number of cases among travelers, but the epidemic proportions of the disease in Asia have compelled immunization of entire regional or national populations. Japanese encephalitis, which is caused by a flavivirus transmitted by mosquitoes, often strikes in unpredictable form. It affects principally school-age children and is greatly feared because of its high lethality and frequency of permanent neurologic sequelae. The clinical disease was described as early as 1871 in Japan, but the causative agent was not isolated until 1934. A major summertime epidemic problem in Japan until the late 1960s, Japanese encephalitis has subsequently caused fewer than 100 cases annually.

ADA419111	History of Respiratory Illness at the U.S. Naval Academy	NAVAL HEALTH RESEARCH CENTER SAN DIEGO CA	Blankenship, Tammy L.,Gackstetter, Gary,Gray, Gregory C.	7/1/2001	8	NHRC-00-11	BUMED	U	A - 01	Approved for public release; distribution is unlimited.	Not available	Throughout history, respiratory diseases have been a frequent cause of morbidity in U.S. populations. Because of stress, crowding, and naive immune systems, military training populations are particularly prone to acute respiratory disease epidemics. An examination of the history of respiratory illness at U.S. Naval Academy revealed, in the earliest decades at the school, respiratory illness was a primary cause of both disease and mortality. With the advent of antibiotics and vaccines, most respiratory-disease mortality has been reduced. Today morbidity remains significant. Health concerns regarding respiratory diseases are heightened by emerging and re-emerging respiratory disease agents, which have increased antibiotic resistance and/or increased virulence. Enhanced surveillance and rapid diagnostic capabilities, placed in military settings, will increase knowledge of the epidemiology of many respiratory diseases. These strategies can lead to earlier treatment and prevention measures, thus halting further transmission of disease and decreasing both morbidity and mortality. During the most recent history of the Academy, acute respiratory infections have remained a primary cause of medical morbidity.	
ADA515668	The Collins Center Update. Volume 8, Issue 3, April-June 2006	ARMY WAR COLL CARLISLE BARRACKS PA CENTER FOR STRATEGIC LEADERSHIP	Fowler, Chris	6/1/2006	5	Not available	AWC/CSL	U	A - 01	Approved for public release; distribution is unlimited.	Journal	This issue contains the following articles: 1. Robotics Day; 2. Belize National Security Strategy Formulation Process Workshop; 3. The Strategic Rationale for Stability Operations; 4. Strategic Leader Staff Ride Program.	
ADA516583	Revisiting the Seventies: The Third World Comes of Age	the once-moribund Chinese giant has revived	and nuclear weapons have been introduced into the Third World."	1/1/2008	Reed, Thomas C.,Stillman, Danny B.	U		9	U	A - 01	Approved for public release; distribution is unlimited.	NDU/INSS	During the 1970s, most young American officers were focused on our sad evacuation from Vietnam, the frightening advances in Soviet intercontinental ballistic missile warheads, or the political cannibalism then consuming leaders in Washington. They thus missed the important stories. A quarter century later, it might be well to revisit those years. Hidden in plain view lay the rise, funding, and technical enablement of certain Third World leaders who now seek nuclear arms and who may soon bring about the detonation of a nuclear device within the West. Such a catastrophe is far more likely today than the Mutual Assured Destruction planned during the Cold War. Where did these people come from, and how complicit were American leaders in their rise? As the 1960s drew to a close, kings and emirs friendly to the West ruled most of the Middle East. India was thought to be a peaceful and nonaligned-although Soviet-friendly-backwater. A glut of cheap oil was on the market. Producing states and independent drillers had to rely on the major oil companies to refine and market their product using price wars, advertising, glassware, and customer service as enticements. Nuclear weapons were solely the province of the Big Five (China, France, Great Britain, the Soviet Union, and the United States), who were the victors of World War II and were enshrined as the permanent members of the United Nations Security Council. But then the cradles of early civilization began to rock. As it was, a grimly anti-American radical Islamic government came to power, again with the assistance of an inattentive American President. And once again, the chaos in the wake of that transition triggered another three-fold increase in the price of oil. As the 1970s ended, the stage was set for the nuclear pandemic to come. Since then, the United States has been marked as the enemy" in Arab eyes

