

Infectious Diseases

Assignment Description

The District of Columbia Department of Health, Center for Policy, Planning and Evaluation (CPPE) is interested in recruiting a CSTE Fellow to participate in a variety of activities on infectious disease epidemiology. The Fellow will be located in the Division of Epidemiology-Disease Surveillance and Investigation (DE-DSI) within CPPE and will perform duties in relation to activities outlined for The DE-DSI.

The DE-DSI is responsible for surveillance, investigation and control of reportable diseases within the District, with the exception of sexually transmitted illnesses, hepatitis, HIV/AIDS, and tuberculosis. The program collects, analyzes, interprets, disseminates data, and provides expertise and information on disease management. Data collected by DE-DSI are reported to the Centers for Disease Control and Prevention (CDC) through the National Electronic Disease Surveillance System (NEDSS) Based System (NBS). Case reports are received from physicians, laboratories, and infection control practitioners in hospitals. Cases are investigated and specimens are collected for analysis and diagnosis. Epidemiological data are monitored routinely to detect changes and potential outbreaks. The program is also actively engaged in syndromic surveillance activities that are now being expanded to include other non-traditional surveillance activities including non-bioterrorism-related activities.

Day-to-Day Activities

The Fellow will join a team of data analysts, epidemiologists and statisticians in data collection, analysis and production of statistical reports for program development, evaluation and policy development. He/she will be mentored in using methods of data analysis, such as the Geographic Information System (GIS) software, ArcGIS 9.x and statistical packages, e.g. SAS. The Fellow will participate in office meetings and will have the opportunity to collaborate with other team members on new and existing projects. He/she will review journal articles and lead discussions at the CPPE monthly epidemiology grandrounds, and assist with development of health messages. He/she will meet frequently with mentors to discuss issues and priorities, as well as problems the fellow could encounter in carrying out his/her assignments. CPPE has special relationships with Howard, George Washington and Georgetown Universities and federal agencies abound in the area, which offer the possibilities of collaboration. The Fellow will have the opportunity to present to programs within DCDOH, national meetings, and publish project work in peer-reviewed journals including the CDC MMWR.

Specific activities include the following:

- Performs activities associated with the collection, management, analysis and dissemination of surveillance and survey data.
- Assists with data collection, data entry and analysis for surveillance programs.
- Performs statistical analysis of large complex data sets and local data sets.
- Evaluates and analyzes data to make recommendations for public health policies, promotion, and disease prevention.

- Conducts syndromic surveillance and report to various stakeholders.
- Enter infectious case reports into the DC NEDSS-Base system.
- Coordinate data collection for individual cases and outbreak investigation including questionnaire design and interviewing of both cases and controls.
- Writes reports, conducts statistical analysis and disseminate information on investigated outbreaks and surveillance data.
- Disseminates department communications on foodborne and other diseases, including listserves during emergencies as needed.
- Prepares a weekly record that includes surveillance data, completed investigations, and the status of ongoing investigations.
- Conducts research and analysis related to infectious diseases on issues of importance to the District of Columbia.
- Prepares reports for publication in peer-reviewed journals.

Potential Projects

1. Determine the burden of foodborne pathogens in the District of Columbia.
2. Annual report of foodborne diseases in the District of Columbia.
3. Using restaurant inspection forms to evaluate non-critical and critical violations to assess foodborne related complaints.
4. Determine Risk factors for foodborne diseases and design intervention measures to prevent them.
5. Survey of food safety knowledge and practices among District of Columbia residents
6. Monitoring bacterial PFGE patterns in PulseNet in order to identify unrecognized clusters and potential outbreaks.
7. Evaluate the DC NEDSS-Base System and determine its efficiency and effectiveness using the CDC standards for evaluation of surveillance systems
8. Assessment of influenza vaccine coverage among young adults
9. Assessment of influenza vaccine coverage among pregnant women
10. Using market research data and Geographic Information System (GIS) to characterize communities at risk for infectious diseases.

Preparedness Role

The CSTE fellow will participate in emergency response training, exercises, and actual events based on the State Emergency Preparedness plan. He/she will also participate in emergency preparedness activities, disease surveillance and investigation. The Fellow will also conduct regular syndromic surveillance and produce reports.

Assignment Location: District of Columbia Department of Health
Washington, DC

Primary Mentor: John Davies-Cole, PhD, MPH
State Epidemiologist

Secondary Mentor: Fern Johnson-Clarke, PhD
Senior Deputy Director