Via email

This letter is an interim response to your Centers for Disease Control and Prevention and Agency for Toxic Substances and Disease Registry (CDC/ATSDR) Freedom of Information Act (FOIA) request of May 2, 2020, assigned #20-01478-FOIA, for “A digital copy of the 2016 Annual Update, the 2015 Annual Update, the 2014 Annual Update and the 2013 Annual Update for the Epidemic Intelligence Service (EIS) at CDC.”

Regarding your request for a copy of the 2016 Annual Update, we located 34 pages of responsive records. After a careful review of these pages, no information was withheld from release.

If you need any further assistance or would like to discuss any aspect of the records provided please contact either our FOIA Requester Service Center at 770-488-6399 or our FOIA Public Liaison at 770-488-6277.

Sincerely,

[Signature]

Roger Andoh
CDC/ATSDR FOIA Officer
Office of the Chief Operating Officer
(770) 488-6399
Fax: (404) 235-1852

20-01478-FOIA
Epidemic Intelligence Service
ANNUAL UPDATE: 2016

Data for Action
Epidemic Intelligence Service Program
Epidemiology Workforce Branch
Division of Scientific Education and Professional Development
Center for Surveillance, Epidemiology and Laboratory Services
Office of Public Health Scientific Services
Centers for Disease Control and Prevention

For additional information, contact
E-mail: EIS@cdc.gov
Phone: 404-498-6110
Web: www.cdc.gov/EIS

DISCLAIMER
The findings and conclusions in this EPIDEMIC INTELLIGENCE SERVICE ANNUAL UPDATE: 2016 are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention (CDC).

Use of trade names and commercial sources is for identification only and does not imply endorsement by the Division of Scientific Education and Professional Development; Center for Surveillance, Epidemiology, and Laboratory Services; CDC; the Public Health Service; or the U.S. Department of Health and Human Services.

Published: May 2016
Dear Friends and Colleagues,

This has been a year full of excitement and new challenges for the Epidemic Intelligence Service (EIS). We have worked to preserve the core components of EIS that have made it the premier field epidemiology training program in the world, while also obtaining input from our officers, supervisors, and esteemed alumni to further strengthen the program. Critical to this process was the guidance of the EIS Action Council (EAC), a regularly assembled group of advisors representing all parts of CDC and the field assignments in which EIS officers are placed (see page 15).

On the basis of the input from these partners, we implemented multiple new initiatives

• In partnership with the EAC, we reviewed EIS eligibility criteria and class selection procedures, making sure that input from our CIOs and field representatives was included in each step of the selection process.

• We strengthened the bond between CDC-based and field-based EIS officers and supervisors by reinstituting Annual Regional Trainings (see page 6), and the in-person second year fall course (see page 6).

• We established field and Centers, Institute, and Offices (CIO) coordinator positions (see page 5) to support and standardize the training and supervision of our field- and CDC-based officers, respectively. Under this leadership we enhanced processes for reviewing EIS positions and undertaking site visits.

• As always, we flexibly adapted our training curricula to meet emerging public health priorities (such as integrating new Global Rapid Response Training into our first year fall course, and integrating our response rostering with broader CDC rostering initiatives), while assuring adherence to core competencies and key principles of interactive learning through case studies.

• We continue to weave data for decision making into the internal fabric of our calendar of annual activities (see page 11). This process will keep our program well matched to current needs, and well suited to report the impact of our EIS officers.

However, most importantly, we selected the 2016 EIS class — which is as skilled and well adapted to the current needs of CDC and our state and local partners as any in the past (see pages 3–4). The new class includes 37 physicians, 2 nurses, 10 veterinarians, and 30 doctoral scientists, including 7 non-U.S. citizens (from Germany, Japan, Kenya, Rwanda, Taiwan, and 2 from the United Kingdom). Acceptance into the class was highly selective as always (79 officers selected from 564 applicants).

Throughout this update you will also see key staff from the EIS Program who have been responsible for the strategic direction and implementation of the activities described above. We encourage you to contact them with any comments or questions — their contact information is included. Together we will continue to protect our population, and the global community, for years to come.

