

Infectious Disease

Description:

The Mississippi State Department of Health (MSDH) offices are located in Jackson, which is in west central Mississippi – about 3.5 hours from New Orleans and Memphis, and from the Mississippi Gulf Coast. MSDH provides public health services to 2.9 million Mississippi residents. It is a centralized system where all the 96 county clinics and the 9 Public Health Districts are part of MSDH. MSDH collects and analyzes surveillance information for all general communicable diseases, including vaccine-preventable diseases, sexually transmissible diseases (STD), HIV/AIDS, tuberculosis, zoonotic, vectorborne and foodborne diseases. In addition, epidemiology, in cooperation with the State's 9 Public Health Districts, investigates disease outbreaks and recommends control measures. Strong infectious disease, epidemiologic and laboratory support are available at the state and at the University of Mississippi Medical School, across the street. The partnership provides the availability of consultation with Medical School faculty as well as access to weekly clinical and research conferences and libraries.

Day-to-Day Activities:

The fellow's daily activities would comprise work on a choice of projects (listed below), acute disease surveillance, and outbreak investigations. Other routine activities include participation in the weekly Epi Hour conference with Epidemiology staff and district epidemiology and surveillance nurses. This would include periodically presenting at the Epi Hour conference. The CSTE fellow will have the opportunity to present at local and statewide conferences of interest, and to write articles for the monthly epidemiology publication for the healthcare providers in the state.

Potential Projects:

Outbreak field investigations: There are many opportunities to investigate a wide variety of outbreaks (in the community or healthcare associated). It is expected that the fellow will investigate at least one outbreak.

Multiple opportunities exist for evaluation of programs and surveillance systems, such as analysis of the Influenza Sentinel Provider Surveillance System. The state is implementing a new hospital discharge data system that will provide a wide range of surveillance and analysis options.

The Fellow will have the opportunity to assume responsibility for daily operation of surveillance for one or more reportable condition (e.g. salmonella, meningitis, legionella). In this role, the Fellow will serve as a resource for district health department staff and health care providers on key issues such as interpreting the surveillance case definition, appropriate laboratory diagnostics, and outbreak investigations.

The fellow will also have the opportunity to be involved in teaching others about epidemiology, biostatistics, and methods of preventing and controlling disease within and outside the agency.

Opportunities are available to work with tuberculosis, STD, HIV and hepatitis control programs. This can range from brief periods of familiarization with these programs to development of major projects within one of these control programs.

The state has a high rate of reported West Nile virus infections. The fellow will have the opportunity analyze WNV data, and to investigate whether Mississippi's high rate is the result of increased surveillance or an actual disease burden greater than that in neighboring states, and what environmental determinants affect this burden.

Emergency Preparedness Role:

The fellow will have the opportunity to work closely with Preparedness and Response in planning for response to public health emergencies. This provides an opportunity to learn from the experience of Mississippi's public health response to hurricane Katrina. The fellow will also be involved in the response to public health emergencies that occur during their tenure and participate in post-disaster surveillance and investigation of health problems related to the disaster.

Assignment Location: Jackson, MS

Primary Mentor: Thomas Chester, MD, MPH
Career Epidemiology Field Officer
Mississippi State Department of Health/CDC

Secondary Mentor: Paul Byers, MD
Medical Director, Epidemiology
Mississippi State Department of Health