

New Hampshire Occupational Health Surveillance Program: Fundamental Program

Grant #U60 OH010910

Annual Report of Major Outputs and Outcomes (July 1, 2015 to June 30, 2016)

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The overall objectives of the program are to:

- *Assess the extent and severity of workplace injuries, illnesses, deaths, hazards and/or exposures*
- *Identify workers and occupations at greatest risk through data collection of industry, occupation, and work status*
- *Develop research and prevention (program) policies through partnerships with public health and non-public health organizations.*
- *Expand outreach and dissemination*
- *Continuous performance review (evaluation) of the accomplishments and impact of surveillance activities*

Major Accomplishments and Outcomes

Assess the extent and severity of workplace injuries, illnesses, deaths, hazards and/or exposures; identify workers and occupations at greatest risk through data collection of industry, occupation, and work status

We continue analysis on a variety of existing and new occupational health indicators and new data sources, including occupational poisonings (reported to the Northern New England Poison Center), trauma emergency medical system for work-related events; work-related commercial motor vehicle crashes (Department of Safety crash reports); first reports of injury reported to the NH Workers' Compensation System; NH State Cancer Registry data, NH Vital Records (death and birth data), vaccination rates of healthcare workers as reported to the National Healthcare Safety Network; and the Behavioral Risk Factor Surveillance Survey (BRFSS). These studies involve some manual data collection; data base development; data cleaning; and merging of data elements across databases. Analysis includes evaluation of utility of each data source to provide meaningful statistics on work-related injury and illness in New Hampshire.

Analysis of 13 of the 21 core NIOSH/CSTE occupational health indicators was completed plus analysis on indicators "modified" to utilize existing data for 2011, 2012, and 2013 where available. Hospital discharge data was not available to meet the reporting deadline. It is expected that by the end of this year, we will have 2011-2012 hospital discharge data completed, allowing for a more up-to-date analysis of our indicators. All available indicator data was published in a comprehensive report, including NH demographic and workforce characteristic data (new analysis of "limited English speaking" by industry and occupation). Priority areas identified included incidence of malignant mesothelioma (higher than U.S. estimates for 3 years) and low back disorder hospitalizations (increasing rates).

Additional efforts to enhance existing data sources included adding industry and occupation questions to the 2013 and 2014 BRFSS, adding fields for industry and occupation to the poison center data; and working with partners to create a merged data set of hospital discharge and emergency medical services information to further explore traumatic work-related injuries. A new data source includes the Department of Safety Motor Vehicle Crash Data. We are also working with the NH DHHS Bureau of Health Statistics and Informatics to create linking tables of NIOSH coded industry and occupation data in the vital records/death data. This will allow for analysis of NH death data by industry and occupation variables.

The NH OHSP has produced more data, contributed to national occupational health surveillance discussions, explored injury and illness rates within several industries and occupations, and applied standards of quality improvement in all program areas. An outcome of these efforts is the dissemination of more accurate and detailed information, including the investigation of injury and illness data by where a person works, what they do for work, and by a variety of demographic and employment parameters. This is an important aspect of increasing our knowledge and understanding of the true burden of work-related injuries and illnesses, and allows us to better prioritize resources. These data are used by state stakeholders to influence safety practices and minimization of workplace risks.

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Expand outreach and dissemination

- Moved all web content to the new OHSP website in UNH/IOD, and have posted all new publications to the NIOSH Clearinghouse. http://www.iod.unh.edu/Projects/OHSP/project_description_ohsp.aspx. UNH/IOD Communications Department produces monthly newsletters of important OHSP updates, publications, and other occupational safety and health news. This newsletter is distributed to more than 230 people.
- Worked with the NH DHHS Environmental Public Health Tracking Program to publish the results of a survey conducted of NH State agencies on knowledge and prevention of Tickborne disease in outdoor workers, *Tickborne Disease Prevention among State Agencies*, May 2016. Results will be used in collaboration with the NH DPHS Bureau of Infectious Disease Control to develop and implement peer to peer training programs for prevention of Tickborne disease.
- Published *Poisoned at Work: An Updated Evaluation of New Hampshire Occupational Poisoning Calls to the Northern New England Poison Center from 2012 to 2014*, March 2016
- Worked with the NH DHHS Lead Prevention Program to publish report, *Characterization of Lower Blood Lead Levels Reported for New Hampshire Adults from 2009–2013*, February 2016. Outreach efforts will include targeting industry groups identified in our data analysis for improved prevention activities.
- Worked with the NH DHHS Rural Health Division to publish report, *Identifying the Gaps in the Methodology of New Hampshire Farm Injury Surveillance Using Hospital Discharge Data*, December 2015. This information is being used by Dartmouth College (Geisel School of Medicine) in discussions with a large medical center in northern New Hampshire to provide additional training to rural medical providers about farm-specific health issues.
- Collaboration with the NH State Asthma Collaborative: *Healthy Body, Healthy Lungs, What Salon Workers Need to Know About their Risk for Work Related Asthma*, published and presented at two schools of hair and cosmetology. Provided training on salon health and safety in partnership with NH WorkWise (OSHA Consultation Program) at two schools of hair and cosmetology.
- Published issue brief, *Asthma Prevalence among New Hampshire Workers, Behavioral Risk Factor Surveillance System, 2011-2012*. Shared with key stakeholders at the annual NH Asthma Collaborative meeting.
- Published issue brief, *Utilization of the NH BRFSS to Better Understand Under-Reporting of Work-Related Injuries*. Results indicated that only about half of the injuries sustained by respondents serious enough to require medical attention were paid for by workers' compensation. This report was provided as background information to the NH Commission to Recommend Reforms to Reduce Workers' Compensation Costs.
- The Occupational Health Surveillance Advisory Committee met twice during Year 1. Topics covered in these meetings included: Dissemination of indicator data to better prioritize prevention efforts, engagement of committee members to develop outreach/communication plan for disseminating pertinent data/information, and priority areas for the next year of research and surveillance.

