

Wisconsin and Minnesota Respond to Shipyard Workers' High Lead Levels

In March 2016, the Minnesota Department of Health (MDH) was notified of a shipyard worker with a blood lead level (BLL) over 60 µg/dL. At the same time, the Wisconsin Department of Health Services (WDHS) received lab reports for two workers from the same shipyard with BLLs over 40 µg/dL. Wisconsin and Minnesota worked together to investigate these high lead levels and reduce worker exposures.



The Challenge

Although the National Institute for Occupational Safety and Health considers BLLs over 5 µg/dL elevated, exposures can be much higher for some workers. Interstate health department collaboration is essential to investigate high lead exposures in industries which employ workers from several states.

The Response

In early April, WDHS and MDH alerted regional partners and launched a joint investigation. WDHS activated its Incident Command System, and with MDH identified workers from 15 states possibly employed at the shipyard during the period of high lead exposure. Both health departments conducted telephone interviews to collect information about the workers and their exposures, and 233 (65.3%) of the identified workers received at least one BLL test. Of the tested workers, 171 (73%) had elevated lead levels of 5 µg/dL or more. Lead testing was also conducted on household members identified through worker interviews. The Occupational Safety and Health Administration's enforcement investigation of the shipyard reported that workers had been exposed to lead at more than 20 times the permissible air exposure limit of 40µg/m³.

Your ship's in top shape!
Make sure your repair workers and their families are too.
Protect them from lead poisoning.

Protect Shipworkers From Lead

Unsafe blood lead levels were found in workers at a Wisconsin shipyard in March 2016.
Wisconsin and Minnesota public health and federal officials* investigated.

233 workers were tested for lead.**
73% of tested workers had high blood lead levels***.

Keep Your Workers Safe
Eliminate lead and lead dust in work areas where possible.
If lead and lead dust remain in a work area, workers need the right personal protective equipment (PPE).
Learn more from a health and safety representative, or call 800-CDC-INFO (800-232-4636).
Don't take lead home from the job: go.usa.gov/xKtnn
Learn how to better protect against lead poisoning: go.usa.gov/xKtn4
*Learn more about the related OSHA investigation: go.usa.gov/xKtn8

No amount of lead is safe, even for adults.

PPE can include:
Goggles, Gloves, Boots, Protective Clothing, Respiratory Protection

MDH Minnesota Department of Health
Wisconsin Department of Health Services | Division of Public Health
Bureau of Environmental and Occupational Health | 7/5/2015 | Oct. 2016
Blood lead level > 5 µg/dL *Out of 357 total workers

The Impact

Minnesota–Wisconsin cooperation made this investigation possible. Timely sharing of BLL reports and interview findings enabled these health departments to describe the extent of the hazard and recommend engineering controls, periodic BLL monitoring, and personal protective equipment for shipyard workers.

For more information, visit <https://www.dhs.wisconsin.gov/occupational-health/index.htm> Credits: Photo copyrighted by the Duluth News Tribune and reprinted with permission. Infographic: Wisconsin Division of Public Health, <http://bit.ly/2nFAnpK>. This work was supported in part by funding from CDC/NIOSH grant U60 OH010898-03