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## KEY ACCOMPLISHMENTS

- OHSSP coordinated, planned and hosted the 2016 Farm Progress Show Health & Safety Tent August 30 – September 1, 2016, Boone, Iowa.
- Iowa partnered with Wisconsin to submit a proposal being considered by the CDC to revise their national web-based child blood lead surveillance database to improve its functionality for adult blood lead surveillance.



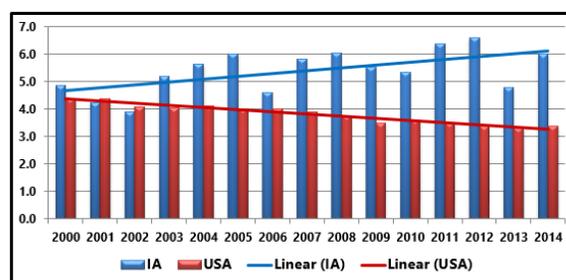
## CORE (FUNDAMENTAL) SURVEILLANCE AND PROGRAM

The mission of the Iowa Occupational Health & Safety Surveillance Program (OHSSP) is protecting and improving the health and safety of Iowans in the workplace. The fundamental or core program provides administrative coordination and continuity across all IDPH OHSSP projects, explores options to improve the surveillance and data translation capacity of the entire program, and provides outreach, dissemination, and evaluation functions to support each project. The core program is also responsible for the Occupational Health Indicators (OHI) project and Adult Blood Lead Epidemiology and Surveillance (ABLES), as well as working with external partner projects and reports.

## Occupational Health Indicators (OHI) and other Surveillance Data Development, Analysis and Usage Projects

OHSSP uses departmental data from hospital discharge, emergency department, death and trauma registry records in partnership with other projects to ensure the inclusion of work-related analysis. Data is also gathered annually for the calculation of nationally established occupational health indicators for the State of Iowa. Iowa OHI data is then reviewed for comparison (when appropriate) to U.S. indicators, surrounding states and state-level trends. This information is reported through program outreach activities and outputs.

Rate of Fatal Occupational Injuries per 100,000 FTE, Iowa and U.S.A.

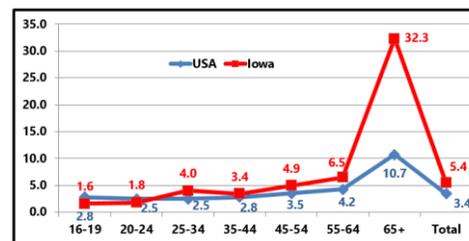


### Project Outputs and Outcomes Highlights:

- Iowa ABLES, OHI, fatality surveillance data and program-generated outputs were used by others for presentations, reports, intervention, program planning and education, including use by the Great Plains Center for Agricultural Health, the Healthier Workforce Center of the Midwest, the Iowa Brain Injury Alliance, Iowa's Center for Agricultural Safety & Health, the Healthy Iowans: Iowa's Health Improvement Plan 2017-2021, and the Iowa Workforce Development Division of Labor, including the Iowa Occupational Safety and Health Administration.
- The Iowa Burden of Injury Occupational Report data was utilized in training and media reports.
- Input was provided for the annual national OHI guidance methodology document update as the state-based lead for two indicators.

- Iowa 2014 OHI data was submitted for national inclusion and reporting.
- OHSSP provided fatal occupational injury surveillance findings to the Iowa Division of Labor to improve identification of worker deaths, especially deaths of self-employed workers. These findings ultimately become part of the Iowa Census of Fatal Occupational Injury (CFOI) report to the U.S. Department of Labor Bureau of Labor Statistics.

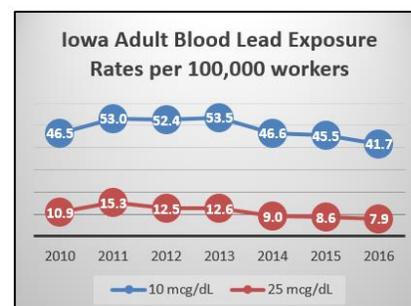
Five-Year Average Rate of Fatal Occupational Injuries per 100,000 FTE workers by Age Range, Iowa and USA, 2009-2013



