

## **New Hampshire Occupational Health Surveillance Program: Fundamental Grant #1U60OH009853-01**

NH Division of Public Health Services  
Continuation Application Progress Report  
Performance Period: July 1, 2010 to June 30, 2011

Karla Armenti, ScD. – Principal Investigator  
Tel: (603) 271-8425; Fax: (603) 271-7623; Email: [karmenti@dhhs.state.nh.us](mailto:karmenti@dhhs.state.nh.us)

### **Program Overview and Major Accomplishments**

**A. Specific Aims** – have not been revised.

#### **B. Studies and Results**

Formally established the New Hampshire Occupational Health Surveillance Program (OHSP) in the Division of Public Health Services (DPHS) in August of 2010 through the hiring of Karla Armenti as Principal Investigator. For the past eight months, Dr. Armenti has worked with staff from the Bureau of Health Statistics and Informatics and interns from the University of New Hampshire and the University of Massachusetts Lowell to access existing data in the state Enterprise Data Warehouse as part of an occupational health surveillance system. In addition, survey data from the Behavioral Risk Factor Surveillance System (BRFSS), Department of Labor (DOL) workers' compensation data, poison center data and emergency medical services data were added for surveillance purposes.

Final compendium of databases for occupational health surveillance was created.

Additional efforts to enhance existing data sources include adding industry and occupation questions to the 2011 BRFSS (with 3 months of pilot data in 2010), adding fields for industry and occupation to the poison center data; adding occurrence (at work) codes to the hospital discharge data set, and coding of occupation and industry in the ABLES data. We have also started exploring workers' compensation data. NH DOL has prepared a new file of several years combined, including lost time and medical treatment. Finally, we have begun discussions with UNH and Drexel University researchers on adding industry and occupation to the hospital discharge data.

An advisory committee was established in September of 2010. Members (total of 54) include representatives of local government, labor, academia, business and industry, public health professionals, and private funders. Four full advisory committee meetings are planned per year. The first meeting was held in October of 2010. The committee was introduced to the new program, including aims and objectives established in the original proposal. A mission statement was created and ideas were shared on how best to identify key issues of concern and where to target our limited resources. Another meeting was held in February, made up of a subcommittee of the larger committee, focused on strategic planning. The initial strategic plan was brought to the larger committee for discussion, which worked on the initial steps of a work plan. The third meeting will be held in June 2011, which will include an invited presentation on local government compliance with Department of Labor administrative rules for health and safety - joint loss management committee responsibilities. It is our goal to bring outside presenters into each advisory committee meeting in order to educate committee members on outside systems that collect or process occupational health information. We will continue doing basic strategic planning through the subcommittee. So far, approximately 25 people have attended the first 2

## **New Hampshire Occupational Health Surveillance Program: Fundamental Grant #1U60OH009853-01**

meetings each. We established an e-mail list of key occupational health stakeholders in the state which totals over 50 people.

In April of 2011, we had the great fortune of having APHA president, Dr. Linda Rae Murray, come to New Hampshire and speak at the New Hampshire public health Association's annual meeting. Since her background is occupational health we hosted a meeting of occupational health stakeholders for a one-on-one discussion with her. It was a highly successful interchange where the group received advice and recommendations from Dr. Murray on how to ensure success in working together to protect workers in New Hampshire.

### 3) Dr. Armenti attended several NIOSH meetings:

- 2010 Kick Off Meeting for NIOSH State-based Surveillance, August 25, 2010 in Atlanta, Georgia
- CSTE Occupational Health Subcommittee meeting, November 16, 2010, Austin, Texas
- APHA Annual Meeting, November 6-10, Denver, CO
- CSTE Occupational Health Subcommittee meeting, March 9 and 10 2011, Washington D.C.
- NIOSH Sponsored meeting on Work-Related Asthma, Oakland, CA, March 21 to 24, 2011

#### *Upcoming meetings:*

- Northeast States Occupational Health Surveillance conference, May 2, 3, and 4 2011, Farmington, Connecticut
- CSTE Annual Meeting, June 12-16, Pittsburgh, Pennsylvania

### Dr. Armenti spoke/guest lectured in the following venues:

- February - Dartmouth Institute for Health Policy and Clinical Practice, Master of Public Health Program, Environmental and Occupational Health
- March – Keene State College, Health Sciences course
- March – Safety and Health Council of Northern New England Annual Meeting
- April - University of New Hampshire, Department of Health Management and Policy, College of Health and Human Services, Environmental Health Introduction course
- May – UNH Grand Rounds
- June – CSTE (abstract accepted)

### Student Intern Presentations

- April 29 – “Characterization of adult blood lead levels below 25 mcg/dL in the New Hampshire Adult Blood Lead Epidemiology and Surveillance Program (ABLES) Program,” UNH Undergraduate Capstone Presentations.
- May 9 – NH Occupational Health Indicators – UMASS Lowell Capstone Presentations

4) With the help of staff from the Bureau of Public Health Statistics and Informatics and an intern from the Department of Work Environment at UMASS Lowell, we completed a total of 16 (out of 20) occupational health indicators and submitted them to CSTE/ NIOSH. The biggest limitation with our ability to process the indicators is due to the fact that New Hampshire does not participate in the Bureau of Labor Statistics Survey of Occupational Injury and Illness

## **New Hampshire Occupational Health Surveillance Program: Fundamental Grant #1U60OH009853-01**

system. We have begun discussions with BLS to learn how New Hampshire can participate in the future. However during these times of economic distress, it is unlikely that New Hampshire will be able to provide the required state match. In the interim we will be reporting out on modified indicators using the data we do have.