ADA516941	Controls on Earthquake Rupture and Triggering Mechanisms in Subduction Zones	MASSACHUSETTS INST OF TECH CAMBRIDGE	Llenos, Andrea L.	6/1/2010	119	MIT/WHOI-2010-08	XD	U	A - 01	Approved for public release; distribution is unlimited.	Doctoral thesis	This thesis investigates earthquake rupture and triggering in subduction zones using earthquake observations, statistical and physical modeling. Comparison of rupture characteristics of $M > 7.5$ earthquakes with fore-arc structure suggests that frictional heterogeneities (asperities) primarily control the extent of large earthquakes. To identify stress accumulation on the megathrust that could cause an asperity to rupture, this thesis develops a new method to detect space-time variations in stressing rate from earthquake catalogs, based on observations that strain transients due to aseismic processes such as fluid flow or slow slip trigger seismicity, often as swarms. These swarms are modeled with two approaches for investigating driving mechanisms in catalogs: the stochastic Epidemic-Type Aftershock Sequence model [Ogata, 1988] and the rate-state friction model [Dieterich, 1994]. These approaches are combined into a model accounting for seismicity rate variations due to both aftershocks and aseismic processes, which is implemented in a data assimilation algorithm to detect transients in earthquake catalogs. The technique is evaluated with a synthetic test and applied to the Salton Trough in southern California and the Hokkaido corner in northeastern Japan. The algorithm successfully identifies aseismic transients in these multi-decade catalogs and may ultimately be useful for mapping spatial variations in frictional conditions on the megathrust.
ADA502432	Molecular Mechanisms and Treatment Strategies for Obesity-Associated Coronary Artery Disease, an Imminent Military Epidemic	COLUMBIA UNIV NEW YORK	Tabas, Ira	12/1/2007	97	Not available	Not available	U	A - 01	Approved for public release; distribution is unlimited.	Annual rept. 1 Jan 2006-30 Nov 2007	There is an epidemic of obesity in the military. Obesity leads to insulin resistance syndromes, notably metabolic syndrome and type 2 diabetes. The major cause of death in these syndromes is atherothrombotic vascular disease, including coronary artery disease. Therefore, when retired military personnel and their families reach middle age, there will be an epidemic of obesity-related vascular disease. We have made major progress on the key Tasks over the last year. We have completed our study on a commonly used drug for obesity-related diabetes, pioglitazone, showing that it promotes plaque progression in vivo (published in Circulation). This study is very important, because recent clinical studies have implicated this class of drugs in heart disease. Indeed, pioglitazone is being used and studied in military personnel. We have also made major progress in understanding how a particular property of adiponectin, a beneficial" hormone that is decreased in obesity
ADA525458	National Security: Interagency Collaboration Practices and Challenges at DOD's Southern and Africa Commands	GOVERNMENT ACCOUNTABILITY OFFICE WASHINGTON DC	Pendleton, John H.	7/28/2010	27	GAO-10-962T	GAO	U	A - 01	Approved for public release; distribution is unlimited.	Testimony rept.	Recognizing the limits of military power in today's security environment, the Department of Defense (DOD) is collaborating with other U.S. federal agencies to achieve its missions around the world. DOD's combatant commands, such as U.S. Southern Command (SOUTHCOM) and U.S. Africa Command (AFRICOM), play key roles in this effort. Both aim to build partner nation capacity and perform humanitarian assistance, while standing ready to perform a variety of military operations. Among its missions, SOUTHCOM supports U.S. law enforcement and intelligence agencies in the Americas and Caribbean in disrupting illicit trafficking and narco-terrorism. As DOD's newest command, AFRICOM works with U.S. diplomacy and development agencies on activities such as maritime security and pandemic response efforts. Today GAO issued reports that the subcommittee requested on SOUTHCOM (GAO-10-801) and AFRICOM (GAO-10-794), which in part evaluated how each collaborates with U.S. interagency partners. This testimony summarizes that work and provides observations from ongoing work on U.S. counterpiracy efforts by focusing on 3 key areas essential for interagency collaboration.