Joshua Adam Mott, EIS ‘98
Chief, EIS Program

“Supposing is good, but finding out is better.” — Mark Twain

Joshua Mott
EIS Program Chief
zud9@cdc.gov
Phone: 404-498-6284
Ask me about
EIS Program
Strategy and Objectives

Beth Lee
Deputy Branch Chief
exw6@cdc.gov
Phone: 404-498-6183
Ask me about
EIS Management and Operations
What is EIS?

Training epidemiologists to respond to public health threats since 1951!

EIS officers

- Are physicians, veterinarians, scientists, and other health professionals
- Complete a 2-year, on-the-job training and service fellowship
- Serve our country while learning to apply epidemiology
- Gain practical skills to become future leaders
The 79 EIS officers in the Class of 2016 were selected from 564 applicants and have diverse skills for domestic and global public health response.

Professional Backgrounds

<table>
<thead>
<tr>
<th>37 Physicians</th>
</tr>
</thead>
<tbody>
<tr>
<td>14 with medical degree only</td>
</tr>
<tr>
<td>19 with MPH (including 3 with additional master’s degree)</td>
</tr>
<tr>
<td>4 with other master’s degree</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2 Nurses</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 with MPH; 1 with MS and ScD</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>10 Veterinarians</th>
</tr>
</thead>
<tbody>
<tr>
<td>6 with MPH</td>
</tr>
<tr>
<td>2 with other master’s degree</td>
</tr>
<tr>
<td>2 with PhD (including 1 with MPH)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>30 Nonclinical Doctoral Scientists</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 with doctoral degree only</td>
</tr>
<tr>
<td>21 with MPH (including 1 with additional master’s degree)</td>
</tr>
<tr>
<td>5 with other master’s degree</td>
</tr>
</tbody>
</table>

Data source: EIS application data

Physician Specialties
- Infectious Diseases and Internal Medicine
- Internal Medicine
- Family Medicine
- Pediatrics
- Preventive Medicine
- Emergency Medicine and Pediatrics
- Pediatrics and Pediatric Hematology/Oncology
- Emergency Medicine
- Family Medicine and Preventive Medicine
- Internal Medicine and Preventive Medicine
- Occupational Medicine
- Pathology
- Pediatrics and Pediatric Cardiology
- Surgery

Doctoral Disciplines
- Epidemiology
- Biostatistics
- Health Behavior
- Environmental Health Sciences
- Environmental Sciences
- Family Social Science
- Health Promotion and Behavioral Science
- Human Nutrition
- International Health
- International Nutrition
- Population Biology, Ecology, and Evolution
- Psychology and Neuroscience
- Reproductive Epidemiology
- Social Work and Public Health
- Biomedical and Veterinary Sciences
- Veterinary Preventive Medicine
EIS Class of 2016

(Ready to go with new shoes!) Wences Arvelo
dwi4@cdc.gov
404-498-6003
Ask me about Class Selection Recruitment Evaluation

Home Country

- 72 U.S. citizens or permanent residents
- 7 citizens of other countries: Germany, Japan, Kenya, Rwanda, Taiwan, and United Kingdom (2)

Languages

Number of EIS Officers in the 2016 Class who Speak Non-English Languages

<table>
<thead>
<tr>
<th>Language</th>
<th>Officer Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spanish</td>
<td>35</td>
</tr>
<tr>
<td>French</td>
<td>15</td>
</tr>
<tr>
<td>Other</td>
<td>10</td>
</tr>
<tr>
<td>Chinese</td>
<td>8</td>
</tr>
<tr>
<td>Hindi/Gujarati/Punjabi</td>
<td>5</td>
</tr>
<tr>
<td>Swahili</td>
<td>4</td>
</tr>
<tr>
<td>Portuguese</td>
<td>3</td>
</tr>
<tr>
<td>German</td>
<td>2</td>
</tr>
<tr>
<td>Italian</td>
<td>2</td>
</tr>
</tbody>
</table>

