

ID: 35213419

Infectious Diseases, Injury - Drug Overdose - Host Site Description

Georgia Department of Public Health

Assignment Location: Atlanta, US-GA
Georgia Department of Public Health
DGMQ/QBHSB

Primary Mentor: Alida Gertz, MD, DrPH, MPH, MSc
Medical Officer, Team Lead for the Support Evidence Analytics and Liaison (SEAL) Team in the Travel Risk Assessment and Mitigation (TRAM) Branch
CDC

Secondary Mentor: Laura Edison, DVM, MPH
CDC Career Epidemiology Field Officer assigned to the Georgia Department of Public Health
Georgia Department of Public Health

Work Environment

Hybrid

Assignment Description

This host site position is sponsored jointly by the Centers for Disease Control and Prevention's (CDC) Travel Risk Assessment and Mitigation (TRAM) Branch, and the Georgia Department of Public Health, and provides a robust general infectious disease epidemiology experience. Both organizations are located in Atlanta, Georgia, and have a longstanding collaborative relationship.

The Fellow will work on projects within the TRAM Branch and the Georgia Department of Public Health (GDPH). There will be opportunities for collaboration between TRAMB and GDPH, and some as separate projects for each institution. The focus will be on infectious disease surveillance, outbreak investigations, evaluation of aviation illness responses, and preparedness.

At the TRAM Branch, the Fellow will be assigned to Support, Evidence, Analytics, and Liaison (SEAL) Team. SEAL Team works with state and local partners-such as the Georgia Department of Public Health-to provide epi support, data analysis and interpretation, special project coordination, and more. Currently, SEAL Team includes a Lead (primary mentor), one officer in charge at the San Juan port health station, 1 port health protection officer in Chicago, a CSTE Fellow (the current CDC/GDPH fellow), 4 port health medical officers, an epidemiologist, an associate service fellow, and an EISO.

At the TRAM Branch, the Fellow will enjoy a wide variety of opportunities for epidemiology, data analysis, program evaluation, and outbreak investigations/notifications across a wide variety of topics.

At CDC, the Fellow will learn about policies designed for the protection of human subjects and the role of an Institutional Review Board (IRB). The Fellow will participate in meetings and conferences at CDC and will be encouraged to enroll in CDC classes on media relations, manuscript writing, and oral presentations.

Activities may include working with GDPH on specific projects.

At GDPH the CSTE Fellow will be housed in the Acute Disease Epidemiology Section (ADES) in the Epidemiology Program, which is directed by the Georgia State Epidemiologist, Dr. Cherie Drenzek. ADES is one of 6 Sections in the Epidemiology Program; the others include the Chronic Disease, Healthy Behaviors, and Injury Epidemiology Section, the HIV/AIDS Epidemiology Section, the STD Epidemiology Section, the TB Epidemiology Section, and the MCH Epidemiology Section.

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The mission of the Acute Disease Epidemiology Section (ADES) is to optimize the health of Georgians by preventing and mitigating certain communicable and/or notifiable infectious diseases. The ADES is dedicated to fulfill its mission by using epidemiologic methods to:

- Conduct surveillance of infectious diseases (opportunity to work in many other subject areas as well)
- Identify and respond to emerging infectious disease threats and public health crises such as the opioid epidemic
- Provide support to local and district public health and private partners in identifying training and resource needs, developing guidelines for and investigating outbreaks or increases in endemic rates of disease, developing educational and training materials, and collecting and disseminating data.
- Publish and disseminate public health information: statistical reports (e.g. Georgia Epidemiology Report), outbreak investigation reports, annual data summaries, and educational materials.
- Participate in emergency preparedness planning, response and recovery efforts.

The Fellow will be based at the TRAM Branch, but work will involve activities at Atlanta’s Hartsfield-Jackson international airport and the Georgia Department of Public Health and its affiliates.