ADA572604	Initial Identification and Characterization of an Emerging Zoonotic Influenza Prior to Pandemic Spread	NAVAL HEALTH RESEARCH CENTER SAN DIEGO CA	Metzgar, David,Baynes, Darcie,Myers, Christopher A.,Kammerer, Peter,Unabia, Michelle,Faix, Dennis J.,Blair, Patrick J.	11/1/2010	15	NHRC-10-22	NHRC	U	A - 01	Approved for public release; distribution is unlimited.	Journal article	Two cases of influenza-like illness associated with untypeable influenza A were identified in Southern California during March 2009. One was initially identified as influenza using an experimental diagnostic device in a clinical trial, while the other was identified at a local reference lab using a diagnostic PCR assay. In both cases, analyses yielded negative results for strain-specific tests targeting currently circulating strains of human influenza A, namely seasonal H1 and H3. These two samples became the first reported cases of the 2009 pandemic H1N1 (2009/H1N1) influenza strain. The first reportable characterization was made from the second collected specimen on April 15 at the CDC's central lab using traditional culture and sequencing methods. The novel nature of the strain and its apparent zoonotic origins were initially characterized using the first collected specimen at the Naval Health Research Center in San Diego, California, on April 13, using an experimental molecular analysis tool, PCR/ESI-MS, designed to amplify PCR products from any strain of influenza and to generate informative (phylogenetic) strain identifications through mass spectrometry of PCR amplicons.
ADA098954	Oropouche Virus. 3. Entomological Observations from Three Epidemics in Para, Brazil, 1975,	WALTER REED ARMY INST OF RESEARCH WASHINGTON DC	Roberts, Donald R.,Hoch, Alfred L.,Dixon, Kenneth E.,Llewellyn, Craig H.	10/6/1979	9	Not available	WRAIR	U	A - 01	Approved for public release; distribution is unlimited.	Not available	Not available
ADA134377	Biochemical Basis of Virulence in Epidemic Typhus	UNIVERSITY OF SOUTH ALABAMA MOBILE DEPT OF MICROBIOLOGY AND IMMUNOLOGY	Winkler, Herbert H.	8/1/1980	46	Not available	USAMRDC	U	A - 01	Approved for public release; distribution is unlimited.	Annual progress rept. 1 Jan-31 Dec 1980	The avirulent, Madrid E, and virulent, Breinl, strains of Rickettsia prowazeki were compared with respect to their interaction with (a) mouse macrophage-like cell lines, (b) a human macrophage-like cell line, (c) mouse peritoneal macrophages and (d) guinea pig peritoneal macrophages. Furthermore, the fatty acid composition and plasmid DNA content of these strains were compared. The mouse macrophage-like cell lines and the guinea pig peritoneal macrophages could differentiate between the strains. The avirulent strain was eliminated and the virulent strain grew within the cytoplasm of these cells. The human macrophage-like cell line and the mouse peritoneal macrophages, on the other hand, could not distinguish between the two strains. Mouse macrophages destroyed both strain and both strains grew in the human macrophage-like cell line. The fatty acid composition of the two strains were compared. The hypothesis was that the high level of unsaturated fatty acid known to be in the avirulent strain might not occur in the virulent strain and that this might be a target for selective killing via lipid peroxidation. Our investigation established that the fatty acid composition was not different in the two strains.
