

Infectious Disease

Assignment Description

CSTE Zoonotic Fellow Activities at the Michigan Department of Community Health:

- Participate in surveillance and outbreak investigations for zoonotic and vector-borne diseases in Michigan
- Participate in regularly scheduled meetings within the Division of Infectious Disease and the Bureau of Laboratories
- Participate in existing state-level working groups on topics of zoonotic disease, including the Michigan Arbovirus Working Group, the Michigan Rabies Working Group, and the Michigan Avian Influenza Interagency Working Group
- Attend local and state level meetings on topics including public health, epidemiology and infectious disease
- Assist with field investigations MDCH may undertake to better understand the epidemiology of zoonotic diseases in Michigan

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 Division of Infectious Disease. In addition to the above activities, MDCH will support the candidates completion of the required activities related to this CSTE Fellowship.

Day-to-Day Activities

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 diseases. On a daily basis, the CSTE Fellow would assist in monitoring zoonotic illness patterns throughout the state and using epidemiologic and laboratory data to identify clusters and outbreaks both within and across jurisdictions. 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 and federal regulatory partners on multi-state investigations, assisting with development of study design, construction of case definitions and line listings, development of hypotheses and hypothesis-testing questionnaires, data analysis, contact with MDCH laboratory staff and coordinating appropriate and timely laboratory specimen testing requests and submissions.

Other support activities may include guidance with database structure, data entry, participating in conference calls, and report-writing guidance and review. The Fellow may eventually be able to provide consultation and technical assistance to local health authorities regarding enteric illness case reporting rules and case definitions, pathogen identification and interpretation of laboratory test results, and disease control measures. Many of these consultations routinely involve control measures for pathogens with high transmissibility and/or high morbidity. Other frequent consultations would concern high-risk situations and/or high-risk groups.

Potential Projects

The CSTE Fellow, together with both mentors, will choose a project suited to the interests of the Fellow and to the current needs of the Division. Past projects have included collaborations with EID laboratory

Fellows on laboratory-oriented endeavors. Opportunities for joint projects with interdisciplinary teams include the ELC workgroup (a statewide 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 Rabies Working Group in Michigan; the Michigan Department of Agriculture; and Michigan State University.

Future projects could also include:

- 1) evaluations of case investigations of selected zoonotic pathogens;
- 2) field work involving a zoonotic or vectorborne pathogen.

The Fellow will be expected to review a surveillance system currently in place for one or more selected notifiable diseases in the state.

Preparedness Role

Michigan has an established Office of Public Health Preparedness that 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 Public Health Preparedness in Michigan. In addition, the Fellow would 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, Michigan
Primary Mentor:	Mary Grace Stobierski, DVM, MPH Manager, Zoonoses Michigan Department of Community Health
Secondary Mentor:	Kim Signs, DVM Zoonotic Disease Epidemiologist Michigan Department of Community Health