

**Minnesota Occupational Health and Safety Surveillance Program  
Annual Report of Accomplishments and Outcomes, July 2015 – June 2016  
Minnesota Department of Health – Fundamental Program**

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**Collaborations:**

- We continue our collaborative relationships with the Minnesota Department of Labor and Industry (DLI), Minnesota OSHA, and the University of Minnesota (U of MN) Midwest Center for Occupational Health and Safety (MCOHS), as well as other MDH programs. The PI currently provides internships at MDH for 2 MCOHS graduate students. DLI continues to provide data and expertise for the indicators that rely on workers' compensation and Bureau of Labor Statistics SOII and CFOI data.
  - *Potential Outcomes:* These collaborations have led to the placement of three graduate student interns to address specific issues of occupational safety and health. Two of the interns are completing projects at the MDH and the third will be working on a project facilitated by DLI.
- A second collaboration with the MN DLI includes the Minnesota Safety Council. This collaboration will create a dashboard of safety statistics and measures for Minnesota. A third of this dashboard would address issues related to occupational safety and health. As part of the collaboration measures from our Occupational Health Indicators will be used to complement the data from MN DLI and the MN Safety Council.
  - *Potential Outcome:* Increased awareness of occupational safety and health issue, an awareness of how much time is spent in the workplace, and the impact workplace hazards have on the non-work life. The dashboard will also address safe driving and safe living, promoting an attitude of safety in all areas of life.
- We have formed a Tri-State collaboration with the Wisconsin and Iowa Occupational Health and Safety State Based Surveillance programs. The collaboration aims to address issues of occupational health and safety at regional level. To date the three programs have had 4 meetings, two in person and two via conference call. The three programs decided to use the occupational fatalities indicator as a method to identify potential similarities and differences among the three states. Iowa and Wisconsin are also pilot testing the methodology Minnesota developed to identify injuries with a potential relationship to agriculture using administrative billing hospital discharge data.
  - *Potential outcome:* A stronger relationship between the three states to allow for increased communication and leveraging of resources. This relationship has already allowed for a rapid response to an occupational exposure where hundreds of employees were exposed to high lead levels. The 3 states share borders and often have citizens living in one and working in another, these relationships allow for coordinated responses, decreasing possible confusion or miscommunication. Also, as the three states have similar types of industries, they can leverage the experiences and programs that each state develops and tests.
- A collaboration between the MN DLI, the MN Department of Agriculture (MDA), and the MDH Center for Occupational Health and Safety (Center) will be joining the NYCAMH Roll Over Protection Structure (ROPS) program to provide rebates to MN farmers for ROPS installation. This work began last spring with the sharing of the newly calculated CFOI numbers by the MN DLI and the concern that ag still has over 1/3 of work-related fatalities in MN. The Center has had an integral role in moving this work forward, by researching possible interventions, aiding in identifying existing programs,

making connections with NYCAMH and other interested parties, and organizing a meeting of the 3 agencies, NYCAMH, the Wisconsin ROPS program, and interested stakeholders to learn about the program and how to participate. The meeting was held Nov. 18, 2015 and was well received. Two bills were introduced and survived the 2016 legislative session, one for the ROPS program and one for farm safety in general.

- Potential Outcome: The ROPS Rebate program has been funded with \$250,000 for two years and received \$27,000 in private contributions. The expectation is that interested farmers were able to take advantage of the available funds beginning July 6<sup>th</sup>, 2016. Increased ROPS use and eventual decline in the number of tractor related deaths in the years that follow.
- We continue to collaborate with our CDC funded Asthma Program. In cooperation with our Asthma Program we joined a working group comprised of researchers from the U of MN, MN OSHA, MN Pollution Control Agency, MDH, Hennepin County Public Health and the MN Bureau of Cosmetology to address and promote awareness of the hazards associated with nail salons. The working group assisted in the development of a survey instrument to be used in nail salons throughout Hennepin County with the intent of collecting information about exposures, health and safety training, and willingness to adopt greener products in their business. The working group continues to meet to share information and potential project ideas to address this at risk population.
  - Potential Outcome: This partnership allows for increased collaboration with outside stakeholders and resource sharing. In regards to this specific collaboration activity there is an opportunity to increase health and safety training and decrease the number of exposures and poor health outcomes in an at risk occupational population.
- The Heart Safe Communities Program, in collaboration with the MDH Heart Disease and Stroke Unit, has created an application process that provides workplaces with the opportunity to become a “heart safe workplace” and promote activities that would increase the likelihood of survival should an employee have a heart attack or stroke on site. Most recently MN DLI has been identified as another collaborator to promote the program to health and safety, as well as HR, personnel through a quarterly newsletter.
  - *Potential Outcome:* The collaboration will strengthen ties between chronic disease programs and the NIOSH funded surveillance program. It will also promote health and safety activities that will aid in maintaining safe work environments.
- In collaboration with the Center for Public Health Education and Outreach with the MCOHS we have developed an outreach and dissemination strategy to promote the work completed through this co-operative agreement. To date three speaking engagements have been coordinated through the collaboration and materials are currently in development to have a link for the program’s website added to the Center for Public Health Education and Outreach’s webpage.
  - *Potential Outcome:* This collaboration provides a number of opportunities for us to publicize the occupational health indicators and the other work being conducted under this co-operative agreement with NIOSH.