AD0294807	BIBLIOGRAPHY ON HISTOPLASMOSIS	CAMP DETRICK FREDERICK MD TECHNICAL LIBRARY	Not available	5/11/1955	90	Not available	ABL/MD	U	A - 01	Approved for public release; distribution is unlimited.	Rept. for 1900-Jun 1955	Contents: Diagnosis, detection, and identification Clinical picture: case histories Culture and morphology Isolation of histoplasma capsulatum from the soil Human pathology Serology Immunology Chemotherapy Animal pathology Animal sources and animal pathogenicity Epidemiology General epidemiology Laboratory infection Epidemic countries

ADA312421	Domestic Violence Prior to and During Pregnancy within a Selected Military Population and its Relationship to Depressive Symptomatology	AIR FORCE INST OF TECH WRIGHT-PATTERSON AFB OH	Cepis, Loretta J.	1/1/1996	140	AFIT-96-053	AFIT	U	A - 01	Approved for public release; distribution is unlimited. Document partially illegible.	Master's thesis	Domestic violence is a social problem of epidemic proportions which adversely effects the health of millions of women each year. Abuse does not cease when a woman becomes pregnant. In fact, violence may begin or escalate during the prenatal period. An extensive review of the literature reveals that the prevalence of abuse during pregnancy ranges from 1.5% to 23%. Despite documentation of the prevalence of abuse during pregnancy in the civilian population, a prevalence study has not been conducted in the military community. A preliminary descriptive study was performed at two military hospital clinics, in order to investigate the prevalence of domestic violence prior to (within the last year) and during pregnancy and its relationship to depressive symptomatology. Research on domestic violence discloses that it is a problem that permeates all ethnic, racial, and religious groups, all socioeconomic and educational levels, and all trades and professions. It is assumed that the military is not immune from domestic violence and that its prevalence is comparable to that in the civilian community. A Women's Pregnancy Well-Being Assessment Survey was distributed to 317 prenatal patients at these facilities between 20 November 1995 and 5 January 1996, until a sample size of 298 participants was obtained. The participants revealed that 3.4% had been abused during the current pregnancy, and that 9.4% had been abused prior to (within the last year) or during the current pregnancy. A significant difference was found between abused and nonabused participants and total scores on the Beck Depression Inventory (t = -5.23, p = .000). Abuse was significantly correlated with depressive symptomatology (r .2931, p = .000).
ADA445335	Strengthening and Expanding the Citizen Corps	NAVAL POSTGRADUATE SCHOOL MONTEREY CA	Biladeau, Pamela G.	3/1/2006	117	Not available	NPS	U	A - 01	Approved for public release; distribution is unlimited.	Master's thesis	The Citizen Corps (CC) is the primary Department of Homeland Security vehicle for achieving civilian preparedness. CC volunteers are included in the National Preparedness System (NPS) through various sponsoring agencies who determine the roles and functions of the volunteers within their organization. However, not defining the CC as an independent support function within the NPS makes it difficult to isolate data for the purpose of creating Target Capabilities Lists, measuring performance, and including volunteers in operations plans. This thesis posits that to achieve adequate civilian preparedness, the CC's roles and functions need to be restructured to align with the certification systems of the professional emergency response disciplines. CC certifications will also bridge gaps in the response continuum. The CC reorganization will modularize and isolate roles and functions for the purpose of strategic planning, measuring performance levels, serving as a predeployment civilian response, typing, credentialing, and pre-registering as an independent resource capability (which will be essential in planning for a pandemic and surge capacity needs). For planning purposes, and to add visual clarity to the CC roles and functions, the CC should be positioned as an independent Emergency Response Function within the National Response Plan.
AD0672115	METHODS OF ERADICATING ANTHRAX	ARMY BIOLOGICAL LABS FREDERICK MD	Korotich, A. S., Netreoko, I. D., Suponitskaya, V. M.	9/27/1960	6	TRANS-966	ABL/MD	U	A - 01	Approved for public release; distribution is unlimited.	Not available	Most important measures in prevention are providing 100% immunity among livestock, and acting upon all three variable factors in the epidemic process -- the source of infection, the mechanism of transmission and the susceptible population.
