

Iowa Adult Lead Exposure Facts

August 2019

Lead Exposure: Know your risks, Control your risks.



Your health can be damaged from lead exposure below OSHA standards:

- Damage can be permanent.
- Damage can occur even if you have no symptoms and may not be detected until years after exposure to lead.
- Damage can happen to family members if you spread lead dust to your car or home.
- Damage can happen with short term (less than a year) or long term (more than a year) exposure to lead.
- OSHA does not regulate all work places, sports clubs, or private homes where you may get exposed.

What health damage can low levels of lead cause?

Studies show that even low levels of lead in adults can:

- Increase blood pressure which can increase your chances of having a heart attack or stroke.
- Decrease brain function, making it more difficult to think, learn and remember.
- Harm the physical and mental development of your baby before it is born or increase the risk of miscarriage.
- Harm almost any part of your body including your kidneys, blood, brain and nerves.

What level of lead in your blood is harmful from a public health point of view?

- The current public health reference value for adults is a blood lead level (BLL) of 5 micrograms per deciliter ($\mu\text{g}/\text{dL}$). There is no known safe level of lead exposure for children or adults.
- The U.S. average adult BLL was 0.97 $\mu\text{g}/\text{dL}$ in 2013-2014.
- Iowa had 1,132 adults who tested at 5 $\mu\text{g}/\text{dL}$ or higher in 2018, or 31% of the adults tested.
- Pregnant women, those planning to get pregnant, or women who are breastfeeding should have a blood lead level below 5 $\mu\text{g}/\text{dL}$ to protect their health and the baby.
- Blood lead levels of 5 $\mu\text{g}/\text{dL}$ or higher may complicate other medical conditions such as:
 - High blood pressure
 - Kidney diseases
 - Brain or nervous system diseases
 - Other health problems or pregnancy

If you work with lead products on the job, around the home or during a hobby you need to:

- Know your risks, control your risks and reduce your exposure whenever you can.
Common jobs and hobbies with higher lead exposure in Iowa include manufacturing storage batteries or metal products, construction and renovation, industrial resurfacing or painting, metal and electronics recycling, radiator repair and vehicle body work. Firing guns and casting or reloading ammunition are also common sources of lead exposure.
- Take steps to protect your health. Work lead safe, wash-up and clean-up on the job and don't spread lead.
- Get regular blood lead tests to monitor current or recent exposure.
- Talk to your medical provider about lead exposure and your health.

What should I tell my doctor or medical provider?

Your doctor or medical provider needs to know if you work with lead. Tell the medical provider:

- What you do at work or home that exposes you to lead.
- How long you have been working with lead.
- If you think working with lead is making you sick.
- If you have any hobbies or part-time jobs that could expose you to lead.
- If you had any lead jobs or hobbies in the past.
- If you had a blood lead test before and the result (number).
- If you were ever moved to a different job at work or had to be off work because your lead level was high.
- If you are a woman who is pregnant or thinking about becoming pregnant and work with lead.

What can I do to protect myself and my family?

Get a blood lead test at least every 6-12 months, either through work or through your private medical provider if you are exposed to lead at work, at home or by hobbies.

- How often you get tested depends on the type of job you do, your hobbies and your health.
- Getting exposed more often or to higher amounts of lead increases your risks of damage. Having a higher exposure risk may mean you need to get tested more often.
- Depending on your blood lead level result you may need to get repeat tests more often.
- Adults with no known risk factors for lead exposure rarely need a lead screening test.

Ask your doctor if you need any follow-up medical tests not done by an employer to see if lead is affecting your health or the health of your family such as:

- Blood pressure checks or other heart function tests
- Kidney function tests
- Cognitive evaluation testing (how you think, process information, make decisions)
- Lead tests for family members

Make sure you don't swallow lead.

- Wash your hands and face with soap and water before eating, drinking and leaving work.
- Do not eat, drink or smoke in the work area. Do not keep your food or beverages in the work area.
- Keep your work area clean to keep lead off your hands, clothes and shoes. Wet clean using soapy water to wipe down surfaces where lead dust can settle. Mop or HEPA vacuum shop floors or work areas daily.

Make sure you don't spread lead to your car, home or your family.

- Take a shower and wash your hair (including facial hair) at work before you go home. Change into clean clothes and shoes at your workplace. Keep dirty work clothes and shoes away from clean street clothes.
- If your employer doesn't provide a place to shower and change, you can still:
 - Wash your face, hands and arms with soap and water before you leave work.
 - Take off your work shoes and clothes and store them in a plastic bag or plastic container in your trunk before getting into your car or truck.
 - Shower as soon as you get home.
 - Wash your work clothes separately, not with the rest of the family's laundry.
 - Routinely wash the seats of your work car or truck with soapy water or use washable seat covers to remove lead dust before it transfers back onto your hands and clothes or those of family members.

Make decisions that can lower the amount of lead you inhale.

- Sanding and surface prep during renovation can generate lead dust. Learn how to work lead safe.
- If your work station has local exhaust ventilation, turn it on and position it correctly while you work.
- Check if you should wear a respirator while working around lead. It takes products like an air-purifying respirator with a N100, R100 or P100 filter or a powered, air-purifying respirator with a high-efficiency particulate filter to protect you from lead in the air. Get a doctor to check if you can safely wear a respirator. A fit-test is required to check that a respirator fits and protects you.
- If you fire guns at a range or club, find out if there is an adequate and well maintained ventilation system.

Work with your employer to make the work place safer.

- If you have concerns about lead exposure at work or have already been exposed, talk to your safety officer. There are often ways to change your work process that will reduce the amount of lead in the air or on surfaces even when the exposure is less than current OSHA standards.
- Companies can ask for help to determine the possible risks and solutions for making the workplace safer. Contact the IDPH ABLES program for more information.

**IDPH Adult Blood Lead Epidemiology & Surveillance Program
(ABLES) 800-972-2026**

<https://idph.iowa.gov/Environmental-Health-Services/Occupational-Health-and-Safety-Surveillance/Adult-Blood-Lead-Epidemiology>

