

## **Infectious Diseases- HAI**

### Assignment Description:

The HAI Program in Maine is dynamic and very active. Legislation in Maine requires the reporting of hospital-specific HAI data, including MRSA and C. difficile, to the HAI Program at the Maine Center for Disease Control and Prevention (Me CDC). The HAI Program has a unique advisory group, the Maine Infection Prevention Collaborative (MIPC), which has representatives from every acute care hospital. The HAI program works in partnership with the MIPC, other state agencies, and the Quality Improvement Organization (QIO). The HAI Program realizes that efforts to reduce multiple drug resistant organisms must go beyond hospitals to include long term care. With the help of the Quality Improvement Organization (QIO), the HAI program has offered trainings in 10 different locations across the state to enhance infection prevention and control long term care. The result has been an increase in outbreak reporting to Maine CDC, and greater involvement of the HAI Program in C. difficile outbreak assistance. The HAI program is also involved in a pilot program with the QIO to enhance antibiotic stewardship in the Augusta region and reduce C. difficile. Another unique effort in Maine is the development of an external observation of hand hygiene program which involves all hospitals, with results reported to CEOs twice a year. The program now receives HAI data on the National Healthcare Safety Network (NHSN) from every Maine hospital, and is developing baseline data from which to measure progress. The HAI Program is developing hospital-specific infection control report cards for hospital CEOs. The Maine HAI program participates in regional calls with other New England states to share successes and information. With the support of this CSTE supplemental position, Maine can further develop these efforts.

Maine CDC has successfully partnered with CSTE and CDC by providing professional development opportunities to EIS Officers, Public Health Prevention Specialists, and CSTE Fellows. A Fellow who completes his/her time in Maine will have with an excellent working knowledge of HAI prevention. To further enhance their experience, the Fellow will also shadow field epidemiologists and be exposed to outbreak investigations, both in HAI and infectious disease outbreaks. Because Maine has a limited number of hospitals (36) and a centralized public health system, the HAI Program is able to work intimately with hospitals and make a difference in reducing infections. This is a wonderful opportunity to get marketable skills in healthcare infection prevention while gaining added experience in general infectious disease epidemiology.

### Day-to-Day Activities:

Daily activities would comprise of HAI data analysis, validation, presentation of results, policy analysis, developing and integrating prevention initiatives, and participating in acute outbreak investigations. Other routine activities offer opportunity for the Fellow to partner with Division of Infection Disease (DID) epidemiologists and learn about the epidemiology work occurring across the division. Examples of routine activities include:

- 1.) Collect, analyze, and develop presentation materials of HAI events for all Maine hospitals. Present materials at statewide meetings.
- 2.) Participate in the development and implementation of a regional pilot study to reduce C. difficile and enhance antibiotic stewardship in the Augusta area. This involves coordination among the local hospital, multiple nursing homes, and several physician practices. The work is a joint effort of the HAI program and the QIO. The CSTE Fellow will participate in monthly team meetings and work with a tri-state group (Maine, New Hampshire, and Vermont), all of which are implementing similar programs.

- 3.) Participate in monthly meetings of the MIPC, bimonthly meetings of MIPC-Coordinating Council, and quarterly meetings of the Maine Association of Professionals in Infection Control meetings. This allows multiple opportunities to present.
- 4.) Participate in outbreak investigations, particularly of *C. difficile* in hospitals and long term care facilities. Utilize PFGE testing to determine likely source of transmission.
- 5.) Participate in daily meetings with DID epidemiologists where current investigations and outbreaks are discussed.
- 6.) Participate in monthly epidemiology symposia with medical, central and field epidemiologists. Recent topics include the on-going outbreak of pertussis, TB case presentations, foodborne outbreaks, and other infectious disease reports.

#### Potential Projects:

Potential activities include, but are not limited to the following:

- The CSTE HAI fellow will be intimately involved in major projects of the HAI program, including validation and analysis of HAI data on NHSN, determine baseline data of hospital HAIs, research and analysis regarding proposed legislative mandates for reporting, outbreak HAI investigations, enhancing antibiotic stewardship practices in physician offices, nursing facilities, and hospitals, and collaborating with healthcare infection preventionists.
- The CSTE Fellow will be involved in HAI surveillance statewide: gathering data through National Healthcare Safety Network (NHSN) and presenting data. The CSTE Fellow will also perform hospital chart review and electronic medical records for validation of data.
- The CSTE Fellow will coordinate, analyze and present data on hand hygiene compliance for all hospitals in Maine.
- A Fellow would have the opportunity to participate on the outbreak investigation.

#### Preparedness Role:

The Division of Infectious Disease is the lead response unit for surveillance, epidemiology, and disease control activities related to emergency preparedness and response. A Fellow would contribute to this work as part of the epi team and under the direction of the State Epidemiologist.

Assignment Location:                      Augusta, ME

Primary Mentor:                              Peg Shore, MT (ASCP), MSPH, PhD, CIC  
HAI Prevention Coordinator  
The Maine Center for Disease Control and Prevention

Secondary Mentor:                            Stephen Sears, MD, MPH  
State Epidemiologist  
The Maine Center for Disease Control and Prevention