

Infectious Disease- HAI

Fellow's Anticipated Activities, Potential Projects and Emergency Prep Role:

The Fellow's primary activities will focus on New Hampshire's healthcare-associated infection surveillance and response. There is a great deal of scrutiny of this novel surveillance system, and opportunities for many levels of collaboration and influence, from NH communities, hospitals, state government, and with CDC and other federal groups. The fellow will underpin his/her experience by routine analysis of data to track the occurrence of healthcare-associated infections, interpretation of the data trends, and implementation of educational strategies for prevention. The fellow will also have a key role to interpret statewide data to inform policy and procedures for use in planning disease prevention activities and interventions. Specific activities include:

- Validate and analyze central line associated blood stream infections data reported through the National Healthcare Safety Network (NHSN) in response to legislation mandating reporting of hospital acquired infections
- Validate and analyze data on surgical site infections following knee arthroplasty, coronary-artery bypass graft surgery, and colon surgery reported by hospitals through NHSN
- Design and implement an effective sentinel surveillance system for the collection of antibiogram data from NH hospitals
- Analyze large administrative datasets, such as the hospital discharge data and Medicaid claims data, to assess the occurrence of non-reportable multidrug-resistant organisms
- Use analysis results to develop education and prevention goals for the NH Healthcare-Associated Infections Program
- Provide oral data presentations to stakeholders including the Healthcare-Associated Infections Technical Advisory Workgroup, the NH Healthcare Quality Commission, and the NH Infection Control and Epidemiology Professionals
- Attend state and local meetings related to healthcare-associated infections prevention and surveillance

Additionally, the fellow will engage in activities beyond the healthcare-associated infection surveillance program. Depending on his/her professional goals, the fellow will be offered a broad array of experiences and opportunities in other areas of state jurisdiction public health. Such activities could include:

- Response to urgent health threats that threaten the health of the NH population. For example, response to pandemic influenza or arboviral illnesses such as Eastern Equine Encephalitis, which can be unpredictable from year-to-year in their occurrence.
- Participate in weekly outbreak team meetings, which include an interdisciplinary group of public health professionals that discuss current outbreak and case investigations

- Attend monthly meetings of the Communicable Disease Epidemic Control Committee, which is a unique model in the US for development of statewide infectious disease and preparedness policies and guidelines
- Participate in and eventually lead outbreak investigations. This would include developing hypotheses, selecting investigation methods, developing survey instruments, administering surveys to patients, creating a data entry database, analyzing survey data, drafting the final outbreak report, and sharing results and recommendations to stakeholders. This may include responding to public and media inquiries regarding the outbreak
- Participate in public health emergency preparedness planning including assisting with protocol and policy development and participating in training exercises and drills
- Engage in public health research activities as opportunities become available. Professional presentation and publication is encouraged. The unique relationship of the NH DHHS with Dartmouth College through the joint appointment of the primary and secondary mentors affords high quality, diverse research opportunities that may be tailored to the Fellow's interests.
- Collaborate on projects and public health activities with other experienced staff including staff infectious disease doctors, epidemiologists, and the CDC assigned Epidemic Intelligence Service Officer.

Assignment Location: Concord, NH

Primary Mentor: Jodie Dionne-Odom, MD
Deputy State Epidemiologist
Division of Public Health Services
Associate Professor, Infectious Diseases and International Health
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Secondary Mentor: Elizabeth Talbot, MD
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