

Environmental Health, Occupational Health

Maryland Department of Health, Environmental Health Bureau

Baltimore, Maryland

Assignment Description

The fellow will be assigned to the Environmental Health Bureau under the supervision of Dr. Mitchell and Dr. Liu, and will be expected to work on at least one major project, several minor projects, and routine assignments. The fellow will be physically located close to both Dr. Mitchell and Dr. Liu. The areas of responsibility for the fellow will be to assist Dr. Mitchell and Dr. Liu in some of the major Bureau projects, including environmental public health tracking, lead surveillance, asthma and radon (all under healthy homes), and will likely also be involved in time-sensitive responses to issues such as outbreaks, opioids, etc.

Day-to-Day Activities

The fellow will work across several of the environmental, occupational, and injury epidemiology programs including

environmental public health tracking, Recent fellows have worked on the Maryland Violent Reporting System and its data quality; a re-evaluation of the State's targeting plan for testing of children for potential lead exposure, cancer clusters, and a host of other activities, including work with the infectious disease epidemiologists, response to public health emergencies such as Ebola Virus Disease or Zika, and foodborne outbreak response. The fellow will work closely with the epidemiology group, but also with other Environmental Health Bureau staff including food protection and healthy homes staff. The fellow will meet weekly with the primary or secondary mentor, and will be expected to participate fully in all aspects of the Bureau's activities, including weekly outbreak meetings, Bureau staff meetings, and relevant program staff meetings.

Potential Projects

Surveillance Asthma Surveillance Activity

This activity will involve analysis of hospitalization and other data to look at trends in asthma, particularly as the trends relate to a new initiative with the Children's Health Insurance Program (CHIP) for home visiting and environmental trigger reduction.

Surveillance Evaluation of Lead Surveillance Evaluation

The Childhood Lead Registry (CLR) is maintained by the Maryland Department of the Environment, and works closely with the Department of Health's Environmental Health Bureau. The CLR is transitioning from an older platform (STELLAR) to a new Healthy Homes Lead Poisoning Surveillance System (HHLPSS) during the State's expanded testing initiative for young children. This represents an opportunity to evaluate lead surveillance, particularly due to expansion of point of care (POC) testing, which is stressing the system's resources.

Major Project Electronic Health Records for Asthma Case Identification

This project involves the use of the State's Health Information Exchange (HIE) as a means of identifying children with diagnoses of moderate to severe persistent asthma who would be potential candidates for a new program with the Children's Health Insurance Program (CHIP). The project would involve working with the Department's informatics staff and the primary and secondary mentors to develop a strategy and framework for case identification using the HIE.

Additional Cancer Cluster Investigation Project

The Environmental Health Bureau is co-lead with the Maryland Cancer Registry in responding to inquiries and concerns regarding cancer. The fellow will be responsible for leading at least one such inquiry response during her/his tenure in the Department.

Surveillance Application of GIS to Ongoing Surveillance Activities
Activity

The fellow will be provided an opportunity to train in GIS and will be expected to apply geospatial analytics to at least one project during her/his tenure in the Department. Currently projects involving GIS that have been or could be involved in this include: cancer surveillance; asthma and lead surveillance; the Maryland Violent Death Reporting System; opioids overdose mortality; and Injury surveillance. The fellow will be able to select from among these (or several others, potentially) for this project.

Preparedness Role

All fellows are required to take the introductory level FEMA online courses on incident command, incident management and response, and may also be asked to take some of the more topical courses such as environmental health, radiological response, etc. All fellows will also participate with the primary mentor in the emergency management (EM) team conference, as well as on-call emergency response if needed. The fellow will also be expected to train on the Department's ESSENCE system for syndromic surveillance, which is utilized to identify infectious and environmental outbreaks.

Additional Activities

The fellow will attend the weekly Outbreaks review meeting on Friday mornings, bi-weekly meetings of the environmental public health tracking (EPHT) project, bi-weekly meetings of the cancer cluster investigation group (as well as assisting the primary and secondary mentors with ongoing cluster investigations), and meetings with the Department's leadership on a variety of topics such as information management strategies.

Mentors

Primary	Clifford Mitchell MS, MD, MPH Director, Environmental Health Bureau
Secondary	Ann Liu MPH, PhD Chief, Center for Environmental & Occupational Epidemiology

