

Infectious Diseases—Healthcare Associated Infections (HAI)

Assignment Description

The fellow will work as an epidemiologist in the Bureau of Healthcare Associated Infections. He or she will participate in and potentially lead investigations of healthcare-associated outbreaks with support and guidance from Bureau staff. Recent investigations have included hepatitis B transmission in dialysis centers, legionellosis in hospitals and nursing homes, invasive group A streptococcal disease in nursing homes, viral respiratory infections in pediatric long term care facilities, and *Clostridium difficile* outbreaks in hospitals and nursing homes. The fellow will assist with the monitoring and triage of reports of healthcare-associated outbreaks submitted through the Bureau's Nosocomial Outbreak Reporting Application (NORA).

The fellow may also assist with the development of internal guidance documents for healthcare-associated infections such as legionellosis and vancomycin-resistant *Staphylococcus aureus*. Depending on the fellow's interests, he or she may also choose to work with the hospital-acquired infection public reporting program or with other Bureaus within the Division on joint investigations or projects.

Day-to-Day Activities

The Fellow's anticipated day-to-day activities would include work on long-term analytic projects and acute outbreak investigations (suggested projects below). Other routine activities would include:

With the support of mentors and staff, the fellow will work as an epidemiologist alongside other Bureau personnel. The work will involve discussions with our regional field epidemiologists and facility infection control personnel to gather and analyze data and make prevention and control recommendations. There is the potential for field work, such as participating in site visits, depending on the interests of the fellow. The fellow will also participate in day-to-day Bureau activities such as weekly statewide epidemiology calls, and monthly Division-wide surveillance meetings.

The fellow will be given ample time to complete projects that are required as part of the fellowship. He or she will have access to New York State's Dickerman library to perform literature reviews.

The office atmosphere is congenial, positive, and supportive. Albany is within daytrip range of the Catskills, Berkshires, Adirondacks, and New York City.

Potential Projects

There is flexibility built into the program such that the Fellow will have the option of pursuing specific projects of interest. Typical potential projects include:

- Evaluation of New York State healthcare associated infection surveillance systems, such as:
 - Legionnaire's disease in hospitals and nursing homes
 - Healthcare facility-associated influenza

- Participation in or leading investigations of healthcare facility-associated outbreaks.
 - Recent investigations have included:
 - Legionellosis in hospitals and nursing homes
 - Invasive group A Streptococcus in nursing homes
 - Parainfluenza virus and adenovirus in pediatric long term care facilities
 - Severe C. difficile disease in hospitals and nursing homes
 - Acinetobacter infections in intensive care units (ICUs)
 - Carbapenem-resistant Enterobacteriaceae in long term care facilities
- Participation in investigations of transmission of bloodborne pathogens or infection control breaches related to injection safety
 - Recent investigations have included:
 - HBV transmission related to diabetic care
 - HCV transmission in a pain clinic
 - Infection control breaches in a variety of healthcare settings
- Analysis of existing and compiled databases of case and outbreak reports, including:
 - Multidrug-resistant organisms in healthcare facilities (e.g., MRSA, Acinetobacter spp., extended spectrum beta lactamase-producing bacteria)
 - Clostridium difficile infections
 - Viral gastrointestinal outbreaks
 - Influenza and respiratory outbreaks
- Supporting and leading development and updating of guidelines and training, including:
 - Mandatory bloodborne pathogen training course content
 - Infection control management of VISA in hospitals and nursing homes
 - Investigation and prevention of legionellosis in nursing homes
 - Control of invasive group A Streptococcus infections in nursing homes
- Analysis of National Healthcare Safety Network (NHSN) data for selected conditions, including:
 - Surgical site infections, especially risk factors for infection in procedures that are newly-added to New York State's public report
 - Catheter-associated urinary tract infections

Preparedness Role

Depending on the fellow's interests, he or she may participate in healthcare facility-related preparedness activities that occur during the fellowship, such as pandemic influenza planning and development of guidelines for facilities. Additionally, the fellow may have the opportunity to work with the Division's Public Health Emergency Epidemiology Program (PHEEP), which investigates illnesses caused by select agents and plans for the dispensing and tracking of medical countermeasures in the event of an emergency. There is an active local Medical Reserve Corps that provides additional opportunities for preparedness-related activities.

Assignment Location: New York State Department of Health
Albany, New York

Primary Mentor: Emily Lutterloh, MD, MPH
Director, Bureau of Healthcare Associated Infections

Secondary Mentor: Valerie Haley, MD, PhD (Expected 2013)
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