

Injury

The Bureau of Epidemiology within the Michigan Department of Community Health (MDCH) provides epidemiological support to the state's Public Health programs. It is staffed by nearly 200 epidemiologists and professional staff organized into five Divisions: Communicable Diseases; Environmental Health; Genomics, Perinatal Health and Chronic Disease Epidemiology; Immunizations; and Vital Records and Health Statistics.

The CSTE Fellow will have opportunities to experience and contribute to applied injury epidemiology in a breadth of areas across public health. He/she will be based in the Epidemiology and Surveillance Section of the Division of Environmental Health (DEH), which supports programs in Occupational and non-Occupational Injury; Environmental Hazards and Poisonings; Lead Abatement; Anti-Chemical Terrorism and Preparedness; Environmental Asthma; and Occupational Health. A new DEH program addresses the epidemiology of substance abuse, a growing public health problem. The DEH currently has eight staff with advanced degrees and training in epidemiology; three have doctoral degrees. There are also toxicologists, industrial hygienists, and health educators. There are numerous opportunities to collaborate throughout the Bureau of Epidemiology as well as program staff in Injury Control; the Office of Drug Control Policy; the Michigan Departments of Agriculture, Environmental Quality, Labor and Economic Development; and our academic partners. Please visit our website at www.michigan.gov/mdch-toxics

Current activities in DEH include:

- 1) Assessment of statewide poison control center and other surveillance as an early warning system for bio- or chemical-terrorism incidents, or for early detection of outbreaks of communicable or environmental disease.
- 2) Maintenance and analysis of statewide mandatory reporting systems for pesticide poisonings, heavy metals poisonings, occupational diseases (with Michigan State University), chemical spills and releases, and lead-contaminated and abated housing.
- 3) Healthy Homes asthma and injury hazards intervention demonstration project.
- 4) Response to toxic spills and environmental emergencies, and assessment of health hazards around Superfund contamination sites
- 5) Substance abuse epidemiology and surveillance, a collaboration of the Bureau with academic experts in drug abuse epidemiology from Michigan State University (Dr. James Anthony) and the University of Michigan (Dr. Sandro Galea).
- 6) Surveillance of occupational amputation injuries reported via hospital discharge data.
- 7) Provision of epidemiology data and reports on injury morbidity, mortality, and risk factors to the MDCH Injury Control Program. See website at http://www.michigan.gov/mdch/0,1607,7-132-2940_2955_2981---,00.html

The CSTE Fellow can choose from a wide range of projects, including:

- 1) Development of a new statewide system for surveillance of Carbon Monoxide Poisonings, utilizing data submitted to DEH under a new mandatory reporting law. The Fellow could help design and evaluate this new surveillance system, design an

intervention based on its data, and join the multistate/CDC Workgroup addressing national efforts to reduce Carbon Monoxide Poisonings.

2) Analysis of data on non-occupational poisonings in Michigan using the statewide Pesticide Poisoning surveillance system. The Fellow could also design and help implement interventions.

3) Analytic studies in priority areas of injury epidemiology, such as substance abuse or disparities. There are multiple data sources available, including hospital discharge data, death certificate files, Statewide Poison Control Centers data, state and local traffic crash death and injury data, and Medical Examiner and Death Review data for selected topics or areas; also behavioral data such as the Behavioral Risk Factor Survey, Youth Risk Behaviors Surveillance System, and special surveys of alcohol and drug use behaviors. One suggested analysis: Spatial distribution and morbidity, mortality trends due to alcohol use, prescription drug misuse, or illegal drug use among different age and ethnic groups in Michigan.

4) The DEH currently generates the CSTE State Injury, Occupational Health, and selected Environmental Health Indicators. The Fellow can evaluate their utility on the county (local health department) level.

5) The Fellow is welcome to collaborate on current environmental epidemiology studies.

6) Opportunities are available for the Fellow to participate in communicable disease or environmental field investigations, as time and interest permits.

7) There will also be opportunities for the Fellow to participate in trainings and exercises through the Division's Chemical Terrorism and Emergency Preparedness Section.

The Fellow will have the opportunity to use data sets of varying size and complexity, to learn how to link data files, edit data and maintain quality control, and to manage projects. He/she will participate in the design of studies, in data collection, in the analysis and interpretation of results, and in their dissemination. There are educational opportunities available, both on-line and at the local universities. The Bureau has a monthly Epidemiology seminar series, as does MSU, and the Fellow will be encouraged to present at least one of the following: the Michigan Epidemiology Conference, the Michigan Public Health Conference or the Michigan Public Health Technology Conference.

Assignment Location: Lansing, MI

Primary Mentor: Lorraine (Lorri) Cameron, MPH, PhD
Lead State Environmental Epidemiologist;
Manager, Epidemiology and Surveillance Section,
Division of Environmental Health, Michigan
Department of Community Health

Advanced Degrees: PhD, Johns Hopkins University (1985)
MPH, University of Michigan (1976)

Michigan_Cameron

Secondary Mentor:

Corrine Miller, PhD
State Epidemiologist and Division Director
Michigan Department of Community Health

Advanced Degrees:

PhD, University of Minnesota (1982)
DDS (Dentistry), University of Minnesota (1982)