* Other languages
  - Akan
  - Amharic
  - Bengali
  - Croatian
  - Dutch
  - Esperanto
  - Farsi
  - German
  - Greek
  - Hausa
  - Hebrew
  - Hindi/Gujarati/Punjabi
  - Hungarian
  - Indonesian
  - Italian
  - Japanese
  - Kannada
  - Korean
  - Lao
  - Latvian
  - Lithuanian
  - Luxembourgish
  - Makassarese
  - Malagasy
  - Maltese
  - Malay
  - Marathi
  - Moldovan
  - Moroccan Arabic
  - Nepali
  - Norwegian
  - Ottoman Turkish
  - Patio
  - Persian
  - Polish
  - Punjabi
  - Quechua
  - Romanian
  - Russian
  - Slovak
  - Slovenian
  - Somali
  - Somali
  - Spanish
  - Swahili
  - Swedish
  - Finnish
  - Turkish
  - Turkmen
  - Urdu
  - Vietnamese
  - Wolof
  - Xhosa

Data source: EIS application data

Reported high proficiency (good or excellent in writing, reading and speaking)

Reported some but less than high proficiency (less than good in writing, reading or speaking)
### Centers, Institute, and Offices

<table>
<thead>
<tr>
<th>Centers, Institute, and Offices</th>
<th>Number of EIS Officers</th>
</tr>
</thead>
<tbody>
<tr>
<td>National Center for Emerging and Zoonotic Infectious Diseases (NCEZID)</td>
<td>34</td>
</tr>
<tr>
<td>Center for Global Health (CGH)</td>
<td>19</td>
</tr>
<tr>
<td>National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention (NCHHSTP)</td>
<td>15</td>
</tr>
<tr>
<td>National Center for Chronic Disease Prevention and Health Promotion (NCCDPHP)</td>
<td>14</td>
</tr>
<tr>
<td>National Center for Immunization and Respiratory Diseases (NCIRD)</td>
<td>14</td>
</tr>
<tr>
<td>National Center for Environmental Health/Agency for Toxic Substances and Disease Registry (NCEH/ATSDR)</td>
<td>6</td>
</tr>
<tr>
<td>National Institute for Occupational Safety and Health (NIOSH)</td>
<td>5</td>
</tr>
<tr>
<td>National Center for Injury Prevention and Control (NCIPC)</td>
<td>4</td>
</tr>
<tr>
<td>National Center for Health Statistics (NCHS)</td>
<td>2</td>
</tr>
<tr>
<td>National Center on Birth Defects and Developmental Disabilities (NCBDDD)</td>
<td>1</td>
</tr>
<tr>
<td>Office of Public Health Preparedness and Response (OPHPR)</td>
<td>1</td>
</tr>
<tr>
<td>Center for Surveillance, Epidemiology and Laboratory Services (CSELS)</td>
<td>43</td>
</tr>
</tbody>
</table>

Note: CSELS Epidemiologists provide supervision for officers assigned to positions in state, local, and tribal health departments and other federal agencies (field officers; see map).

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**EIS Officers are placed as ready-responders in positions at CDC, state and local health departments, and other federal agencies.**

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EIS Officer Placements

Shaded states and territories have an EIS officer in the EIS class of 2014 or 2015, assigned at the state level or territorial level.

---

**Ask me about**

**Larry Cohen**

cbu1@cdc.gov

404-498-6128

**Ask me about**

CIO-Based Officer Support and Assignments

---

**Jennifer Wright**

pzw5@cdc.gov

404-498-1180

**Ask me about**

Field Officer Support and Assignments
EIS officers gain applied epidemiologic skills through on-the-job training and a structured competency-based curriculum.

Diana Bensyl
zqg6@cdc.gov
404-498-6153
Ask me about Curriculum and Training EIS Conference Agenda Student Programs Laboratory Leadership Service Fellowship

- Summer course (4 weeks)
  - Applied epidemiology lectures
  - Case studies
  - Outbreak response exercise
  - Team building
- First-year fall course (1 week)
  - Surveillance evaluation
  - Analytic methods
  - Emergency response
- Tuesday Morning Seminars (weekly)
- Post-Tuesday Morning Seminars

Back in 2015–2016!
- Second-year fall course (1 week)
  - Leadership training
  - Scientific writing
  - Advanced analytic methods
  - Job networking
- Regional trainings for field officers
  - Presentation skills
  - Program feedback

CDC experts provide most of the structured training.