### Iowa Adult Blood Lead Epidemiology and Surveillance (ABLES)

Iowa has averaged 770 adults annually for the past five years who had at least one blood lead test of 10  $\mu\text{g}/\text{dL}$  or higher. Both numbers and rates have been declining since 2013. Iowa consistently has higher prevalence rates than seen nationally, with rates double the U.S. rate for blood lead levels (BLLs) of 10  $\mu\text{g}/\text{dL}$  or greater (2014 rates: IA: 46.6, US: 20.4). Iowa provisional ABLES data show adult BLL prevalence rates at 10  $\mu\text{g}/\text{dL}$  or higher as 45.5/100,000 workers in 2015, and 41.7/100,000 workers in 2016. Provisional data show Iowa adult BLL prevalence rates at 25  $\mu\text{g}/\text{dL}$  or higher as 8.6/100,000 workers in 2015, and 7.9/100,000 workers in 2016. Data is also being analyzed at the new national reference level of 5  $\mu\text{g}/\text{dL}$ .

OHSSP ABLES surveillance involved the review of incoming adult BLL data (Iowa has mandatory reporting of all blood lead tests). Elevated reports were given additional follow-up to determine if the report was for a known case or a newly reported exposure; follow-back was done to gather missing or incomplete data and determine whether the exposure was work-related or from another exposure source. Work-related cases were coded by industry. Educational materials were provided to medical providers and new cases. Referrals were made by OHSSP to the Iowa OSHA enforcement program regarding elevated blood lead results that met developed criteria.



### Project Outputs and Outcomes Highlights:

- A data sharing agreement was finalized with NIOSH to allow the reporting of de-identified Iowa adult lead data through 2021.
- Following a recall by the FDA of blood lead testing equipment, state-based laboratories and clinics were contacted to clarify questions regarding their testing options while further investigation is done.
- Adult lead data is now displayed on the Iowa Public Health Tracking Portal.

### Beyond ABLES

The Beyond ABLES campaign strategy was developed last year. The goal of the campaign is to provide community-level targeted education, outreach and awareness activities to the workers and medical providers in Iowa counties with the highest number of adults with elevated blood lead levels, while building capacity at the local public health level. This is a multi-year project.

### Project Outputs and Outcomes Highlights:

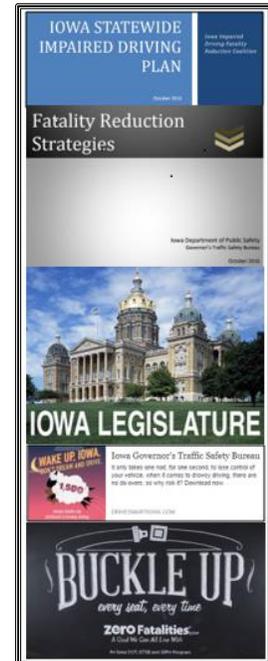
- The campaign was presented at four regional state meetings in September 2016, with key contacts identified at the local level.
- A number of local programs have voluntarily extended their childhood lead poisoning prevention activities to work with local employers and businesses regarding lead issues in their communities.

## Collaborative Projects – Transportation Safety

OHSSP continues to work in partnership with the Governor's Traffic Safety Bureau (GTSB) and the Iowa Department of Transportation (IDOT) as a member of a number of advisory groups, task force groups and implementation teams. This partnership allows the program to gain synergy on projects that impact transportation safety and reduce transportation injuries and fatalities for Iowa workers, as well as the general public. OHSSP does not have the capacity to generate these types of outputs alone, but by being involved as a representative of occupational health and safety, strategies that impact workers are included.

### Project Outputs and Outcomes Highlights:

- OHSSP participated in the development of the Iowa 2016 Impaired Driving Coalition Final Plan (October 2016), the Iowa Fatality Reduction Strategies report (October 2016) and the 2017 Highway Safety Plan.
- Two pieces of legislation intended to counteract the rising level of traffic fatalities related to distracted and intoxicated drivers were signed into law on April 17, 2017. The legislation utilized information from the plans and reports developed by the workgroups.
- A public service announcement "Don't Wake Up to a Nightmare," created as an output of the impaired driving fatality reduction task force to address drowsy driving, received a 2017 Telly Award.
- The Iowa Strategic Highway Safety Plan implementation project "Iowa Zero Fatalities" utilized electronic message boards, website and media messaging and social media to keep transportation safety messaging in front of the public. IDPH is credited as a partner. Examples can be seen at <http://ia.zerofatalities.com/>.
- Transportation fatalities for workers have started to decline in Iowa while they increased nationally based on 2015 CFOI data (Iowa deaths down from 33 to 19 in 2015).



