

The Injury Prevention and Control Program (IPCP)/Office of Statistics and Evaluation, within the Center for Community Health, and the Injury Surveillance Program (ISP), within the Center for Health Statistics, Research and Evaluation, at the Massachusetts Department of Public Health (MDPH) seek a CSTE Fellow to conduct injury surveillance activities pertaining to fall injuries among the elderly, fire-related injuries, shaken baby syndrome, and/or other injury topic areas as able. The IPCP and ISP work in close collaboration to conduct general injury surveillance and prevention programming as well as activities in focused areas, including but not limited to: suicide surveillance and prevention, fire injury surveillance and prevention, emergency medical services for children, traumatic brain injury surveillance and prevention, motor vehicle safety, and weapon surveillance/violence prevention. In addition, the MDPH injury epidemiologists and research analysts also perform program and surveillance system evaluations, and actively disseminate the data findings through reports, scientific publications and presentations.

The MDPH is fortunate to have many high quality population-based data sources and a team of experienced injury epidemiologists and analysts with whom the Fellow would work. The databases currently utilized for injury surveillance include the Massachusetts death, acute care hospital inpatient, observation state, and emergency department databases, the Weapon Related Injury Surveillance System, the Massachusetts Violent Death Reporting System (MA-VDRS), and several other sources. Despite the wealth of data, there are still many surveillance projects in need of attention. Examples of potential projects and focus areas are described below. Many of these are flexible based upon the skills and interest of the Fellow.

- Examine the factors associated with recent upward trends in fall-associated traumatic brain injuries among the elderly in Massachusetts, utilizing electronic databases and data obtained through the abstraction clinical records and EMS run sheets. Using the Barell Matrix and other data tools developed by the CDC/NCHS and others, examine trends in fall injuries affecting other anatomic regions of the body. Collaborate with the MDPH's Office of Elder Health and the newly developed multidisciplinary Healthy Aging Work Group to provide data for policy development and fall prevention programming.
- Collaborate with the staff involved in the MDPH's fire prevention activities to identify data needed for program planning and evaluation. Analyze statewide data from health and fire services agencies, examine and report disparities in fire-related injury rates across racial/ethnic, geographic, and other demographic groups. Utilize mapping software to display geographic findings.
- Utilize the newly developed Massachusetts Violent Death Reporting System (MA-VDRS) database and other relevant data sets to analyze and report findings on shaken baby syndrome (SBS) and other forms of child maltreatment. The MA-VDRS database contains information from death certificates, police, crime lab and the medical examiners office, on all homicides and suicides in MA. Examine the sensitivity and predictive value positive of case-mix hospital discharge data for surveillance of SBS and other forms of child maltreatment. Work closely with the Statewide Shaken Baby Syndrome Advisory Group.
- Assist with drug overdose surveillance activities, including but not limited to poisonings and overdoses associated with opioids, cocaine, carbon monoxide, and other classes of agents. Collaborate with staff from the MDPH's Bureau of Substance Abuse Services.

- Prepare fact sheets and presentations based on findings and disseminate results to local, state and national groups.
- Evaluate one or more of the databases used by the MDPH for injury surveillance utilizing the Centers for Disease Control and Prevention's "Guidelines for the Evaluation of Surveillance Systems," assessing the timeliness, flexibility, completeness, sensitivity, and predictive value positive of the data. Report findings and meet with database administrators to investigate the feasibility of instituting methods for improvement.

As an injury epidemiologist with the MDPH, the Fellow will work with the staff of the IPCP and ISP to conduct routine injury data analyses, complete one or more focused projects, and produce at least one manuscript for submission to a peer-reviewed journal. The Fellow will serve as a member of the Injury Community Planning Group, an interdisciplinary group of public and private partners involved in state injury prevention activities. Depending on the project(s), the Fellow may collaborate with the Elder Health Program, the Registry of Vital Records, the Medical Examiner's Office, the MDPH's Violence Prevention Program, the State Fire Marshal's Office, the Massachusetts Rehabilitation Commission, and/or the Bureau of Substance Abuse Services.

The IPCP currently works with the MDPH's Center for Emergency Preparedness (CEP) in the implementation of two federal cooperative agreements involving State Injury Surveillance and Prevention and Emergency Medical Services for Children. The Fellow would be involved in the planning and implementation of projects pertaining to the CEP, in coordination with IPCP staff.

Assignment Location: Boston, MA

Primary Mentor: Holly Hackman, MD, MPH
Epidemiologist, Injury Prevention and Control Program

Advanced Degrees: MPH, Johns Hopkins University, School of Hygiene and Public Health (1997)
MD, Jefferson Medical College of Thomas Jefferson University (1986)

Secondary Mentor: Victoria Ozonoff, PhD
Senior Research Advisor, Injury Surveillance Program

Advanced Degree: PhD, Boston University (1984)