Number of Total Instructional Staff Hours by Instructor Affiliation, 2015

- Summer Course
- 1st and 2nd Year Fall Courses

- Responding to outbreaks (see pages 7–9)
- Designing studies and analyzing data
- Conducting and evaluating surveillance systems (see page 10)
- Writing reports (MMWR, peer-reviewed journal articles and others; see pages 16–31)
- Presenting findings (EIS Conference, other national conferences, media interviews)
- Collaborating with partners

Providing Service Through On-The-Job Training

10% Structured Training
EIS officers deploy for field investigations (Epi-Aids and other field investigations) in the United States and worldwide.

277 Number of field investigation experiences* (Epi-Aids and other field investigations) reported as completed or in-progress by the 158 officers in the 2014 and 2015 EIS classes, as of January 2016

Number of EIS Field Investigation Experiences by Type of Location (n = 277)

- Domestic (U.S. states and territories)
- International — Ebola
- International — other than Ebola

Data source: Data entered by EIS officers in EIS Activity Reports for investigations meeting CAL 1

*A field investigation experience is defined here as conducting or participating in an investigation of a potentially serious public health problem that required a timely response, occupied at least 10 working days of the EIS officer’s time, and involved original data collection and working with partners. Field investigation experiences include, but are not limited to, Epi-Aids and Health Hazard Evaluations. Multiple officers participating in the same investigation are counted as separate field investigation experiences. Numbers are based on Core Activity of Learning (CAL) 1 information from EIS officer activity reports, as of January 2016.
Field Investigations

Locations of Field Investigations conducted by EIS Officers in the 2014 and 2015 classes (as of January 2016)*

Non-U.S. Locations
Botswana  Cambodia  China  Colombia  Cote de Ivoire  Democratic Republic of the Congo  Dominican Republic

Ethiopia  Gambia  Georgia  Ghana  Guinea  Haiti  India

Indonesia  Kenya  Liberia  Malawi  Mali  Mongolia  Mozambique

Nigeria  Saudi Arabia  Sierra Leone  South Africa  Tanzania  Uganda  Ukraine

*Shaded states and territories had a field investigation conducted by an EIS Officer in the EIS Class of 2014 or 2015

*Field investigation experience is defined here as conducting or participating in an investigation of a potentially serious public health problem that required a timely response, occupied at least 10 working days of the EIS officer’s time, and involved original data collection and working with partners. Field investigation experiences include, but are not limited to, Epi-Aids and Health Hazard Evaluations. Multiple officers participating in the same investigation are counted as separate field investigation experiences. Numbers are based on Core Activity of Learning (CAL) 1 information from EIS officer activity reports, as of January 2016.
**Field Investigation Highlights**

- Meningococcal vaccine campaign effectiveness assessment among ~25,000 University of Oregon students
- Assessment of methyl bromide exposure because of release at a resort
- Investigation of botulism outbreak among attendees of a church potluck in Ohio
- Investigation of tularemia exposures among national park employees in Wyoming
- Response to chikungunya outbreaks in multiple locations
- Response to HIV infections among persons using an opioid painkiller in Indiana
- Investigation of Ebola contacts in Ohio and Texas
- Investigation of potential silica exposure at a workplace where granite countertops are manufactured

**EIS Ebola Response Highlights, FY 2015**

- 106 EIS officers were deployed to 10 West African countries; many officers deployed multiple times

**Number of Field Investigation Experiences by Type of Subject Area, EIS Classes of 2014 and 2015 (as of January 2016)**

Data source: Data entered by EIS officers in EIS Activity Reports for investigations meeting CAL 1
EIS officers work to improve global disease surveillance and publish data for action in MMWR and peer reviewed journals.

**Surveillance**

- During their first year, all EIS officers are required to evaluate a surveillance system and present the findings at the EIS first-year fall course.
- Systems evaluated during 2014 and 2015 have covered a range of subject areas.

*Image created by using Wordle™ — word size reflects the number of surveillance systems evaluated during 2014 and 2015 that related to that topic.*

*Data source: Surveillance evaluation data entered by EIS officers into EIS Program data management system.*

**Public Health Literature**

- EIS officers publish the findings of their field investigations and applied epidemiologic studies in MMWR and prominent peer-reviewed journals (see publication list on pages 16–31).
Evaluation and Data for Decision Making in the Annual EIS Cycle