Describe Statistical and Data Analysis Support, Such as Databases, Software, and Surveillance Systems Available to the Fellow

CDC

At TRAM Branch/CDC, the Fellow will have access to the Port Health Activity Reporting System (PHARS), SAS, and all of the other CDC online resources. Additional databases are accessible on a case-by-case basis depending on the nature of the project.

GDPH

ADES has access to many databases including: the Notifiable disease database (SENDSS); immunization database (GRITS); HIV databases (eHARS, MMP, CAREWare, ADAP, NHBS); EIP data; ABC and FoodNet data; HAI database (NHSN); hospital discharge data; Vital Records death certificates; the State Unintentional Drug Overdose Reporting System data; and the Prescription Drug Monitoring Program data. There is statistical and data analysis support available from many of the MPH and doctoral level epidemiologists in ADES, Chronic Disease, and HIV Epidemiology. The Fellow will have access to SAS, GIS, Excel, EpiInfo, and more.

Projects

Surveillance Activity Title: Port Health Activity Reporting System (PHARS) Modernization

Surveillance Activity Description:

Fellow would assist in evaluation and implementation of ongoing activities to modernize and update the current TRAM Branch surveillance system.

- Work with partners within CDC as well as external partners including GDPH
- Help to coordinate collaboration between stakeholders
- Assist with project planning
- Assist with data collection and analysis
- Assist with writing of reports
- Assist with other activities related to the project

Surveillance Activity Objectives:

The goal of this project is to evaluate the current PHARS and develop ways to modernize and improve the system to meet current needs of the branch, division, and health department partners.

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Surveillance Activity Impact:

Improved communication between PHP Branch and external partners including health departments across the nation that work with port health stations

Surveillance System Evaluation Title: PHARS Modernization

Surveillance System Evaluation Description:

Evaluating the current system and its limitations and strengths will be a large part of this project. This initial evaluation will help to drive planning for modernization of the system

Surveillance System Objectives:

Data systems are currently fragmented and unidirectional. This project would work to explore and develop a unified, bidirectional data system that could be used to share information between CDC's TRAM Branch and state and local health departments. Information includes diseases of public health concern that are spread via travel and globally mobile populations. Activities supporting this project could potentially include but not be limited to the following:

- Evaluate the current system
- Define areas that need modernization
- Define needs of the branch
- Define needs of the health department
- Plan to update system to improve communication between CDC and HDs

Surveillance System Impact:

Improve communication and collaboration between TRAM Branch and health departments

Major Project Title: Major Project Options

Major Project Description:

Opportunities exist in many areas of epidemiology, even outside of infectious diseases, depending on the Officer's interests. DPH has excellent statistical support with many highly skilled epidemiologists and biostatisticians and a collaborative learning environment, partnering with Georgia Tech and Emory University to increase our data modelling and analytic capacity. There are multiple existing datasets and analyses that will enable a range of complex analytical projects, and can be chosen based on the fellows area of interest. Some examples of analyses include: analysis of HIV risk behavior in men who have sex with men or people who inject drugs (Georgia HIV Risk Behavior Survey) that would involve multivariate modeling and analyses of confounding and effect modification; linking HIV surveillance data to Ryan White clinic data to evaluate impact of rapid linkage to care protocols; matching across surveillance systems to understand how patients are affected by multiple conditions and determine what SDOH are associated with syndemic conditions; analytical project linking STD with enteric bacterial and parasitic infections that are readily transmitted by sexual contact; model-based estimates of population denominators for those at higher risk of HIV, including men who have sexual contact with men, transgender people, and people who inject drugs; model-estimates of undiagnosed HIV; conducting geospatial analysis of antimicrobial resistance data to identify changes over time and key areas of the state requiring response; analyzing N. meningitidis laboratory findings (e.g., serogroup) and epidemiologic trend analysis; analyzing data on antimicrobial resistance markers obtained using laboratory sequence data among enteric bacteria for reported cases with corresponding interview data to evaluate clinical or exposure associations with resistance; and developing health equity overdose mortality/morbidity visualizations for analysis of population health and targeting areas of intervention. An additional project could include developing surveillance tools and systems for *Cronobacter sakazakii*, which will soon be reportable in Georgia, by developing a district disease protocol, conducting outreach to reporting facilities, and assisting with the development and evaluation of the surveillance system.

