

Occupational

**Lead Safety** 

# Health effects from overexposure to lead

Lead poisoning can happen if a person is exposed to very high levels of lead over a short period of time or when you are exposed for a prolonged period of time. When this happens, you may feel:

- Abdominal pain
- Constipated
- Depressed
- Distracted
- Excessively tired
- Forgetful
- Headache

- Irritable
- Loss of appetite
- Memory loss
- Nauseous
- Pain or tingling in the hands and/or feet
- Weak

Because these symptoms may occur slowly or may be caused by other things, lead poisoning can be easily overlooked as their cause. Being exposed to high levels of lead may cause anemia, weakness, kidney and brain damage. Very high lead exposure can cause death. People with prolonged exposure to lead also may be at risk for high blood pressure, heart disease, kidney disease, and reduced fertility.

Lead exposure affects men causing reduced sexual function and impotence if lead levels reach high enough concentrations. Lead also can alter the structure of sperm cells potentially causing birth defects.

Lead can cross the placental barrier, which means pregnant women who are exposed to lead also expose their unborn child. Lead can damage a developing baby's nervous system. Even low level lead exposures in developing babies have been found to affect behavior and intelligence. Lead exposure can cause miscarriage, stillbirths, and infertility (in both men and women).

Generally, lead affects children more than it does adults. Children tend to show signs of severe lead toxicity at lower levels of lead than adults. Lead poisoning has occurred in children whose parents accidentally brought home lead dust on their clothing. Neurological effects, behavior disorders and mental retardation also have occurred in children whose parents may have job-related lead exposure.

## How do I know if I have lead in my body?

### Have your blood tested

You can have lead poisoning and not have any symptoms. Contact your health care provider or local health



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department to get your blood tested. Your doctor can take a blood sample and test for lead. These tests give results in micrograms per deciliter of blood. They are a simple and inexpensive way for individuals to know if the precautions they are taking to keep their lead exposure down are working.

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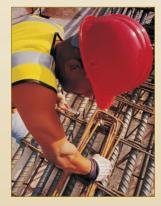


Illinois Department of Public Health Division of Epidemiologic Studies Adult Blood Lead Registry

# Am I being exposed to lead at work?

Certain jobs may put you at risk of being exposed to lead. These jobs include:

- Artists (materials such as pigments, glazes and fluxes may contain lead)
- Auto repairers (car parts may contain lead)
- Battery manufacturers (batteries contain lead)
- Bridge reconstruction workers (old paint may contain lead)
- Construction workers (materials may include lead)
- Firing range instructors and gunsmiths (ammunition contains lead)
- Glass manufacturers (lead may be used in glass production)
- Lead manufacturers
- Lead miners
- Lead refiners
- Lead smelters
- Manufacturers of bullets, ceramics and electrical components
- Painters (old paint and commercial paint may contain lead)



- Plastic manufacturers (materials made may contain lead)
- Plumbers and pipe fitters (pipes may contain lead)
- Police officers (ammunition contains lead)
- Radiator repairers (radiators may contain lead)



- Recyclers of metal, electronics and batteries (may contain lead)
- Rubber product manufacturers (process contains lead)
- Shipbuilders (materials used may include lead)
- Solid waste incinerator operators (waste may contain lead)
- Steel welder (galvanized steel is coated in part with lead)

# How exposures can happen

Breathing in lead fumes produced during metal processing, when metal is being heated or soldered.

Breathing in lead dust produced when metal is being cut or when lead paint is sanded or removed with a heat gun. Both lead fumes and lead dust do not have an odor so you may not know you are being exposed.

Ingesting lead dust. If you eat, drink or smoke in areas where lead is being processed or stored, you could ingest lead dust that has settled on food, water, clothes and other objects. Not washing your hands before you eat or touch your mouth are also ways you could ingest lead.

Coming in contact with lead dust. If you handle lead and then touch your eyes, nose or mouth, you could be exposed. Lead dust also can get on your clothes and your hair. If this happens, it's possible that you may track home some of the lead dust which also may expose your family.

# How do I keep myself and my family safe from lead?

- Eat and/or drink in areas where lead or leadcontaining products are not being handled or processed.
- Use an effective lead removal product to clean your hands. Washing hands with soap and water is not enough to remove lead residues from your skin.
- Shower and change clothes and shoes after working with or around lead-based products.
  Wash work clothes separately from the family laundry.
- Work in areas that are well-ventilated.
- Wear the proper personal protective equipment such as goggles, gloves, boots and protective clothing to prevent contact while working around lead and lead dust. In some cases, a respirator may be necessary.
- Talk with your doctor about workplace lead exposure if you are pregnant or planning to become pregnant.
- If you are a working mom exposed to lead while breastfeeding, consult your pediatrician to decide if you should have your blood lead level tested.
- Talk with your employer to see if they do routine blood testing; this is a simple blood test that can measure your blood lead levels. If not, talk with your doctor about getting this test done.

