

Environmental Health

Assignment Description

The fellow will be assigned to the Bureau of Environmental Health Services. Our goal is to protect the health of Iowans by providing technical assistance to local boards of health, local public and environmental health professions, and the general public on issues related to environmental health. The fellow will also have the opportunity to work with the entire Division of Environmental Health including the Bureau of Lead Poisoning and Prevention, the Bureau of Radiological Health, and the State of Iowa Toxicology program. Opportunities presented to the Fellow will allow them to develop an appreciation for the public health system; strengthen communication, collaboration, and teamwork skills; foster leadership skills in program design, implementation and evaluation; and reinforce strong investigation and statistical analysis skills.

Day-to- Day Activities

- Collaboration with programs located within the Department of Public Health, other state agencies, local health departments, and research institutions involved in the monitoring and control of infectious diseases and environmental health hazards
- Participation in investigations with environmental health specialists and epidemiologists to identify the source of environmental-related disease outbreaks
 - Assist in conducting environmental health disease surveillance
- Under the supervision of the public health veterinarian and bureau chief, the Fellow will initiate the development of much needed databases within the Division of Environmental Health
- Attend program level meetings to gain an understanding of environmental health policy within the department

Potential Projects

- Evaluation of one or more of the following surveillance systems.
 - o Harmful algal blooms
 - o Cancer Registry
 - o Birth defects Registry
 - o Carbon Monoxide
 - o Lead (adult or childhood)
 - o Rabies/West Nile/Lyme
 - o Infectious diseases such as Crypto/Campy/Salmonella/E.coliEvaluate the effectiveness of the investigation system at the local and state level. Develop and implement improvement plan based upon evaluation of prevention and control measures. Provide this information to key stakeholders.
- Development of water-borne or food-borne outbreak surveillance system
- Analyze Environmental Health surveillance data
- Assist in writing surveillance reports (e.g. Pesticide Poisoning, Adult Lead Poisoning)
- Participate in outbreak investigations involving the Department of Public Health and local public health agencies. This may include designing questionnaires and other data collection tools, conducting interviews, and analyzing data; writing reports, oral presentations, and journal articles. Potential outbreaks include food-borne disease, water-borne disease or other environmental diseases such as Legionnaires or Histoplasmosis.

- Continue to develop environmental disease surveillance. Work with Department staff to improve tracking and surveillance of select environmental health reportable diseases and hazards beginning with developing case definitions. Provide guidance and leadership on the development of environmental health indicators. Draft a proposal for the importance of GIS database to include environmental exposures. Develop outreach materials.

Preparedness Role

The fellow will have the opportunity to participate in a response capacity to natural or man-made disasters by becoming a member of the Environmental Health Response Team or the Epi Response Team. The fellow will be offered opportunities to participate in tabletop exercises with the Center for Disaster Operations and Response attend emergency preparedness trainings and meetings, food security trainings and offered the opportunity to attend the “Environmental Health Training in Emergency Response” course provided by the Department of Homeland Security Center for Domestic Preparedness.

Assignment Location: Des Moines, Iowa

Primary Mentor: Ann Garvey, DVM, MPH
State Public Health Veterinarian/Deputy State Epidemiologist
Iowa Department of Public Health

Secondary Mentor: Carmily Stone, MPH
Bureau Chief, Bureau of Environmental Health Services
Iowa Department of Public Health