WHERE CAN LEAD BE FOUND?

JOBS

- **Demolition of old painted structures**
- **BLOOD LEAD** Stripping, abrasive blasting or LEVEL sanding old paint **Bronze & brass foundries Battery manufacturing** Radiator repair Scrap metal handling 40 μg/dL DANGER! or greater Lead soldering REMOVE 20-40 **Indoor firing ranges** FROM μg/dL **EXPOSURE** REDUCE 3.5-20 EXPOSURE μg/dL NORMAL

OTHER PLACES

Paint in houses built before 1978

3.4 μg/dL

Hobbies including target shooting, reloading ammunition, or remodeling old homes

To have paint chips analyzed for lead, use only a laboratory accredited through the EPA's National Lead Laboratory Accreditation Program or AIHA's Environmental Lead Laboratory Accreditation Program.

FIND OUT IF THE PRODUCTS YOU **WORK WITH CONTAIN LEAD!**





MICHIGAN STATE UNIVERSITY COLLEGE OF HUMAN MEDICINE DEPARTMENT OF MEDICINE 909 Wilson Road Rm.



WORKING SAFELY

HOW DOES LEAD HARM ME?

Once lead gets into your body, it stays there for a long time. The lead in your body builds up over time, even if the exposure is to small amounts of lead. Too much lead in your body can harm your:

NERVOUS SYSTEM: Too much lead can damage your brain and nerves. If your brain has been affected, you might feel tired and have headaches. Symptoms include feeling anxious and irritable, having difficulty sleeping or concentrating, short term memory loss and confusion. Lead can also affect the nerves in your hands, arms and legs, causing weakness.

REPRODUCTIVE SYSTEM: Lead can damage the reproductive system of men and women and may harm unborn children. Children whose mothers were exposed to lead may have learning difficulties.

KIDNEYS: Chronic exposure to lead can harm your kidneys permanently. Medical tests can be performed to find out if your kidneys are being damaged.

BLOOD-FORMING SYSTEM: Lead exposure can cause "anemia," an inability to produce enough red blood cells to supply oxygen to your muscles, brain and other tissues.

BLOOD PRESSURE: Chronic exposure to lead can raise your blood pressure and cause hypertension.

For more information on health effects, contact

Occupational and Environmental Medicine
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HOW DOES LEAD GET INTO MY BODY?

- 1. Inhalation you breathe lead dust into your lungs.
- 2. Ingestion you swallow lead dust.

PROTECT YOURSELF

Avoid breathing in lead dust or fumes:

- Use ventilation systems to evacuate lead from your work environment.
- Use correct respiratory protection.
 Make sure it is clean, fits properly and is in good repair.
- Make housekeeping a priority. Use a vacuum with a HEPA filter or wet cleaning methods.
 Do not use compressed air for cleaning dust.

Avoid eating lead dust:

- Do not eat, drink, smoke or apply cosmetics in work areas.
- Wash your hands, arms, and face before eating, drinking, smoking or applying cosmetics.

Avoid bringing lead home and affecting your family:

- Use protective clothing.
- Store your street clothes in a separate locker from your work clothes.
- Shower and change into clean clothes including shoes before leaving the workplace.

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MIOSHA LEAD STANDARD YOUR INDIVIDUAL RIGHTS

- 1. Training. You have the right to know that you are working with lead. Training is required on the correct handling of lead products, how lead affects your health, ways to protect yourself from lead exposure and the provisions of the MIOSHA Lead Standard.
- **2.** Air Monitoring. Air monitoring must be conducted to determine airborne lead exposure levels. The Permissible Exposure Limit set by MIOSHA is 50 micrograms per cubic meter (μ g/m³) averaged over an 8-hour shift. The PEL is reduced when working an extended shift.
- **3.** Medical Surveillance. Your employer must provide a medical exam and consultation as well as blood sampling and analysis to determine lead levels when you are or may be exposed to concentrations of airborne lead at or above the MIOSHA Action Level of 30 μ g/m $^{\circ}$ for more than 30 days per year.
- **4.** Medical Removal. You have the right to be removed from airborne lead exposure at or above the Action Level when your periodic and follow up blood lead level is at or above 30 micrograms per deciliter (μg/dL) of whole blood, or three consecutive tests or all tests within the last six months are above 20 μg/dL. or when you have a detected medical condition which places you at an increased health risk from lead exposure. You cannot return to lead exposure until your blood lead is below 15 μg/dL.
- **5.** Chelation. Chelation is a drug treatment for lead poisoning that should be taken only under the supervision of a physician treating you for lead poisoning.

FOR MORE INFORMATION ON WORKPLACE HEALTH AND SAFETY, CONTACT:

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Consultation Education and Training Division
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