ADA601296	Global Emerging Infection Surveillance and Response (GEIS)- Avian Influenza Pandemic Influenza (AI/PI) Program	KENYA MEDICAL RESEARCH INST NAIROBI	Koech, Davie, Coldren, Rodney L.	10/1/2008	8	Not available	USAMRMC	U	A - 01	Approved for public release; distribution is unlimited.	Annual rept. 13 Sep 2007 12 Sep 2008	The purpose of this contract is to carry out emerging infectious disease surveillance in Kenya. Specific areas in which work is performed include respiratory illness surveillance (particularly influenza), acute febrile illness surveillance, malaria resistance surveillance, diarrhea etiology and antimicrobial resistance surveillance, sexually transmitted illness surveillance, and capacity building. KEMRI maintained surveillance sites in Ministry of Health clinics and hospitals throughout Kenya. KEMRI operated reference laboratories for this work in Nairobi, Kericho, and Kisumu, including the arbovirus reference laboratory, the antimalarial resistance laboratory, entomology facilities, the Center of Excellence in Microscopy, the microbiology reference laboratory Outbreak investigation and response constituted a significant portion of the efforts in this contract year.

ADA333092	JPRS Report, Epidemiology.	JOINT PUBLICATIONS RESEARCH SERVICE ARLINGTON VA	Not available	5/3/1993	18	JPRS-TEP-93-009	XD	U	A - 01	Approved for public release; distribution is unlimited.	Not available	Partial Contents: Cholera Outbreak in Busia District, Guinea Worm Eradication Proceeding Well, Eight Die From Yellow Fever in Oyo, Cholera Spread To All Parts of Country, Statistics on Cholera Deaths Issued, Anthrax Outbreak in West Contained,Ten Percent Are Hepatitis B Carriers, THE Cholera Under Control in Mashonaland Central, Cholera Epidemic Deaths 120 Thus Far, Refugee Camp Has High Cholera Death Rate, Fifty Thousand Hectares Infested With Armyworm,Viral Hepatitis at School,Water Plausible' Cause of Viral Hepatitis, Leishmaniasis Epidemic in Bechar, Rinderpest To Be Eradicated by 1998, Diphtheria in Moscow, Diphtheria in Krasnoyarsk, Threat of Diphtheria Epidemic in Aktau, Political Instability, Refugees Increase Disease Incidence, Chernigov Water Monitored, Epidemiology Official on Deteriorating Public Health.
ADA462111	Pandemic Influenza: Appropriations for Public Health Preparedness and Response	LIBRARY OF CONGRESS WASHINGTON DC CONGRESSIONAL RESEARCH SERVICE	Lister, Sarah A.	1/23/2007	7	CRS-RS22576	CRS/DC	U	A - 01	Approved for public release; distribution is unlimited.	Congressional rept.	The spread of H5N1 avian influenza (flu") on three continents
ADA621772	2012 International Military HIV/AIDS Conference (IMilHAC): Re-Energizing HIV Campaigns	NAVAL HEALTH RESEARCH CENTER SAN DIEGO CA	Shook, Brittney,Thomas, Anne G.	9/10/2012	17	NHRC-12-48	NMRC/MD	U	A - 01	Approved for public release; distribution is unlimited.	Final rept. 7-10 May 2012	On May 7-10, 2012, the US Department of Defense hosted the International Military HIV/AIDS Conference (IMilHAC): Re- Energizing HIV Campaigns, in Maputo, Mozambique. The conference was attended by 417 participants. The objectives were to (1) highlight the role of leadership in successful military HIV/AIDS programs; (2) emphasize the best military health system practices in HIV prevention, care, treatment, and strategic information; (3) facilitate military to military technical assistance, networking, and partnerships; and (4) consolidate advances in military medical HIV programs to support an agile, effective, and sustainable response to the epidemic. In order to accomplish these objectives, the 4-day conference offered plenary and concurrent sessions in two tracks: prevention and care/treatment, as well as hosted several networking events. Feedback from the daily evaluations expressed that the meeting was extremely well organized, presented cutting-edge techniques, and provided useful information applicable to military HIV/AIDS programs.