#### **Other Achievements:**

- As of June 2016, 21 occupational health indicators had been completed for the year 2013 and submitted to NIOSH for presentation on the CSTE website.
- The scientific advisory group continued to meet and provide guidance on projects and methods to improved dissemination and promotion of the program. A new member, from the MN Safety Council, has also been added to the advisory group.
- Through the use of an online Google-News Search, twelve agricultural fatalities were identified and media or news clippings relating to each incident were collected. We have also subscribed to the

Marshfield Ag Injury News website to review available clippings of news items describing agricultural injury events.

- *Potential Outcome:* Represents an extremely cost-effective method for surveillance of agricultural-related fatalities in both workers and children.
- New accessibility guidelines and rules were enacted this past year and all materials produced by the MDH (printed and electronic) must meet these requirements. As such a public health graduate student was hired to update a trend analysis of the relevant CSTE/NIOSH occupational health indicators for years 2000 to 2013/2014. The student will also update a state profile to describe occupational health and safety in Minnesota for publication and release.
  - *Potential Outcome:* This report will draw attention to issues relating to occupational health and safety, particularly for the creation of appropriate interventions or policy to prevent occurrences of occupational disease and injury.
- The Center has contributed to the MDH Health Promotion and Chronic Disease Division's dashboard. Highlighting the contribution the Center makes in providing data and information about occupational safety and health injuries and illnesses.
- A public health graduate student intern has been working with the program to investigate and evaluate the guidance for sub-state analysis and mapping by using the available work-related pesticide poisoning data. The student will also be conducting an analysis investigating the differences between occupational and non-occupational poisoning events. This research will serve as the intern's master's thesis.
- The program director has been investigating a method to quantify health disparities in occupation and industry for Minnesota using readily available data sources including the Current Population Survey and the American Community Survey.

#### **Papers, Presentations, and News Releases:**

- Landsteiner A, Nyman J, Lindgren P, McGovern P, Alexander B, Williams A. The Economic Impact for Farm Injury in Minnesota, 2004-2010. *Journal of Agromedicine*, 2016: Vol 21(2): 171-177. DOI 10.1080/1059924X2016.1143904
- Landsteiner A, Yendell S, Lindgren P, Olson L, and Williams A. Rates and Trends of Adult Blood Lead Levels in Minnesota, 2005-2012. *Minnesota Medicine* 99(2): 47-50, March 2016.
- \*Landsteiner A, PhD MPH. *Occupational Health and Safety Indicators*. Invited Speaker MN Local AIHA Chapter Meeting, September 18, 2015. Roseville, Minnesota
- \*Landsteiner A, PhD MPH. *Adult Blood Lead Exposures in Minnesota 2005-2012*. Invited Speaker MDH Lead and Healthy Homes M-CLEAN Symposium, October 6, 2015. St. Paul, Minnesota.
- \*Landsteiner A, PhD MPH. *State of Occupational Health and Safety in MN*. Invited Speaker ASSE Regional Chapter Annual Conference, February 9, 2016. St. Paul, Minnesota.
- \*Landsteiner A, PhD MPH. *A Roll Over Protection Rebate Program – Comments, Concerns?* Invited Speaker at the Equipalife Annual Symposium, March 13, 2016. St. Cloud, Minnesota
- \*Landsteiner A, PhD MPH. *Occupational Health and Safety Indicators*. Invited Speaker MN OSHA advisory council meeting, June 24, 2016. St. Paul, Minnesota
- \*Landsteiner A, PhD MPH. *Affect of Work on Youth*. Rapid Fire Presentation, Council of State and Territorial Epidemiologists Annual Meeting. June 18 – 23, Anchorage, Alaska.
- \*Landsteiner A, PhD MPH. *Youth Worker Health and Safety Training In Minnesota*. Rapid Fire Presentation, Council of State and Territorial Epidemiologists Annual Meeting. June 18 – 23, Anchorage, Alaska.
- NIOSH eNews submission: “News from our Partners” for Dec 2015 – **Minnesota Reporting of Occupational Diseases.**
- NIOSH eNews submission: “News from our Partners” for April 2016 – **Trend and Economic Burden of Agricultural Injury in Minnesota.**