

Environmental Health- Waterborne

Assignment Description:

This position would be related to the Great Lakes state waterborne disease project area. The fellow will be assigned to the Illinois Department of Public Health (IDPH) Division of Infectious Diseases, which includes the Communicable Disease (CD) Section, and will also work closely with personnel from the IDPH Division of Environmental Health (EH). The CD section is responsible for state-wide communicable disease surveillance, prevention, and control programs, which is conducted in collaboration with 95 local health departments (LHDs). The EH Division is responsible for a variety of environmental issues, including recreational water safety in the state.

Day-to-Day Activities:

With a population of over 12 million, Illinois has great diversity, from rural to large metropolitan areas. The volume of infectious diseases reported to the Department is significant and staff members are at times required to work on single cases or outbreaks of new and emerging pathogens. The fellow would be involved in infectious disease surveillance, outbreak investigations and various water safety projects with local health departments, other state health departments and federal agencies.

Potential Projects:

The fellow will be able to choose from numerous potential projects including:

- 1) Oversight of surveillance data for diseases transmitted via water (e.g. cryptosporidiosis, legionellosis), which would require review of surveillance data for completeness, development and review of reports to identify clusters of cases, and working with LHDs.
- 2) Work closely with IDPH EH Division and Illinois Environmental Protection Agency (IEPA) on blue-green algae issues. Testing of bodies of water in Illinois for blue-green algae began last year but a specific Illinois response to higher levels has not been established. This project would require working with several agencies in the development of a response plan.
- 3) Participation in waterborne and other outbreak investigations, which could include developing questionnaires, databases and memos to the field; analyzing data; drafting final outbreak reports; and entry of reports into the CDC outbreak surveillance system. Outbreaks may be due to more common pathogens (e.g. cryptosporidiosis, *Salmonella*, Shiga toxin producing *E. coli*) or less common causes, such as contaminated medications or animal contact.
- 4) Development of materials on recreational water safety and blue-green algae issues for the IDPH internal SharePoint and the public IDPH website.
- 5) Work with the EH Division on projects such as studying the use of total maximum daily load issues related to Great Lakes beaches; evaluation of PCR for *E. coli* versus culture for lake beaches; participating in Great Lakes sanitary surveys; and collaboration with other Great Lake states over water issues.

Preparedness Role:

The fellow would have the potential to participate in any response planning and training, as well as any exercises or responses to events in Illinois during their time in the state.

Assignment Location: Springfield, IL

Primary Mentor: Connie Austin, DVM, MPH, PhD
State Public Health Veterinarian
Illinois Department of Public Health

Secondary Mentor:

Lori Saathoff-Hubber, MPH
Foodborne Epidemiologist
Illinois Department of Public Health