In addition, the NH OHSP has produced several occupational health indicator dash boards for public use in the NH DHHS WISDOM system, the state-wide web-based interactive system for direction and outcome measures. Data points are presented by counts and rates, and by gender and geography where possible. (<http://wisdom.dhhs.nh.gov/wisdom/>). WISDOM can be used as a tool for educating stakeholders from academia, nonprofit organizations, advocacy groups, etc. on workplace injuries and illnesses and other employment, demographic and/or exposure/hazard data that warrant targeted attention for prevention purposes.

An outcome to outreach and information dissemination is an increased use of occupational health data by our stakeholders and others who have an interest in the data. More people are looking to us as experts in occupational health surveillance. A more educated stakeholder population is more successful in implementing prevention strategies and effecting policy change.

Develop research and prevention (program) policies through partnerships with public health and non-public health organizations.

- Working with the NH DHHS Nutrition Services Section to develop and conduct a survey administered to women in the NH WIC (women, infants and children) program about barriers to continuation of breastfeeding after

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returning to work. Preliminary data indicate that nearly 20% of the respondents would have continued breastfeeding if there were better lactation policies in their workplace. The focus of the full survey is on informing stakeholders about the importance of supportive lactation policies in the workplace. We are leveraging existing and new funding mechanisms to do in-depth interviews of WIC mothers, and to develop a training module for businesses and industry on creating a model lactation policy in their workplaces.

- Adult Blood Lead Epidemiology Surveillance –Worked with NH DHHS Lead Prevention Program to develop fact sheets and issue briefs informing businesses and health providers on the importance of preventing lead exposure at work. Continued data collection of all adult blood lead cases through the CDC Healthy Homes and Lead Poisoning Surveillance System (HHLPSS), including assignment of NAICS and/or SOC codes (where available). Clinical call-back is conducted to follow up with laboratories and testing physicians to obtain employer and/or occupation where missing.
- Worked with NH DHHS Radiation Prevention Program to host a Dartmouth MPH/Leadership Program student to research and recommend requirements for radiation safety education for staff operating fluoroscopy equipment. Findings from this study were presented to the NH State Radiation Advisory Committee, focusing on review of proposed legislation for regulatory requirements for users of radiological medical equipment.
- Behavioral Risk Factor Surveillance System - Worked with NIOSH on adding industry and occupation questions to 2013 and 2014 survey (currently 3 years of I/O data).
 - Collaboration with the Cancer Prevention and Control program to analyze cancer screening behaviors by industry and occupation.
 - Collaboration with the DPHS Chronic Disease Program to write issue brief on BRFSS chronic disease indicators by industry and occupation.
- Worked with the Department of Safety on the Commercial Motor Vehicle Crash Project.
 - Performed preliminary exploration of the commercial motor vehicle crash data in NH. Future studies with a more comprehensive dataset are planned, with a focus on distracted driving.
- Participating in the “Dialogue on Climate & Public Health Issues in NH” workgroup; representing surveillance advice on climate effects on vulnerable workers. Working on training materials for outdoor workers.
- Participating as a subject matter expert (SME) on the State Public Health Emergency Planning Team, Capability 14, Responder Safety and Health. Participating in the pilot testing of the NIOSH Emergency Responder Health Monitoring and Surveillance (ERHMS) system.

Outcomes from collaboration include building awareness and educating various public health groups about the importance of occupational health as an integral part of public health (being a voice on various committees devoted to broader public health issues); advising on important topics such as emergency responders, and understanding the broader perspective of quality improvement at the program level.

Continuous performance review (evaluation) of the accomplishments and impact of surveillance activities

Performance Measures have been developed through logic models and the IOD “GOACT,” or “Goal, Objective, Activity Checklist & Timeline” tool, which is an expanded Gantt chart that identifies tasks, staff/partners, and projected and actual completion dates. The GOACT will assess progress on each of the time-referenced objectives and activities of the projects and gaps between projected and actual performance.

Results of communication efforts:

Emails go out to 231 contacts, 5 newsletters produced since February 2016.

From February 1 – July 31, we’ll have posted 16 times about OHSP on Facebook (a little over 3126 followers), and 16 tweets on Twitter (2641 followers). We also featured OHSP in our Winter Vision & Voice (mailing list = 20,751)

(http://www.iod.unh.edu/About/visionandvoice/Winter2016/OHSP_Intro.aspx).

According to Google Analytics from Jan 1, 2016-June, 30 2016:

- The OHSP project description page has had 286 Pageviews
- The OHSP publication page has had 139 Pageviews
- The entire collection of ALL OHSP pages have had 764 Pageviews