

Chronic Disease and Injury

The Fellow will closely collaborate with the State Chronic Disease Epidemiologist as well as with the Bureau of Health Statistics and Data Management that provides support for the Behavioral Risk Factor Surveillance Survey (BRFSS), Injury Prevention Program, and Cancer Registry. The Fellow will have an opportunity to collaborate with several DPHS program epidemiologists and will have access to several large data systems. The fellow will have an option to collaborate with various chronic disease programs including Diabetes Education, Oral Health, Nutrition and Physical Activity or Comprehensive Cancer Control Programs.

Potential Projects:

The Fellow will take a primary role by analyzing and evaluating available data sets related to cardiovascular disease (CVD), including the hospital inpatient and discharge data, ambulatory care data, mortality data, BRFSS, private insurance and Medicaid claims data. The Fellow will update and expand the NH CVD burden document. The Fellow's work will help to support routine surveillance activities as well as identify health risk factors that may lead to recommendations related to the improvement of stroke and heart disease outcomes.

The Fellow will be able to carry out several special CVD-related projects:

- Analyze Trauma and Emergency Medical Services Information System (TEMSIS) data to assess timeliness of stroke and cardiovascular symptoms onset to 911 calls and EMS response. Using TEMSIS data will help to determine the time between onset of symptoms and the 911 call and will allow to discern whether or not there is a response delay; as well as whether people know to call 911.
- Analyze NH Medical Examiner's data related to sudden cardiac death, determine basic descriptive statistics, co-morbid conditions, and use of publicly available automated external defibrillators; determine trend over time and potentially plot the events with the location of publicly used defibrillators using an interactive mapping tool called Instant Atlas.

The Fellow will provide epidemiological leadership for NH's Injury Prevention Program. At present there is no one epidemiologist dedicated to injury prevention. New Hampshire has many rich sources of data that can aid in program planning and evaluation. The Fellow will analyze and evaluate data sets related to injury including, but not limited to the hospital discharge data, mortality data, the Crash Outcome Data Evaluation System, the Trauma Emergency Medical Services Information System, the Fatality Analysis Reporting System, the Uniform Crime Report and the National Occupant Use Survey.

The Fellow will be able to carry out special Injury Prevention related projects:

- Use CDC and State and Territorial Injury Prevention Directors' Association recommendations for injury surveillance to develop and disseminate a comprehensive data report using the injury data available in New Hampshire. At a minimum, this report would include summary statistics on all 14 conditions found in the Consensus Recommendations for Injury Surveillance in State Health Departments.
- Analyze data related to both the prevention and perpetration of sexual assaults in New Hampshire for the continuous evaluation of a Sexual Assault Prevention Plan. This would include crime trends, call data, Youth Risk Behavior Survey data and recently released Violence Against Men data.

The daily activities may include but are not limited to:

- Work with a number of large databases including those listed above.
- Write programs to efficiently obtain and analyze data using SAS, SPSS, EpiInfo, Access and Excel.
- Assist in responding to a variety of chronic disease data inquiries, including investigation of cancer clusters.
- Work with the NH Cancer Registry in the writing of cancer reports and publications.
- Assist in the evaluation of chronic disease indicators for their application to data linkages with environmental health data through the Environmental Health Tracking Program.
- Assist DPHS with the continuing evaluation of chronic disease surveillance systems and help develop and implement evaluation of special projects.
- Utilize spatial modeling programs to report health outcomes for small geographic areas.
- Participate in the Data and Epi work groups at DHHS.
- Investigate outbreak.

In summary, working for the NH DHHS will allow the CSTE Fellow to: develop a comprehensive set of core skills through competency-based training in essential public health practice and research; be exposed to applicable municipal, state and federal law; design and evaluate public health surveillance systems; conduct survey research and epidemiological analysis on a variety of chronic diseases; work with program monitoring and evaluation; prepare manuscripts for publication; and play a lead role in writing important grants.

Assignment Location: Concord, New Hampshire

Primary Mentor: Ludmila Anderson, MD, MPH
Chronic Disease Epidemiologist
New Hampshire Department of Health and Human Services

Advanced Degrees: MPH, Boston University (2002)
MUDr (Medicinae Universae Doctoris), Charles University, Prague, Czech Republic (1996)

Secondary Mentor: Karla Armenti, ScD, MS
Chief of Health Statistics and Data Management Section
New Hampshire Department of Health and Human Services

Advanced Degrees: ScD (Doctor of Science), University of Massachusetts Lowell (2001)
MS, University of Massachusetts Lowell (1997)