Assignment Description

The Fellow will be assigned to the Bureau of Assessment, Statistics, and Epidemiology and will work as part of the epidemiology team. The Fellow will act as a liaison to healthcare facilities in the county, focusing on investigation and control of healthcare acquired infections. The Fellow's main projects will involve analysis of data from hospitals in the National Healthcare Safety Network (NHSN) database, creation of a county-wide antibiogram for carbapenem-resistant Enterobacteriaceae (CRE), promotion of hand hygiene audits at long-term care facilities, and an evaluation of Legionella surveillance in the county. The Fellow will be involved in investigations of disease outbreaks as they arise. The Department will provide all necessary resources and supervision, access to data, introductions to community partners, and opportunities for professional development.

Day-to-Day Activities

The Fellow's day-to-day activities may vary depending on the need for disease report follow-up, outbreak investigations, and training/workshop events. The Fellow will have regular communication with health care facilities, discussions with colleagues at the health department, and collaboration with other county and state agencies. Outbreaks may be reported at any time. Preparedness for emerging diseases and other health hazards may also require the Fellow's attention.

Potential Projects

Surveillance Activity CRE Antibiogram

The Fellow will conduct a survey of all acute care hospital laboratories to obtain information on the number of carbapenem-resistant Enterobacteriaceae (CRE) isolates by year and request information on susceptibility testing. The data will be compiled to create a county-wide antibiogram for CRE.

Surveillance Evaluation Evaluation of Legionella Case Reporting

The incidence rate for Legionnaires' disease in Allegheny County is several folds higher than the national rate. Yet, no one has evaluated the completeness of reporting, the possibility of false positive test reports, and testing protocols used by hospitals to identify cases. The Fellow will perform a complete evaluation of Legionella surveillance in the county.

Major Project Analysis of NHSN data

Currently the state health department is the only entity in PA with access to National Healthcare Safety Network (NHSN) data and is not able to share summary data with local health departments in a timely manner. ACHD plans to apply for access to NHSN data, and the Fellow will analyze the data to identify hospitals in the county with high rates of healthcare associated infections.
Additional Project Healthcare-Associated Outbreak Investigations

The Fellow will assist with the investigations of healthcare-associated outbreaks, including clusters of Legionella, invasive Group A Strep, CRE, Clostridium difficile, norovirus, and influenza. Investigations will involve confirming the diagnosis, collecting information on cases, and providing infection control recommendations to healthcare facilities.

Additional Project Infection Control Activities

The Fellow will promote implementation of hand hygiene and personal protective equipment (PPE) audit tools at long-term care facilities. The Fellow will work with facilities to track successful observations over time as part of quality improvement projects.

Preparedness Role

The Fellow will participate in monthly conference calls with state health department preparedness staff and attend occasional meetings of the Region 13 Health and Medical Committee. The Fellow will participate in training sessions and response exercises centered on emerging infections, such as novel influenza strains, bioterrorism agents, and other newly identified agents.

Additional Activities

1) The Fellow will be able to participate in all major outbreak investigations by conducting interviews, entering and analyzing data, and presenting results.

2) The Fellow can participate in activities related to our Community Health Assessment and Community Health Improvement Plan.

3) If funding is available, the Fellow will be able to study for and register for the certification in infection prevention and control (CIC) examination.

Mentors

Primary Kristen Mertz MD, MPH
Medical Epidemiologist

Secondary LuAnn Brink PhD, MPH
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