- **January**: Pre-match, 6-Month Reports and Evaluations
- **February**: Regional Trainings
- **March**: EIS Conference Match
- **April**: Call for Position Descriptions, Selection
- **May**: Fall Courses, Selection Results, EIS Conference Evaluations
- **June**: Applications Open, Eligibility Criteria Posted, Summer Course
- **July**: Applications Close
- **August**: Interviews
- **September**: Interviewer Results, Selection
- **October**: Summer Course Evaluation Data
- **November**: Call for Position Descriptions, Selection
- **December**: Fall Course Evaluations, Selection
- **January**: Pre-match, 6-Month Reports and Evaluations
- **February**: Regional Trainings
- **March**: EIS Conference Match
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- **May**: Fall Courses, Selection Results, EIS Conference Evaluations
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- **November**: Call for Position Descriptions, Selection
After completing their EIS fellowship, EIS officers have gained the skills and experience needed to strengthen the public health workforce.

**Setting of First Job After EIS, Among EIS Officers with Known First Jobs***

(n = 618), 2004–2013 EIS Classes

- CDC: 65%
- Other Government: 7%
- State Health Department: 4%
- Clinical Setting: 5%
- Additional Training: 5%
- Academia: 5%
- Other Government: 7%
- Nongovernmental Organization: 2%
- Other: 4%

*First job setting was known for 76.1% of EIS officers in the classes of 2004–2013 based on exit survey data.

Data source: EIS officer exit surveys

**Future Directions: The EIS Program is working with the EIS Alumni Association (EISAA) to identify ways of tracking longer term career paths of EIS alumni.**

EIS Alums — please join EISAA and contribute to our growing knowledge!
What do you get when you hire an EIS graduate?

An applied epidemiologist who can

✓ Respond effectively to public health emergencies in the field or from the office
✓ Complete an epidemiologic study from initial design to final results
✓ Evaluate the effectiveness of surveillance efforts and recommend improvements
✓ Publish short reports and peer-reviewed journal articles
✓ Present findings coherently to both lay audiences and scientific colleagues
✓ Collaborate with CDC, state, local, tribal, and international partners
✓ Serve public health needs domestically or internationally
The EIS Action Council (EAC) provides critical input regarding all aspects of the EIS program.

EAC Members for 2015–2016

Joshua Mott
CSELS
Chair

Sally Brown
NIOSH
Co-Chair

Fred Angulo
CGH

Jennifer Lind
NCBDDD

Djenaba Joseph
NCCDPHP

Yulia Carroll
NCEH/ATSDR

Kanta Sircar
NCEH/ATSDR

Scott Santibanez
NCEZID

Elise Beltrami
NCEZID

Arlene Greenspan
NCIPC

Sam Posner
NCIRD

Alexa Oster
NCHHSTP

Kate Brett
NCHS

Randolph Daley
OPHPR

Jennifer Wright
EIS Field Support Coordinator

Jeff Engel
CSTE

Runa Gokhale
EIS 2014

Amanda Garcia-Williams
EIS 2015
Publications with Authors in the 2013–2015 EIS Classes*


*Publications on this list were identified through (1) a search for Epidemic Intelligence Service affiliation in PubMed and (2) publications reported by Officers in the EIS classes of 2013–2015. This list might not be complete, and only includes publications identified and published by February 26, 2016.


Division of Viral Diseases, National Centers for Immunization and Respiratory Diseases, CDC; Division of Vector-Borne Diseases, Division of High-Consequence Pathogens and Pathology, National Center for Emerging and Zoonotic Infectious Diseases, CDC; Children’s Hospital Colorado; Council of State and Territorial Epidemiologists. Notes from the field: acute flaccid myelitis among persons aged ≤21 years—United States, August 1–November 13, 2014. MMWR Morb Mortal Wkly Rep. 2015;63(53):1243–1244.


EIS was absolutely amazing. It prepared me for all of the twists and turns my career has taken. More importantly, it is where I fell in love with public health and its power to change the world!"

— Richard Besser, MD, EIS Class of 1991, ABC News Chief Health and Medical Editor

CDC’s Epidemic Intelligence Service (EIS) offers the unique potential to improve the lives of thousands of persons and offer hope to communities or entire countries.

EIS officers
✓ Are physicians, veterinarians, scientists, and other health professionals
✓ Complete a 2-year, on-the-job training and service fellowship
✓ Serve our country while learning to apply epidemiology
✓ Gain practical skills to become future leaders

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Scan the QR Code for additional information!