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Major Project Objectives:

Varies by project.

Major Project Impact:

Varies by project.

Additional Project #1 Title: One Health surveillance enhancement

Project #1 Type: Surveillance Activity

Project #1 Description:

Opportunities exist in many areas of epidemiology depending on the fellow's interests and may include desk- or field-based evaluation depending on the project chosen. Examples of surveillance system that need to be evaluated and have support in place to conduct an evaluation early in the course of CSTE fellowship EIS include evaluation of: the new HIV molecular surveillance system designed to quickly identify areas where HIV may be spreading and provide prevention and treatment services, breaking the chain of transmission; pertussis cases and completeness of records including vaccine history and exemptions; a new statewide surveillance system for Neonatal Abstinence Syndrome; severe outcomes of Group A Streptococcus including necrotizing fasciitis and toxic-shock syndrome; and infants with congenital infectious disease exposure - surveillance and monitoring for emerging infectious disease impacts and other health threats. These surveillance systems are all new or need a close evaluation and plan to improve them.

Project #1 Objectives and Expected Deliverables:

The fellow will assist DPH staff in developing an evaluation plan, carrying out the plan, and analyzing data.

Project #1 Impact:

Surveillance system evaluation will allow for more effective and efficient function leading to improvement in data driven public health measures and policies.

Please Describe the Fellow's Anticipated Role in Preparedness and Response Efforts – Include Activities and Time Allocation (Required Competency of Fellowship)

CDC

The Fellow will receive training and experience in public health preparedness and response through the TRAMB and the Georgia Department of Public Health. TRAMB has a Preparedness and Policy Coordination Team that works with our Port Health Stations to work with Airport and Maritime Partners, and State and Local Health Departments, to develop Communicable Disease Response Plans for the Aviation and Maritime Ports in States. The Fellow will assist in planning for public health responses to natural disasters (e.g. pandemics) and man-made disasters (e.g. bioterrorism attacks), and in the design and as well as the operation of preparedness tabletop exercises.

GDPH

Our fellows are directly included in all cluster and outbreak investigations in some capacity. Activities they may be involved in include creating notifiable disease surveys and helping to create and provide disease guidance to our local health districts, partners and the public. They will work closely with our local health districts and may help conduct case investigations and assist in control activities.

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Please Describe the Fellow's Anticipated Role in Cluster and Outbreak Investigations – Include Activities and Time Allocation (Required Competency of Fellowship)

At GDPH, the fellow can be involved with many preparedness activities, depending on their areas of interest. Possible projects include developing a chemical and radiation exposure epidemiology response plan, revising the port of entry communicable disease response plan and participating in exercising the plan with the CDC Port Health Station, and local partners, participating in outbreak and other state level emergency responses, and more.

Please Describe the Fellow's Anticipated Role in the COVID-19 Response – Include Activities and Time Allocation

The fellow will be offered the opportunity to be involved extensively in the TRAMB and GDPH response activities. Responses vary and may involve many different efforts including disease prevention and community mitigation, healthcare facility preparedness, outbreak response and more. DPH has worked closely with CDC, GEMA, GDA and more during different responses include the COVID-19 response.

Please Describe Opportunities for Fellows to Work in Health Equity as well as Incorporating Diversity, Equity, and Inclusion into their Work

CDC
DGMH currently includes a DEIBA WG and the fellow would have the opportunity to join this group and play a small or large role in developing activities and proprieties related to health equity across the branch.

GDPH
There are many opportunities to work on DEI projects at DPH. DPH has working groups currently focusing on DEI within the department, and in the work that we do. Epidemiology has stood up a working group across subject areas to develop common goals and vision about how to improve, analyze, and present our data in order to affect health equity. This effort is in its infancy and will be a great opportunity for a fellow to get involved and help shape the work we do.