

Infectious Diseases

Assignment Description:

The Michigan Infectious Disease Fellow would have a truly unique opportunity to act as a member of Michigan's infectious disease epidemiology team, with special emphasis on zoonotic, vectorborne and emerging infectious disease opportunities. The fellow will work closely with Dr. Kimberly Signs, DVM and Dr. Mary Grace Stobierski, DVM in the Zoonotic Disease and Special Projects Section of the Communicable Disease Division. The Fellow will participate in all current activities of the Section, which include routine surveillance, interagency collaborations, and education and outreach on a variety of zoonotic and vectorborne diseases such as rabies, West Nile virus, and Lyme disease, to name a few. The CSTE Fellow would provide support to acute outbreak investigations requiring immediate public health response, under the guidance of the lead Epidemiologist. This would include working first-hand with the CDC, federal and state regulatory partners on multi-state investigations. In addition, MDCH will support the candidates completion of the required activities related to this CSTE Fellowship, including a surveillance system evaluation.

The Communicable Disease Division organizes and hosts an annual statewide Communicable Disease Conference each spring to provide updated information and guidance on communicable disease topics and emerging disease threats. The target audience includes all Local Health Departments, as well as infection control practitioners and clinical laboratory directors from healthcare systems and nursing homes. Our previous Fellows have had the opportunity to present their work at this and other statewide meetings.

Day-to-Day Activities:

On a daily basis, the CSTE Fellow would:

- 1) Assist in surveillance and outbreak investigations for zoonotic and vectorborne diseases in Michigan.
- 2) Participate in regularly scheduled meetings within the Communicable Disease Division.
- 3) Participate in existing state-level working groups and discussions on topics of zoonotic disease, including the Michigan Arbovirus Working Group, the Michigan Rabies Working Group, the Michigan Bed Bug Working Group and the monthly Michigan One Health Conference Call.
- 4) Attend local and state level meetings on topics including public health, epidemiology and infectious disease.
- 5) Assist with field investigations MDCH may undertake to better understand the epidemiology of zoonotic diseases in Michigan.

Potential Projects:

The CSTE Fellow could choose among several focused areas to tailor experiences leading to advanced skills in applied epidemiology as well as policy and program development. The Fellow, together with both mentors will be able to choose a project suited to the background of the Fellow and current needs of the Division. Past projects have included a KAP survey of Veterinarians in Michigan regarding Leptospirosis, collaboration with Michigan State University researchers conducting field research on the ecology of Lyme disease in Michigan, and development of the Michigan Bed Bug Manual, to name a few. Other activities may include database construction, data entry, participating in conference calls, and report-writing. Creation and delivery of presentations of investigative methods and findings would also be supported.

We are proud of the diversity of projects that past CSTE Fellows have been able to pursue here. The arena of zoonotic and vectorborne disease allows many opportunities for collaboration on

interdisciplinary teams including the ELC workgroup (a state-wide task force of epidemiologists, sanitarians, laboratorians, and physicians devoted to improving local health department applied epidemiologic knowledge and skills and providing the state with feedback on tools and resources under development), the Michigan Rabies Working Group, the Michigan Arbovirus Working Group, and the Michigan Bed Bug Workgroup, to name a few.

Preparedness Role:

Michigan has an established Office of Public Health Preparedness which has drawn staff from both the epidemiology and laboratory programs of the health department and thus maintains close ties with both of these programs. The Fellow would have many opportunities to participate in trainings, tabletop exercises, discussions and projects with the Office of PH Preparedness in Michigan. Among these would be:

- Incident Command Training: the availability and completion of Incident Command System training for better integration with the National Incident Management System structure employed throughout Michigan's public health community in response to emergent public health issues. This structure is mandated for incident response at the federal, state and local level.
- Bioterrorism Education: the Fellow would also be encouraged to take advantage of the many Bioterrorism-Preparedness education opportunities and exercises offered through the Michigan Center for Public Health Preparedness based at the University of Michigan campus, which is part of a national network of centers established to support preparedness efforts of state and local health departments nationwide.

Assignment Location: Lansing, MI

Primary Mentor: Kimberly Signs, DVM
Zoonotic Disease Epidemiologist
Michigan Department of Community Health

Secondary Mentor: Mary Grace Stobierski, DVM, MS, DACVPM
Section Manager, Zoonotic Disease and Special Projects
Michigan Department of Community Health