

Infectious Diseases

Assignment Description:

The Philadelphia Department of Public Health Division of Disease Control is responsible for the monitoring, control, and prevention of notifiable infectious diseases in the City of Philadelphia. The Division houses a number of program areas that address different aspects of this overall responsibility. The CSTE Fellow will work primarily from within the Acute Communicable Disease (ACD) Program and will be supported by the Epidemiology Program which provides epidemiological support to all other Division Programs including the Sexually Transmitted Disease Control and Public Health Preparedness Programs.

ACD offers a varied experience for the fellow as it maintains responsibility for the surveillance and investigation of over 60 general infectious diseases including enteric, vaccine-preventable, vectorborne diseases and viral hepatitis. The program is regularly engaged in the investigation of outbreaks, establishment of surveillance systems for emerging pathogens, outreach efforts for disease prevention and control, and the analysis of surveillance, outbreak, and research data.

Day-to-Day Activities:

Initially the fellow will complete an orientation to the Acute Communicable Disease (ACD) Program and Division of Disease Control (DDC) by meeting with ACD team members, DDC program managers, and participating in site visits with disease surveillance investigators and environmental health sanitarians. One of the goals of the orientation is to help the fellow become more familiarized with health department activities and choose a long-term project for the fellowship. Upon completion of the orientation, the fellow will specifically be engaged in routine activities such as taking calls from the public pertaining to general communicable disease issues, reviewing case investigations, presenting at program meetings and/or grand rounds, and assisting in weekly trend report analyses. When outbreaks arise, the fellow will be offered the lead role and will be supported by ACD Surveillance Coordinators and/or the primary mentor. The fellow will also be given the opportunity to regular investigate PFGE clusters and outbreaks of norovirus and influenza in institutional settings.

In addition to these routine activities, the fellow will be expected to work on analytic and surveillance projects associated with fellowship competencies. Furthermore, the fellow will be invited to attend other program meetings in order to explore the possibility of analytical projects outside of the Acute Communicable Disease Program in their second year.

Potential Projects:

PROGRAMMATIC & SURVEILLANCE:

- Implement a surveillance system for carbapenem-resistant pathogens
- Review healthcare-associated infection data submitted to the state health department via NHSN
- Create audit reports for data quality and timeliness of case investigation and closure; utilize data to improve programmatic processes
- Evaluate chronic hepatitis B and C reporting
- Evaluate impact of program infection prevention guidance and toolkits
- Create a protocol for the surveillance of Lyme disease in tick vectors

RESEARCH INVESTIGATIONS:

- Determine social risk factors associated with hepatitis C in youth and young adults

- Examine household risk factors associated with incident pertussis
- Assess environmental health inspection findings of swimming pools and their association with recreational water quality indicators

Preparedness Role:

The Fellow will participate in exercises developed by the Public Health Preparedness Program which is housed within the Division of Disease Control. The Fellow will help to develop data collection tools for any exercises and will help conduct analysis on collected data.

Assignment Location: Philadelphia, PA

Primary Mentor: Ami Patel, PhD, MPH
Career Epidemiology Field Officer
Philadelphia Department of Public Health

Secondary Mentor: Caroline Johnson, MD
Division Director
Philadelphia Department of Public Health