## Collaborative Projects – Agricultural Safety Outreach

Iowa OHSSP collaborated throughout the year with partners to network our agricultural safety outreach projects. Iowa OHSSP represented the Iowa Department of Public Health on the board of Iowa's Center for Agricultural Safety and Health (I-CASH), a multi-organizational effort to improve farm safety.

### Project Outputs and Outcomes Highlights:

- OHSSP coordinated the Health and Safety Tent at the 2016 Farm Progress Show by recruiting partners to participate in space donated by the event (over \$40,000 value). Participation included the Iowa, Nebraska and Minnesota Ag Centers, AgriSafe Network, National Educational Center for Ag Safety, other IDPH programs, and non-government organizations. An Iowa state representative was recruited as a "victim" for a grain bin rescue demonstration. Funds were donated by partners to purchase beverages and snacks for a Farmers' Coffee Corner where attendees could take a break out of the sun. Voluntary surveys related to farm injury were completed by 172 attendees as they talked to exhibitors about farm safety and heat-related illness. OHSSP work included coordinating placement of exhibits within the space, finding volunteers to help with hourly demonstrations, media and promotional marketing, and interacting with the Show's management team.
- OHSSP data related to farm and rural injuries and fatalities was used by many of the partners in their blogs, safety articles, project planning and educational training.



## Multi-focus Collaborative Projects

### Upper Midwest States Occupational Health Collaborative with Minnesota and Wisconsin

Iowa OHSSP is a member of the Tri-State collaboration with the Wisconsin and Minnesota Occupational Health and Safety State-based Surveillance programs. The collaboration goals are to address issues of occupational health and safety at a multi-state level. Initial review of occupational health indicators for the three states was completed and each state is currently testing agricultural injury data identification protocols. This is a multi-year project.

#### Project Outputs and Outcomes Highlights:

- Iowa OHSSP is working with the Council of State and Territorial Epidemiologists (CSTE) Occupational Health subcommittee and NIOSH to explore the feasibility of organizing a MidwestON regional collaborative group. Similar groups exist for western states (WestON), southeastern states (SouthON) and northeastern states (NEON). The collaborative group would offer involvement for NIOSH occupational state-based surveillance, Ag Centers, Educational Research Centers, Total Worker Health centers, and other regional stakeholders for the states of MN, IA, MO, WI, MI, IL, IN, OH, and possibly PA, MD and DE.
- Iowa OHSSP partnered with Wisconsin to submit a recommendation to NIOSH and the CDC Lead Program (NCEH) and NIOSH asking them to partner to make revisions to the CDC's national web-based child blood lead database. Suggested changes and additions to the Healthy Homes and Lead Poisoning Surveillance System (HHLPS) would make it more user-friendly for adult lead surveillance. The proposal is under consideration by the CDC and Iowa and Wisconsin subsequently participated in a teleconference with the CDC and their database developer.

## Falls Prevention Campaign

The OHSSP promoted materials developed by the national Falls Prevention Campaign through social media.

#### Project Outputs and Outcomes Highlights:

- OHSSP promoted a safety article specific to rural workers written by the Great Plains Center for Agricultural Health. The online article included a cartoon solicited from an Iowa artist who was also the first-person example in the story. The cartoon is used here with permission of Rick Friday.



- During the campaign, a maintenance worker fixing a HVAC vent in the building was observed using a ladder unsafely. This picture was submitted to the agency's safety officer and additional ladder safety training was held for agency maintenance workers.



## Additional Output Highlights

- Midwest Regional Agricultural Safety and Health Conference – "Humpty Dumpty Spends a Year on the Farm" November 15, 2016 presentation.
- Wozniak RJ, Hirsch AE, Bush CR, Schmitz S, Wenzel J. Mercury Spill Responses — Five States, 2012–2015. MMWR Morb Mortal Wkly Rep 2017;66:274–277. DOI: <http://dx.doi.org/10.15585/mmwr.mm6610a3>
- Secondary use of program outputs: Jennissen CA, Harland KK, Wetjen K, Hoogerwerf P, O'Donnell L, Denning GM. All-terrain vehicle safety knowledge, riding behaviors and crash experience of Farm Progress Show Attendees. Journal of Safety Research 60 (2017) 71-78.

