

Adult Lead Poisoning Information

What is lead and why is it harmful?

Lead is a naturally occurring element that people have used for centuries. A soft metal, bluish-gray in color, lead has no characteristic taste or smell. Lead is also a **highly toxic heavy metal poison**. There is no use for lead in the human body. Lead affects the brain and vital organs and is especially harmful to children and to adult reproductive systems. Human activities have spread lead widely throughout the environment, most notably in leaded gasoline and leaded paint, both of which have been restricted in the US. Other products expose adults to lead daily at work and home. Efforts continue to limit the use of lead containing products and minimize harmful effects on people. Once lead gets into your body, it can stay there for a long time. Lead can build up in your body if you are in contact with even a small amount of lead for a long time. The more lead in your body, the more likely that harm will occur.



How does lead get into your body?

Most human exposure to lead occurs through **breathing or eating**. Most adult exposures are occupational and occur in lead-related industries such as lead smelting, refining, metal working and manufacturing industries. One frequent source of lead exposure to adults is home renovation that involves scraping, remodeling, or otherwise disturbing lead-based paint. Adults can also be exposed during certain hobbies and activities where lead is used. Workers may inhale lead dust and lead oxide fumes, as well as eat, drink, and smoke in or near contaminated areas, thereby increasing their probability of lead ingestion. It only takes a very small amount, for instance in dust or fumes to poison a human. Lead in the body is measured through a blood test and recorded in micrograms of lead per deciliter of blood, $\mu\text{g}/\text{dL}$.

What lead levels are considered harmful in adults?

- 1-20 $\mu\text{g}/\text{dL}$, lead exposure is evident and lead is storing in the body and initial detrimental health effects may be occurring.
- 20-30 $\mu\text{g}/\text{dL}$, regular lead exposure is occurring and there is increased risk of health problems.
- 30 - 50 $\mu\text{g}/\text{dL}$ health damage may be occurring, even if there are no symptoms.
- 50 - 80 $\mu\text{g}/\text{dL}$ serious long term health damage may occur.
- Greater than 80 $\mu\text{g}/\text{dL}$ serious, permanent health damage or death may occur.



Blood lead levels can rise quickly. With frequent monitoring, dangerous exposures can be quickly identified and corrected.

The following list outlines some of the potential dangers of lead poisoning to health. Even exposure to amounts of lead too low to cause symptoms in the short term may increase the risk of high blood pressure and mental decline in the future. Symptoms in adults may include:

Fatigue, headache, abdominal pain, memory loss, mood disorders, muscular weakness, joint pain, numbness or tingling of the extremities, reduced sperm count, abnormal sperm, miscarriage or premature birth in pregnant women.

High Risk Lead Exposure Occupations

Auto body repair

Battery Manufacturing

Compounding plastic resins

Construction / Remodeling

Gun firing ranges

Lead soldering: electronics, plumbing etc.

Manufacturing of: ammunition and explosives

Ceramics: inks, dyes, glazes, paints, or pigments

Leaded glass or crystal

Stained glass windows/lamps etc.

Lead fishing weights and lures

Plating operations

Radiator Repair

Salvaging and recycling scrap

Metal

Smelting

Welding

Q: How do I find out if I have been exposed?

A: Have a blood lead test performed. It is quick and simple. Contact your physician or your local health department for more information and to arrange for your test today.

Lead Safe Work Practices:

Following these simple rules when working with lead can help protect you and your family from lead poisoning.

(1) Do not eat, drink or smoke in lead-contaminated work areas.



(2) Wash your hands before eating, smoking, or touching your face after working with lead.



(3) Wear your protective equipment over your clothing whenever you work with lead.



(4) Shower, wash your hair and change into clean clothes (including shoes) before leaving the workplace. "Take home lead" can contaminate your vehicle, home, and potentially harm your family, especially young children.



(5) Store street clothes in a separate area from your work clothes.



(6) Eating a well-balanced diet with proper nutrition, can help reduce lead levels.



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