

Non-Occupational Lead Exposure

Lead is a naturally-occurring, toxic element found throughout the environment. Due to lead's threat to human health, the federal government has taken actions to reduce lead exposure, such as implementing the Safe Drinking Water Act in 1974 to limit lead levels in public drinking water and banning the manufacture of lead-based paint in 1978. Despite this, lead exposure is still a significant public health concern. While the majority of lead exposure in Pennsylvania comes from occupational sources, hobby-related lead exposure, such as from home renovation, arts and crafts, and hunting, occurs among people of all ages. In addition, lead exposure can occur through contact with household goods, especially imported spices, jewelry, and cosmetics. No level of lead exposure is considered to be safe. If you suspect that an activity you do involves lead, continue reading to learn about appropriate precautions to minimize or prevent exposure.

How can I be exposed to lead?

Exposure to lead can occur through inhalation, ingestion, or skin contact. Sanding areas with lead paint and solder during metalwork and art projects produces inhalable lead dust. Shooting guns generates lead fumes from the ejection of lead bullet fragments and lead primer. Lead fumes can also be inhaled from fishing tackle and weights. Lead can be ingested via lead-contaminated food or water. Lastly, direct dermal contact can occur when skin absorbs lead dust or by touching lead materials, such as imported jewelry and cosmetics.

What types of activities and hobbies might involve lead exposure?

- Refinishing old furniture and working with imported or antique floor tiles
- Home renovation, repair, or painting
- Fishing, hunting, and casting lead bullets
- Metalwork and jewelry making
- Art restoration, stained glass work, and pottery
- Restoring or playing with antique and imported toys
- Wearing imported cosmetics, such as kohl
- Folk remedies containing lead, such as greta
- Drinking home-distilled liquids, such as moonshine
- Cooking with imported ceramicware or imported spices and using antique tableware



Metalwork



Chipped lead paint

What are the symptoms of lead exposure?

Exposure to lead can harm every organ and system in the human body. Many people exposed to lead are asymptomatic. Early signs of low-dose lead exposure may include nausea and fatigue. Adults with long-term lead exposure may suffer from high blood pressure and kidney disease. Lead can pass from a pregnant or lactating individual to the fetus or infant. Lead exposure among a pregnant person puts them at risk for miscarriage. It can also cause premature birth, low birthweight, and kidney and nervous system damage for the baby. Children exposed to lead may be prone to impaired growth, learning disabilities, hearing issues, and anemia. In rare and severe cases among people of all ages, ingestion of lead can induce seizure, coma, or death.

How do you know if you have been exposed to lead?

A blood test by a health care provider is the only way to confirm exposure to lead. Most health insurance policies, including Medicaid, cover the cost of testing for lead in blood.

Can my job also expose me to lead?

Yes, many occupations involve lead exposure, such as car repair, bridge maintenance, battery manufacturing, and construction. Professional and recreational activities that may involve lead put you at a higher risk for lead exposure. While employers are required to keep employees safe from lead exposure, the same protections may not exist for non-work-related activities.

What is take-home lead exposure?

Take-home lead exposure occurs when people bring lead into their homes after being exposed to lead from hobbies or work. Lead dust can be carried on clothes, shoes, skin, or hair. Hobbies, such as furniture repair, may take place inside the home too, so additional precautions should be taken to ensure the safety of all household members, especially children. Utilize a designated workspace or garage for your hobby and keep children away from this area.

Lead dust can be tracked onto any surface a child touches, including furniture, carpets, floors, and automobile seats. Due to their smaller size and developing bodies, children are at a higher risk of lead poisoning. To protect your family from take-home lead exposure: wash hands before eating, drinking, smoking, or vaping; change out of all clothes and shoes that could have been exposed to lead before returning home or leaving your work area; wash lead-exposed clothing separately; and clean your car and home regularly with a High Efficiency Particulate Air vacuum.

Could my drinking water have lead?

Although lead is rarely found naturally in water, the corrosion of plumbing materials containing lead can contaminate water with lead. If you use tap water from a home built before 1986, you are more likely to have lead in your water. Additionally, groundwater that supplies private wells may be contaminated with lead from local industrial sources. Visit Penn State's Drinking Water program page at <https://agsci.psu.edu/aasl/water-testing/drinking-water-testing> to learn about drinking water testing and associated costs.

What are ways to minimize risk to lead exposure and poisoning?

- Wear personal protective equipment while working with lead materials, such as solder
- Wash your hands after shooting guns, fishing, and removing old paint
- Test your home for lead paint
- Apply a seal over lead-based paint to prevent the release of lead dust
- Clean floors, window sills, and other surfaces frequently
- Teach children to keep their hands and toys out of their mouths
- Read labels on imported and industrial goods and avoid use if they contain lead
- Test your tap or well water for lead
- Consult with your health care provider about getting a blood lead test



Who can I contact for additional information?

- PA Lead Information Line (LIL) at 1-800-400-LEAD (5323)
- Scan the QR Code for the [Workplace Exposure to Lead factsheet](#):



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