

Annual Report: July 2011 – June 2012
Colorado Department of Public Health and Environment
Occupational Health and Safety Surveillance Program (Fundamental Program)

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Current program site: www.cdphe.state.co.us/dc/OH/index.html
New site launching July 2012: www.colorado.gov/CDPHE-DCEED/CBON/1251607754915

Potential outcomes (*Findings, results, or recommendations that could impact workplace risk if used*)

- We generated and reported Colorado's 2009 Occupational Health Indicator (OHI) data to the National Institute for Occupational Safety and Health (NIOSH) for 17 of 20 indicators. Our published OHI report is updated with the most current data available, including 2010 data for several measures. For indicators we are unable to collect using to NIOSH standard methods, similar measures were reported using alternate methods. This report contains several recommendations for improving surveillance systems and further analysis of OHI measures.
- We were successful in adding NIOSH's Industry and Occupation questions to the 2012 Colorado Behavioral Risk Factor Survey (BRFSS). These questions are being asked of all employed participants in the 2012 Colorado BRFSS (approximately 12,000). In addition to creating a new surveillance source for occupational health, these data are expected to be useful in linking occupation data to a number of other health conditions and behaviors, informing CDC's and Colorado's Winnable Battle initiative and guiding targeted public health policy changes. Analysis of 2012 data will begin in 2013.
- In fall 2011, CDPHE launched a new public health data portal, which includes publically available data queries for the following occupational health and safety indicators: 1) County level unemployment rate, 2) County level non-fatal lost-time workers' compensation claims, 3) Regional level work-related hospitalizations, and 4) State-level occupational fatalities. These are part of the Colorado Public Health Indicators dataset, which is a set of measures with broad scope intended to aid local and regional health departments set and meet goals that are aligned with the state's Public Health Improvement Plan and Winnable Battles Initiative.
- In March 2012, we secured a pilot research grant to conduct a survey study for certified pesticide applicators in Colorado. This project is being conducted in partnership with the Colorado Department of Agriculture and researchers at Colorado State University. The data collected is expected to inform potential improvements to education and training for pesticide applicators, as well as best practices for pesticide injury surveillance and prevention activities. Grant funds are supporting a graduate student intern to lead this project.
- We have recently taken over operations and oversight for the Colorado Census of Fatal Occupational Injuries (CFOI) program. This program previously resided in the CDPHE Vital Statistics Unit. Operating these two surveillance programs under one umbrella is expected to provide additional opportunities to analyze and utilize fatality surveillance data in novel ways.

Intermediate outcomes (*How findings, results, or recommendations have been used by others to influence practices, legislation, product design, safety program, training and so forth*)

- We presented OHI data and program overviews at various conferences and meetings throughout the year, and widely disseminated the OHI report via e-mail and web access.
- In September 2011, we hosted a presentation by a NIOSH industrial hygienist on worker risks related to oil and gas drilling sites. Public health staff from across CDPHE, including the manager of the oil and gas permitting unit, were in attendance. As a result, the oil and gas unit reviewed their safety protocol for field inspectors to ensure adequate protection measures were in place. Around this same time, surveillance program staff participated in the Mountain States Energy

Alliance's (MSEA) safety training for oil and gas workers. Conversations held during this training course resulted in an editorial note about lead exposure from pipe-dope in the MSEA's newsletter.

- In October 2011, with guidance from the California adult lead surveillance program, we created a brochure titled, "Don't Take Lead Home from Your Job". This was provided to patrons of the city zoo during National Lead Poisoning Prevention Week. Staff interacted with many people who were unaware lead was still an occupational hazard that could result in "take-home" exposure to family members.
- We worked with the Denver Public Health Department (local health) to include county-level data and interpretation on lost-time workers' compensation claims in the Denver 2011 Community Health Assessment. This report is intended mobilized policy makers, researchers and community residents to recognize public health gaps and set and meet goals for health improvement. State-wide occupational fatality data was also included in the report.
- In January 2012, we finalized an un-funded Memorandum of Understanding (MOU) with the NIOSH Adult Blood Lead Epidemiology and Surveillance (ABLES) Program to submit Colorado data to the national dataset. Our first submission was in March 2012 and included all 2011 adult elevated blood lead level (BLL) data. Our efforts to improve adult lead surveillance data and capacity enhanced our presentations to the Colorado Board of Health requesting an amendment to Colorado's lead test reporting rules. As a result, the Board approved updating these rules to require public health reporting of all adult (> age 18) blood lead level (BLL) tests $\geq 10 \mu\text{g/dL}$. This aligned Colorado's reportable blood lead levels (BLL) with recommendations of the CDC and the NIOSH ABLES Program.
- After securing direct access to Rocky Mountain Poison and Drug Center (RMPDC) Colorado data in the National Poison Data System (NPDS), we conducted a complete epidemiologic review of occupational exposure data captured by this system. This work was conducted by an MPH student intern. The complete report is under final review prior to publication. Findings have been shared with stakeholders and the RMPDC. This project became a springboard for the Colorado Cooperative Program for Environmental Health Assessments (CCPEHA) to investigate utility of the NPDS data as a surveillance source for pesticide exposure (environmental and occupational). This project has also strengthened our partnership with the local poison center, and we expect further discussion of our findings will lead to improved case classification regarding occupational exposure.