ADA538594	Distinct Patterns of IFITM-Mediated Restriction of Filoviruses, SARS Coronavirus, and Influenza A Virus	ARMY MEDICAL RESEARCH INST OF INFECTIOUS DISEASES FORT DETRICK MD	Huang, I.-C.,Bailey, Charles C.,Weyer, Jessica L.,Radoshitzky, Sheli R.,Becker, Michelle M.,Chiang, Jessica J.,Brass, Abraham L.,Ahmed, Asim A.,Chi, Xiaoli,Dong, Lian	1/6/2011	15	Not available	DOD	U	A - 01	Approved for public release; distribution is unlimited.	Journal article	Interferon-inducible transmembrane proteins 1, 2, and 3 (IFITM1, 2, and 3) are recently identified viral restriction factors that inhibit infection mediated by the influenza A virus (IAV) hemagglutinin (HA) protein. Here we show that IFITM proteins restricted infection mediated by the entry glycoproteins (GP1,2) of Marburg and Ebola filoviruses (MARV, EBOV). Consistent with these observations, interferon-b specifically restricted filovirus and IAV entry processes. IFITM proteins also inhibited replication of infectious MARV and EBOV. We observed distinct patterns of IFITM-mediated restriction: compared with IAV,the entry processes of MARV and EBOV were less restricted by IFITM3, but more restricted by IFITM1. Moreover, murine Ifitm5 and 6 did not restrict IAV, but efficiently inhibited filovirus entry. We further demonstrate that replication of infectious SARS coronavirus (SARS-CoV) and entry mediated by the SARS-CoV spike (S) protein are restricted by IFITM proteins. The profile of IFITM-mediated restriction of SARS-CoV was more similar to that of filoviruses than to IAV. Trypsin treatment of receptor-associated SARS-CoV pseudovirions, which bypasses their dependence on lysosomal cathepsin L, also bypassed IFITM-mediated restriction. However, IFITM proteins did not reduce cellular cathepsin activity or limit access of virions to acidic intracellular compartments. Our data indicate that IFITM-mediated restriction is localized to a late stage in the endocytic pathway. They further show that IFITM proteins differentially restrict the entry of a broad range of enveloped viruses, and modulate cellular tropism independently of viral receptor expression.
ADA504580	The 2009 Influenza Pandemic: An Overview	LIBRARY OF CONGRESS WASHINGTON DC CONGRESSIONAL RESEARCH SERVICE	Lister, Sarah A.,Redhead, C. S.	8/6/2009	36	CRS-R40554	CRS/DC	U	A - 01	Approved for public release; distribution is unlimited.	Congressional rept.	



AD1013966	Evaluation of the Protective Efficacy of Recombinant Vesicular Stomatitis Virus Vectors Against Marburg Hemorrhagic Fever in Nonhuman Primate Models	Uniformed Services University Of The Health Sciences Bethesda United States	Daddario-DiCaprio,Kathleen	1/19/2007	184	Not available	Not available	U	A - 01	Approved for public release; distribution is unlimited.	Technical Report	Marburg (MARV) and Ebola (EBOV) viruses cause severe and often fatal hemorrhagic diseases for which there are currently no vaccines or therapies approved forhuman use. The reported potential of filoviruses as biological weapons (Alibek, Handelsmann 1999; Miller J 2001; Borio, Inglesby et al. 2002) and the recent attention drawn to outbreaks of emerging and re-emerging viruses, such as the 2004-2005 epidemic of MARV hemorrhagic fever (HF) in Angola (WHO 2005; Towner, Khristovaet al. 2006; CDC 2005), has significantly increased public recognition of these deadly pathogens.The development of effective treatments and therapies has been an ongoing challenge since these viruses were first discovered. The requirement for biosafety level (BSL)-4 containment has served as a major impediment towards the development of therapeutics. To date, the only available form of treatment for filoviral HF is intensive supportive care. With continual developments of biocontainment laboratories nationwide, additional and more promising means of treatment and prevention are needed for laboratory workers. Furthermore, the recent MARV outbreak in Angola, with case fatality rates approaching 90 percent, desperately calls attention to the fact that there is acritical and pressing need for effective countermeasures against the filoviruses. This thesis entails evaluating in nonhuman (NHP) models a live, attenuated, recombinant vesicular stomatitis virus (rVSV) vector platform expressing the transmembrane glycoprotein (GP) gene of MARV as both a preventative vaccine and Marburg (MARV) and Ebola (EBOV) viruses cause severe and often fatal hemorrhagic diseases for which there are currently no vaccines or therapies approved for human use. The reported potential of filoviruses as biological weapons (Alibek,Handelsmann 1999; Miller J 2001; Borio, Inglesby et al. 2002) and the recent attention drawn to outbreaks of emerging and re-emerging viruses, such as the 2004-2005 epidemic of MARV hemorrhagic.
