Preventing Lead Poisoning in Bridge and Steel Structure Repair Work:

An Alert for Workers



Your workplace can expose you to lead. Lead can harm your health and your family's health. You can protect yourself and your family.

Many resources are available to help you deal with lead exposure in the workplace and the health problems caused by lead poisoning.

Your employer, your doctor, the Department of Labor & Industries, the SHARP (Safety & Health Assessment & Research for Prevention) Program, and the Department of Health can help—at no cost to you.

Why am I at risk?

Exposures to lead fumes and dust put workers at risk for lead poisoning. "Take-home" lead exposure is especially dangerous to children ages six and younger, because lead is toxic to the brain and can cause permanent damage.

Lead-based paint is used on bridges and steel structures to protect them from corrosion and weather. These structures need frequent maintenance and repair due to normal wear.

Ironworkers, laborers, painters and other construction workers involved in bridge and steel repair work have more high blood-lead level reports than any other industry in Washington State.

How am I exposed at work?

Lead can enter your body in two ways:

- Breathing in lead dust, mist or fumes.
- Swallowing lead dust if it gets on your hands or face or if it gets in your food, drinks or tobacco.

The following activities can cause lead exposures:

- Torch cutting
- Thermo-lancing
- Welding
- Rivet busting
- Grinding
- Scaling
- Abrasive blasting

Lead dust can be stirred up and become airborne when using air or power tools or cleaning up and handling waste.

Why should I care about lead poisoning?

Even if you are exposed to small amounts of lead, it can build up in your body and stay there for a long time. Too much lead in your body can damage your brain, nerves, kidneys and blood cells. Lead can also cause infertility in men and harm unborn babies.





Many people with high lead levels do not feel sick or poisoned. Some of the early symptoms of lead poisoning or overexposure may include:

- Nausea, depressed appetite, stomach aches or cramps
- Muscle or joint aches
- Headache, trouble concentrating, irritability or depressed mood
- Tiredness or problems sleeping

If you experience any of these symptoms, or suspect you have been overexposed to lead, notify your employer and contact your doctor.

Understanding your blood lead test

The most common test for lead is called the blood-lead level test, which measures how much lead is in your bloodstream in micrograms of lead per deciliter of blood (µg/dl).

Is there a problem?

Blood-lead levels above 5 μ g/dl are considered to be harmful to adults. Immediately notify your employer if you develop signs or symptoms associated with lead poisoning or if you need medical advice concerning the effects of current or past exposure to lead or your ability to have a healthy child.

How can I reduce my exposure?

There are some things you can do to protect yourself and your family from lead exposure:

- Follow all safe work rules and use controls properly.
- Attend training and safety meetings.
- Participate in blood-lead testing.
- Wash your hands and face before you eat, drink or smoke.
- Eat, drink and smoke only in areas free of lead dust and fumes.
- Work with your employer to ensure that you are not overexposed to lead in your workplace. Sometimes this may include special ventilation equipment or the use of a properly fitted respirator.
- Avoid stirring up lead-containing dust with dry sweeping or blowing. Wet cleaning and vacuuming with a HEPA (high efficiency particle arresting) filter system are generally safer.



- Wear separate work clothes and work shoes/ boots at work.
- Launder your work clothes at work. If you must take work clothes home, wash and dry them separately.
- If possible, shower at work before going home.
- Keep your street clothes in a clean place and change after showering.

Your rights as a worker

Your employer is responsible for providing you with a safe and healthful workplace. If there is lead in the workplace, your employer may be required to provide:

- Training on how to prevent lead exposure and take-home lead.
- Protective equipment at no cost to workers.
- A copy of the lead standard and air monitoring results (upon request).
- Clean areas for workers to eat, shower and change.
- Medical monitoring, including periodic blood-lead testing, and medical examinations.
- Transfer to a non-lead exposed job without loss of pay or benefits (also called "medical removal").

You have the right to file a confidential complaint with L&I's Division of Occupational Safety and Health (DOSH).

Additional resources

Your doctor or other health care provider

See a doctor if you are concerned about lead overexposure for yourself or others in your household. The doctor can arrange to test your blood-lead level and help you interpret any exposure and health effects. It is important for your doctor to know about your lead exposure even if you don't have any symptoms. An occupational physician is trained to recognize diseases associated with work and may be able to diagnose a lead-related disease more readily than a doctor not trained in occupational illnesses.

Your safety officer or industrial hygienist

Find out if your work area has been checked for lead dust or fumes and how you can avoid exposure by using protective equipment and engineering controls.

SHARP Program

L&I's SHARP Program can provide further information on work-related lead poisoning to interested employers, workers and health professionals. Call 1-888-667-4277 or 360-902-4728, or visit www.Lni.wa.gov/SHARP.

Division of Occupational Safety and Health

L&I's Division of Occupational Safety and Health (DOSH) enforces the worker protection rules for workplaces with lead and investigates complaints from workers and concerns from health care providers. It also offers free assistance and information to both workers and employers upon request. Call 1-800-423-7233, or visit www.Lni.wa.gov/Safety.

Washington State Department of Health

The Washington State Department of Health provides information and resources on reducing children's exposure to lead. Call 360-236-4280 for more information, or visit www.doh.wa.gov/lead.

Lead dust isn't just a health risk to workers!

Lead taken home on clothing and other contaminated materials can cause lead poisoning in children.

Upon request, foreign language support and formats for persons with disabilities are available. Call 1-800-547-8367. TDD users, call 360-902-5797. L&I is an equal opportunity employer.