End outcomes (How findings, results, or recommendations have contributed to documented reductions in work-related morbidity, mortality, and/or exposure)

- Colorado's lead surveillance data was used to corroborate a public health complaint regarding lead exposure in a workplace. Though we did not share case-level data with OSHA, we were able to facilitate the OSHA referral to investigate the implicated establishment. OSHA conducted a work-site investigation from May-June 2012. Program staff, Ms. Towle, was invited to participate in the initial site visit. The employer received several citations for non-compliance to OSHA's lead standards along with recommendations to ensure lead exposure prevention.

Partnerships

Stakeholder partnerships continue to play a valuable role in development and implementation of the Colorado Occupational Health and Safety Surveillance Program. In the last period, we convened two meetings of our 15 member Surveillance Advisory Committee. We are actively working with our committee to prioritize surveillance efforts, and create a framework for mentoring student projects in occupational health and safety surveillance. In addition, we continue to facilitate meetings for Worksafe Colorado, a state-wide occupational health and safety professional network. Open meetings occur every other month with the aim of promoting and ensuring safe and healthy workplaces for all of Colorado through collaboration, mentorship, and raising awareness about occupational health and safety issues. Meetings have resulted in establishment of a nine member executive board to govern

network planning and activities, as well as member recruitment tools, such as a member pledge to commit to safe and healthy workplaces in Colorado.

Presentations and Publications

Date	Type	Event/Description	Title
8/17/2011	Presentation	Colorado Lead Coalition Meeting	Occupational Health & Safety Surveillance in Colorado...Including Adult Lead Exposure and Toxicity
8/23/2011	Presentation	Colorado Environmental Leadership Program CEP Meeting	Occupational Health and Safety Surveillance & Worksafe Colorado
9/12/2011	Publication (non-peer reviewed)	Online access: http://www.cdphe.state.co.us/dc/OH/OHI%20Report_090711_Final.pdf	Occupational Health Indicators in Colorado, 2011 Update
9/19/2011	Publication (non-peer reviewed)	Mountain States Energy Alliance (MSEA) Newsletter. Online access: http://www.gomsea.org/linkservid/4E0F8741-E6DC-224C-AAC24A8B043B84D6/showMeta/0/	"Notes From Dan" - Editorial notes mention potential for lead exposure through "pipe-dope" used by oil and gas rig workers
9/20/2011	Presentation	AIHA - ASSE Fall Technical Conference	Update on Occupational Health & Safety Surveillance in Colorado
9/21/2011	Presentation	Colorado Public Health Association (CPHA) Annual Conference	Occupational Health & Safety Surveillance in Colorado
9/23/2011	Presentation	NIOSH Western Occupational Network (WestON) Meeting	Epidemiologic and Occupational Investigation of an <i>E.coli</i> O111 Outbreak Associated with a Correctional Facility Dairy, Colorado, 2010
10/29/2011	Publication (non-peer reviewed)	Brochure distributed during an outreach event for Lead Week. Online access in July 2012: www.colorado.gov/CDPHE-DCEED/CBON/1251610614250 .	Don't Take Lead Home From Your Job!
11/09/2011	Presentation	AgriSafe Network Webinar	Epidemiologic and Occupational Investigation of an <i>E.coli</i> O111 Outbreak Associated with a Correctional Facility Dairy, Colorado, 2010
11/22/2011	Publication (non-peer reviewed)	Online access: http://www.chd.dphe.state.co.us/topics.aspx?q=Mortality_Data	Press Release: 2010 Occupational Fatalities
12/14/2011	Presentation	Colorado Board of Health Rule Making Request	Adult Occupational Lead Exposure and Reporting
02/15/2012	Presentation	Colorado Board of Health BOH Rule Making Hearing	Adult Occupational Lead Exposure and Reporting
02/21/2012	Publication (non-peer reviewed)	CDPHE Hot Topics Newsletter (Email distribution)	Announcement of Adult Lead Test Reporting Rule Change and Surveillance Data
02/28/2012	Publication (non-peer reviewed)	CDPHE Hot Topics Newsletter (Email distribution)	Announcement regarding MMWR which documented risks of methylene chloride exposure in bathtub finishers (MMWR, 61 (7) Feb 2012)
03/08/2012	Publication	CDC Morbidity and Mortality Weekly	Epidemiologic and Occupational

		Report	Investigation of an <i>E.coli</i> O111 Outbreak Associated with a Correctional Facility Dairy, Colorado, 2010 (MMWR, 61(9) Mar 2012)
03/13/2012	Presentation	CDPHE, Disease Control Division Grand Rounds Meeting	Review of Work-related Poisoning Exposures Reported to a Poison Center Helpline, Colorado, 2000-2010
05/17/2012	Presentation	Western Region Epidemiology Network (WREN)	Review of Work-related Poisoning Exposures Reported to a Poison Center Helpline, Colorado, 2000-2010
06/04/2012	Presentation	CSTE June Meeting (ABLES)	Changing State Lead Reporting Rules: The Colorado Story
06/04/2012	Presentation	CSTE June Meeting (Student Track)	Review of Work-related Poisoning Exposures Reported to a Poison Center Helpline, Colorado, 2000-2010
06/05/2012	Presentation	CSTE June Meeting (Occupational Health Track)	Use of Workers' Compensation Data for Occupational Health Indicators Surveillance
Expected 08/30/2012	Publication (non-peer reviewed)	Online publication in Aug 2012: www.colorado.gov/CDPHE-DCEED/CBON/1251610614250 .	Occupational Health Indicators in Colorado, 2012 Update
Expected 08/30/2012	Publication (non-peer reviewed)	Online publication in Aug 2012: www.colorado.gov/CDPHE-DCEED/CBON/1251610614250 .	Review of Occupational Exposures Reported to a Poison Center Helpline, Colorado, 2000-2010