ADA449520	Simultaneous Genomic Detection of Multiple Enteric Bacterial and Viral Pathogens, Including SARS-CoV and RVFV	TEXAS UNIV AT AUSTIN	Payne, Shelley,Peters, C. J.,Makino, Shinji,Oliver, Kerry,Weiss, Christy,Kornguth, Steve,Carruthers, Lenny,Chin, Robert	11/15/2004	9	Not available	ECBC	U	A - 01	Approved for public release; distribution is unlimited.	Conference paper	A multiplexed screening system to detect pathogenicity islands (PI) of bacteria causing enteric disease and pathogenicity factors (PF) associated with the SARS-associated coronavirus (SARS-CoV) and Rift Valley Fever Virus (RVFV) has been developed. Pathogenic bacteria contain DNA sequences (PI) that code for proteins enhancing the ability of the bacteria to cause disease in the host, while viruses possess genomic sequences (PF) that are associated with their pathogenicity. By quickly screening for multiple pathogenicity island and factor sequences, end-users will have the capability to detect the first signs of an enteric or viral bioattack without requiring screening for a particular organism.
ADA233599	Investigations of Hemorrhagic Fever with Renal Syndrome (HFRS)	INSTITUTE OF IMMUNOLOGY AND VIROLOGY BELGRADE (YUGOSLAVIA)	Gligic, Ana	5/7/1990	21	Not available	USAMRDC	U	A - 01	Approved for public release; distribution is unlimited.	Midterm rept.	Five hundred and forty four rodents and small mammals were trapped in various regions of Yugoslavia and examined. Antihantaviruses, immunofluorescent (IF) antibodies were detected in the blood samples of 129 animals. Antigens were detected in the lung samples of 139 animals. Sixty-seven animals tested positive for both the presence of antibodies in the sera and antigens in the lungs. Studies on the immune status of healthy people in various HFRS endemic areas were conducted. Blood samples from over 700 forest workers, farmers, and other individuals with considerable outdoor exposure were collected and tested serologically for antibodies to hantaviruses. Approximately 336 individuals possessed hantaviral antibodies. In 1989, an HFRS epidemic occurred throughout Yugoslavia, over 600 individuals were hospitalized and 15 deaths occurred. The epidemic occurred in all six republics and two provinces of Yugoslavia, in both previously recognized and newly recognized foci areas.

