

Infectious Disease-HAI

The assignment for this Applied Epidemiology Fellow is in the Bureau of Healthcare Associated Infections which is within the Division of Epidemiology, New York State Department of Health (NYSDOH). The Division of Epidemiology is responsible for surveillance and control of infectious diseases in New York State. The Division includes six bureaus: Sexually Transmitted Disease Control, Tuberculosis Control, HIV/AIDS Epidemiology, Immunization, Communicable Disease Control, and the Bureau of Healthcare Associated Infections (BHAi). The Division is directed by the State Epidemiologist, Perry F. Smith, MD.

The BHAi is directed by Rachel Stricof, MT, MPH, CIC, and includes two programs:

1. The Hospital Acquired Infection Reporting Program (HAIRP) oversees mandatory reporting by hospitals of selected procedure-related infections using the National Healthcare Safety Network (NHSN).
2. The Healthcare Epidemiology and Infection Control Program (HEICP) investigates outbreaks of healthcare associated infections and facility-associated communicable disease acquisition.

Both programs provide technical consultation and assistance on infection prevention and control issues to healthcare facilities, county health departments, other state agencies, and throughout the NYSDOH.

The primary supervisor for the Applied Epidemiology Fellowship will be Dr. Joshua Schaffzin, who is a former EIS officer and has supervised to a CDC/CSTE Fellow, has worked at the NYSDOH for nearly four years and is the Director, HEIC. Secondary supervision will be provided by Rachel Stricof, an experienced epidemiologist, infection preventionist, and national expert in HAIs who has worked at the NYSDOH for more than 30 years, and by Carole Van Antwerpen, the Program Manager of HAIRP with more than 30 years of infection prevention and control experience and who has been with the NYSDOH for three years.

It is proposed that this Fellowship will focus on HAI surveillance, prevention and control. There are numerous opportunities for the interested Fellow to experience hands-on epidemiologic field investigation and outbreak control as well as large dataset analysis on a variety of HAI-related topics. The Fellow will have substantial input in determining the projects he or she pursues.

The NYSDOH regulates approximately 240 hospitals and 770 nursing homes statewide. Each facility is required by NYS Sanitary Code to maintain an infection control program and to report any single case of a reportable condition or any increase incidence of infection over baseline rates. The HEICP is responsible for receiving the reports, approximately 1,000 annually, and consulting with the facility to ensure proper response for cessation of transmission, surveillance to monitor for and prevention of future incidents. Investigations in which Fellows might become involved include legionellosis, invasive Group A Streptococcus infection, Clostridium difficile infections, and transmission of multidrug-resistant organisms in a hospital, nursing home, or ambulatory surgery setting. These efforts involve work in the field and in the office to conduct testing and epidemiologic studies.

Additionally, the NYSDOH regulates approximately 230 dialysis centers and 90 ambulatory surgery centers statewide, where Fellows would have the opportunity to conduct field investigations of outbreaks. Recent experiences have included transmission of hepatitis C virus and assessment for infusion products contaminated with bacteria. Outbreak investigations, development of guidelines and studies may also occur in office-based surgery and other non-regulated healthcare settings.

The HAIRP was established in 2006 after a law was passed requiring all NYS hospitals to track selected procedure-related infections and to report their results to the NYSDOH. The department elected to use the Centers for Disease Control and Prevention's (CDC) NHSN. The HAIRP provides education and training on surveillance and reporting, conducts audits to ensure completeness and accuracy of reporting, reviews reported data, assesses risk factors for infections and risk adjustment strategies and compiles an annual report that is made available to the public. Fellows would have many opportunities to learn about hospital surveillance and reporting, and to learn how large datasets are analyzed to produce results that are applicable in a practical manner and comprehensible to the lay public. Additionally, Fellows would be able to design and conduct analyses to answer research questions using HAIRP data.

HAIRP has funded or is currently funding eight prevention projects throughout the state. Each of these involves a collaborative of five to 45 hospitals committed to the monitoring, evaluation, reduction and eventual elimination of healthcare-associated infections.

The BHAH conducts healthcare-associated disease surveillance; data collection and analysis; outbreak field investigations; oral presentations and training; prevention and control activities; assessment and development of regulations and statutes; and preparation of scientific publications. The BHAH works collaboratively with other units within the NYSDOH, including the Wadsworth Center (laboratories and research), other New York State agencies, local health departments, CDC, and other external partners. In addition, multiple opportunities are available throughout the BHAH and Division of Epidemiology to develop other epidemiologic infectious disease projects.

Staff members in the BHAH have considerable experience in outbreak investigation and infection control policy development. In recent years, the HEICP has investigated: numerous outbreaks of legionellosis in healthcare facilities; hepatitis C virus transmission in dialysis centers, plastic surgery, endoscopy centers and a pain clinic; hepatitis B virus transmission in an assisted living facility; Group A Streptococcal outbreaks in nursing homes; and many other outbreaks, both large and small. The Fellow will have access to a wealth of experienced epidemiologists, including many former EIS officers, and other public health professionals for consultation. The Fellow will also have access to an excellent scientific library. There are multiple opportunities, both within the NYSDOH and externally, to present and publish study results.

Typical day-to-day activities within BHAH (in which the Fellow could choose to participate):

- Consultation with field staff and local health department staff about healthcare associated outbreaks, infection control, and HAI reporting.
- Coordination of investigations between epidemiology, laboratory, and regulatory personnel.
- Weekly conference call with NYSDOH regional staff, all 57 NYS counties, and NYC to discuss events from the previous week.
- Development and dissemination of guidance documents relating to communicable disease control (e.g., disease advisories, public notifications).
- Evaluation of collaborative infection prevention projects throughout the state.

Assignment Location: Albany, NY

Primary Mentor: Joshua K. Schaffzin, MD, PhD

Director, Healthcare Epidemiology and Infection Control Program

PhD, University of Cincinnati College of Medicine (1999)

MD, University of Cincinnati College of Medicine (2002)

Secondary Mentor: Rachel L. Stricof, MT, MPH, CIC

Director, Bureau of Healthcare Associated Infections

Secondary Mentor: Carole L. Van Antwerpen, RN, MSN, CIC

Hospital Acquired Infection Reporting Program Manager