5) Based on findings from review and analysis of occupational health indicators, identify priority occupational safety and health conditions in the state and recommend prevention strategies. Work with key stakeholders and partners to implement these strategies.

Initial data analysis on 5 year trends (2003-2007) to be published in June 2011, indicate priority areas to be occupational poisonings, hospitalizations for work related injuries, work related amputations (hospitalizations), and adult blood lead exposures. We will work with our stakeholders to ensure attention is focused on these key areas, and interventions are developed to raise awareness and prevent these exposures and risks. Further analysis of the data by geography and age/gender will be performed to focus our efforts.

### 6) Disseminate data and communicate activities.

- Created new web page in DPHS: <http://www.dhhs.state.nh.us/dphs/hsdm/ohs/index.htm>
- Designed “One-Pager” description of our program and what we do, with some general stats on NH.
- Wrote Issue Brief on BRFSS State Added Questions on injuries at work (serious enough to warrant medical attention) and who paid for them – to be published on line in May 2011.
- New Report on OHI’s to be published in June, 2011; will include results from BRFSS Call-Back Survey on Work-Related Asthma, Poison Center calls for occupational poisoning by substance, gender and age; and workers’ compensation data (total, by body part, and causes of injury).

We transitioned to an Oracle based platform for disseminating data (to replace the Instant Atlas and HealthWRQS tools discussed in the original plan) using Cognos with live query capabilities – we will add all OHI’s to this system over the 2<sup>nd</sup> year; becoming part of a Division-wide data dissemination strategy.

7) Established objectives and approaches for enhancing the NH OHSP. Demonstrate link to prevention activities.

- Working toward revising existing MOU between NH DPHS and OSHA on reporting adult blood lead to include other occupational health conditions reported to or discovered by the OHSP.
- Working with legal counsel at NH DPHS and the Department of Labor to establish MOU for OHSP staff to view confidential workers’ compensation data.
- Wrote educational piece to include with DPHS Bureau of Disease Control Lyme Disease Case Report Form on the importance of collecting occupation as part of the report.
- Coordinated 2 day training session on industry and occupation coding at the Northeast Regional Occupational Disease and Injury Surveillance Conference (to be held May 3 and 4). Fourteen people from various Northeast agencies are signed up, including CT

## **New Hampshire Occupational Health Surveillance Program: Fundamental Grant #1U60OH009853-01**

OSHA staff, researchers from Drexel University and University of New Hampshire, and state surveillance staff.

- Dr. Armenti is participating on the NH EQUITY Partnership's Data Committee focused on better data collection of race, ethnicity and language.

8) Integrate activities with existing NH public health surveillance systems (and prepare for next steps) including:

- Adult Blood Lead Epidemiology and Surveillance Program (ABLES)
  - UNH undergraduate intern performed analysis on lower BLLs (10 to 25 µg/dL) and conducted survey of workers with lower BLLs to better understand exposures and protections in the workplace.
- Northern New England Poison Control Program Occupational Poisoning Project
  - Added I/O fields to incoming call forms that are work-related; did training of personnel on importance of collecting I and O; ran data for June indicator report; started request for data set to perform data linkage with emergency room data (Year 2 project).
- Division of Vital Records Administration occupational mortality study in collaboration with NIOSH for the National Occupational Mortality Surveillance (NOMS) program.
  - Did some preliminary analysis; waiting for NIOSH to finish coding remaining years' data for I and O.
- Dartmouth Hitchcock Medical Center (DHMC) Electronic Medical Record Project
  - Identified and started working with Resident from DHMC. Developed parameters for first project using Electronic Report of Injury (EROI) for employees. This will include: descriptive epidemiology on EROI data set (2009-2010), population characterization – compare to national data for this industry, possible linkage to employee health risk assessments. Timeline for Resident program is 18 months – ends June 20, 2012. Have established a relationship with Dartmouth Public Health Program to continue rotating students to work on this project over the next 4 years.

### **C. Plans for the next year**

- Work toward taking over the contract for CFOI with BLS – it is currently with the Division of Vital Records. This unit would like us to take it over. Identifying state match may be difficult, but we will work with our financial personnel to determine options.
- Start analysis of 15 year mortality data (after NIOSH completes coding)
- Add I/O BRFSS module to our 2012 survey
- Write NIOSH RO3 application for data linkage project (Live emergency room data to EMS data)
- Publish paper (peer-reviewed) on poison center/emergency room data linkage project
- Keep adding OHI's to Cognos tool – allowing for users to perform own queries.
- Continue working with our partners on 4 identified projects in #8 above
- Consider revising state Rules for collection of occupational health conditions by providers

*No significant modifications to original plan.*