ADA430488	Responding to the Unthinkable: The Reserve Components' Role in Recovering from a Biological Incident	ARMY WAR COLL CARLISLE BARRACKS PA CENTER FOR STRATEGIC LEADERSHIP	Tussing, Bert,Traylor, John	10/1/2004	5	Not available	AWC/CSL	U	A - 01	Approved for public release; distribution is unlimited. This document is not available from DTIC in microfiche.	Issue paper, Volume 11-04	With the potential proliferation of chemical, biological, radiological, nuclear, and high-yield explosive (CBRNE) capabilities throughout the world an already challenging security environment grows even more daunting every day. Whether occurring naturally, released unintentionally, or dispersed with a deliberately diabolic intent, the effects of a release of these mechanisms can transcend even the immediate devastation they may portend. Beyond massive death and injury, these agents could attack the very core of the Nation's security, economic strength, and physical and mental well-being. As such, the military component of this Nation's defense must begin pondering the unthinkable, postulating the role it may have to play in mitigating, responding to, and recovering from this kind of catastrophe. With that possibility in mind, the United States Army War College's Center for Strategic Leadership conducted a focused workshop bringing together over 100 participants from local, regional, state, and federal entities to review contemporary plans, policies, and procedures for Disaster Response, and to postulate how those initiatives could meet the required response following the catastrophic introduction of a CBRNE event. Particular focus was directed on how the Army's Reserve Components, the Army Reserve, and the National Guard, would fit into the equation. Three different scenarios were considered one biological, one radiological, and one nuclear. This paper addresses the workshop's findings related to response following a pandemic biological incident in the United States.
AD0659488	LIMIT THEOREMS FOR THE MULTI-URN EHRENFEST MODEL.	CORNELL UNIV ITHACA N Y DEPT OF INDUSTRIAL ENGINEERING AND OPERATIONS RESEARCH	Iglehart,Donald L.	7/1/1967	28	TR-19	Not available	U	A - 01	Approved for public release; distribution is unlimited.	Technical rept.,	In the multi-urn Ehrenfest model N balls are distributed among d+1 (d>2) urns. At discrete epochs a ball is chosen at random from one of the d+1 urns; each of the N balls has probability 1/N of being selected. The ball chosen is removed from its urn and placed in urn i with a given probability pi. The state of the process is specified by the occupation numbers of the various urns. The principal result in this paper is to obtain limit theorems for the occupation numbers, suitably translated and scaled, as N tends to infinity. Applications of this model in statistical mechanics, networks of queues, and epidemic theory are discussed. (Author)
ADA526444	DoD Global Emerging Infections System Annual Report, Fiscal Year 2000	AFHSC	Not available	1/1/2000	22	Not available	AFHSC	U	A - 01	Approved for public release; distribution is unlimited.	Annual rept.	The DoD-Global Emerging Infections System (DoD-GEIS) was established in 1997 in response to Presidential Decision Directive NSTC-7 on emerging infections. The directive expanded the mission of the DoD to include support of global surveillance
AD1069494	An In-Depth Analysis of a Machine-Learning-Based Network Routing Protocol For Networking in a Highly Mobile Topology	NAVAL POSTGRADUATE SCHOOL MONTEREY CA MONTEREY United States	Brown,Jason R.	12/1/2018	123	Not available	Not available	U	A - 01	Approved For Public Release;	Technical Report	This thesis studies the performance of a machine-learning-based DTN routing protocol, QGeo. QGeo is based on the reinforcement learning model called Q-learning whereby an agent in some context takes an action, gains a reward and adapts its decision-making policy based on the rewards value. QGeo is implemented in the ns-3 simulator, and the implementation in this work is based on the previously implemented GPR protocols. QGeo is then tested in ns-3 alongside GPR, GPR2 and GPR2a, as well as the more commonly known Epidemic, Vector and Centroid DTN protocols. Testing is performed rigorously across four simulation scenarios. The Helsinki scenario simulates mobile traffic in a city, the Omaha and Bold Alligator scenarios simulate amphibious military exercises with various properties, and the Swarm scenario simulates the behavior of a drone swarm based on real-world sensor flight data. This thesis ultimately shows that QGeo is a highly selective protocol in terms of making forwarding decisions, based primarily in the Q-learning mechanism. This thesis also advances the research previously done at the Naval Postgraduate School in DTN research and development by furthering the testing effort of the protocols that have been implemented. Finally, an added benefit of this study is the incorporation of the Swarm scenario to the DTN testbed, increasing the range of testing capability for comparison of DTN routing protocol characteristics.
Highest Classification: Unclassified												