

Infectious Disease

Assignment Description:

The NJDOH, located in central New Jersey, provides public health services to over eight million New Jersey residents. The fellow will work with the NJDOH Communicable Disease Service (CDS), which is comprised of two area-specific programs (Infectious and Zoonotic Diseases and Vaccine-Preventable Diseases). CDS provides guidance to local health departments and health care facilities statewide regarding routine investigations of reportable communicable diseases and outbreaks as well as public health emergencies, including emerging infections and events related to bioterrorism. CDS has approximately 70 staff members who represent a range of expertise, including physicians, veterinarians, nurses, epidemiologists, and health educators, who are available to the fellow for consultation and/or collaboration.

Day-to-Day Activities:

The fellow would be an integral part of the CDS team. The fellow's anticipated day-to-day activities would include work on long-term analytic projects and acute outbreak investigations. Other routine activities would include:

- Long-term analytic projects, which would involve collecting and analyzing epidemiological data and reporting findings
- Acute outbreak investigations, which would potentially involve field investigations, developing and/or administering questionnaires, developing database/line list, analyzing data, participating in conference calls with local, federal, and other state public health agencies
- Oral and poster presentations to the public and health professionals
- Access to statewide in-person and online public health trainings, e.g., SAS refresher course, Public Health Media Training, Communicable Disease Investigator Training, Introduction to Logic Models
- Phone duty once a week (CDS epidemiologists rotate daily to answer phone inquiries from public health and health care partners regarding reportable communicable disease issues);
- Participation in CDS off-hours "on call" approximately twice a year;
- Participation in weekly meetings with CDS epidemiologists regarding current investigations/outbreaks and topical infectious disease discussions; and
- Participation in monthly meetings with regional (i.e., based at local health departments) epidemiologists regarding current investigations/outbreaks and lectures on topics in public health.

Potential Projects:

- Analyzing foodborne disease data;
- Analyzing rabies data;
- Analyzing hepatitis B infection among hepatic cancer cases;
- Analyzing co-infected hepatitis/ hepatitis C cases;
- Analyzing National Healthcare Safety Network (NHSN) data;
- Conducting a West Nile virus seroprevalence study among mosquito researchers;
- Evaluating the impact of select infection control measures on reducing hospital-onset MRSA or other health-care associated infections;
- Assess the validity of using aggregate cumulative antibiogram data from hospitals to estimate the statewide prevalence of select antimicrobial-resistant bacteria;

- Developing a plan to measure the impact of required influenza vaccination for daycare attendees.

The fellow will have numerous opportunities to lead and/or participate in outbreak investigations; the CDS receives over 100 reports of communicable disease outbreaks of various etiologies involving a wide range of settings each year.

In addition, the fellow will have numerous opportunities to work on interdisciplinary teams. Depending on the project/investigation, CDS works closely with other areas in NJDOH, including the Consumer, Environmental and Occupational Health Service; the Division of Public Health Infrastructure, Laboratories and Emergency Preparedness; the Division of HIV/SIDS, TB and STD Services and the Division of Health Care Quality and Oversight. The Fellow will have opportunities to collaborate with the NJDOH Center for Health Statistics, which oversees areas including the state's Behavioral Risk Factor Survey, Healthy NJ 2010, and vital statistics analyses.

The Fellow will also have the opportunity to collaborate with outside stakeholders dependent on the investigation or project (e.g., Association for Professionals in Infection Control and Epidemiology, professional organizations, Occupational Safety and Health Administration regional offices, law enforcement agencies).

The fellow may choose to analyze an existing CDS surveillance system—e.g., influenza-like illness, pertussis, hepatitis A- to fulfill the surveillance system evaluation component

Preparedness Role:

In the event of a public health emergency, the fellow would be part of the CDS response team (which includes sub-teams in the areas of business continuity, Emergency Call Center, communications, epidemiology/surveillance, and data management). The fellow would serve in either the epidemiologic/surveillance or data management sub-teams.

Assignment Location: Trenton, NJ

Primary Mentor: Barbara Montana, MD, MPH
Medical Director, Communicable Disease Service
New Jersey Department of Health

Secondary Mentor: Christina Tan, MD, MPH
State Epidemiologist/Assistant Commissioner
New Jersey Department of Health