Workplace Exposure to Lead

Lead is a **naturally occurring, toxic metal** from the Earth's crust. The historic widespread use of lead in consumer products resulted in vast environmental contamination and public health concern in Pennsylvania. For adults, workplace lead exposure is the most common reason for elevated blood lead levels (EBLLs). There continue to be occupations for which the disposal, maintenance, production, recycling, and use of lead materials and products are needed. These occupations, such as lead-acid battery manufacturing and recycling, are more prominent in Pennsylvania than in other places around the country. No level of lead exposure is considered to be safe. Lead exposure can be prevented or minimized by taking appropriate precautions.

How Can I Get Exposed to Lead at Work?

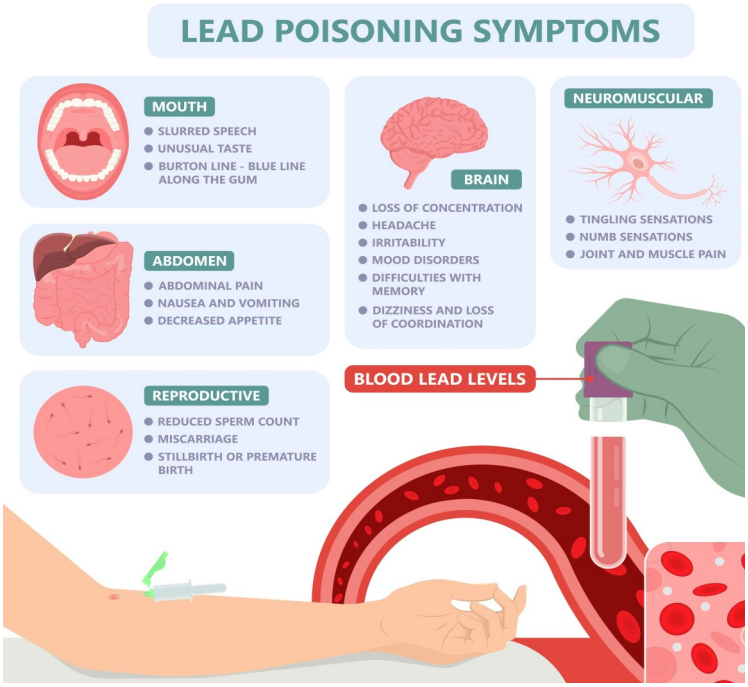
- **Inhaling** lead fumes or dust (*main source of workplace exposure*)
  - For instance, lead dust comes from sanding or sandblasting areas coated with lead paint
  - For instance, lead fumes come from torching areas with lead paint or melting lead
- **Ingesting** lead-contaminated food or water
- **Direct dermal contact** from skin absorbing lead dust

Who Is at Risk of Workplace Lead Exposure?

Some occupations with a known risk of lead exposure include artists, auto repairers, battery manufacturers, bridge reconstruction workers, construction workers, and people working with ammunition, like police officers. Auto repairers, for example, can be exposed to lead through contact with car parts containing lead; bridge reconstruction workers can be exposed to lead through removal of lead paint; and police officers risk exposure via contact with lead bullets.

What Are Symptoms of Lead Exposure?

Lead cannot break down. Over time, **lead accumulates in your body**, circulates in your blood, and may even damage your organs. Even at low levels, lead can cause severe, permanent health effects. As well as the symptoms listed in the graphic to the right, lead exposure can also cause sleep disturbance, fatigue, and high blood pressure.



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Why Should I Get Tested?

Testing a blood sample for lead levels helps us to determine if an individual was exposed to lead. By checking a worker's blood lead level (BLL), occupational safety and health professionals can evaluate whether or not workers are being protected from lead exposure. When BLLs are elevated, test results help healthcare providers determine best treatment methods and inform steps necessary to reduce workplace and take-home lead exposure.

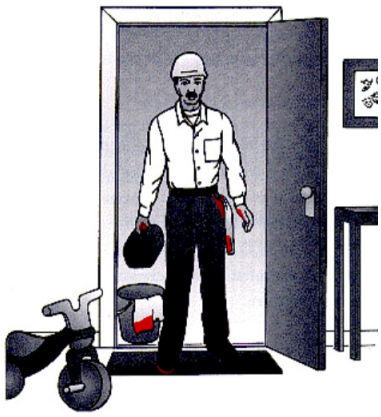
Who Should Get Tested?

In accordance with the Occupational Safety and Health Administration (OSHA) lead standards, **employers are required to protect their workers from lead exposure.** If you work with lead or are exposed to lead at work, talk to your employer or doctor about receiving an annual lead test. More frequent testing may be needed if you work in a high lead environment or previously had a high blood lead test.

Will I Be Removed from My Job Due to My Blood Lead Level?

OSHA requires that employees with high BLL (50 ug/dl) be removed from work or reassigned to a role with an eliminated risk of exposure to lead. Visit osha.gov/workers to learn more about your rights to a safe workplace.

What Is Take-Home Lead Exposure?



REDUCE CONTAMINATION AT HOME

Take-home lead exposure is when people exposed to lead at work unintentionally bring lead into their homes, exposing children and other family members. Lead dust is carried home on clothes, shoes, skin, or hair. Take-home lead can cause elevated BLL in children, which can have serious long-term health effects. Children of lead-exposed workers have disproportionately high BLLs compared to other children. **To protect your family from take-home lead exposure:** wash your hands before eating drinking, smoking, or vaping; change out of your work clothes and shoes before returning home; wash lead-exposed clothing separately from other laundry; and routinely clean your car and home with a High Efficiency Particulate Air (HEPA) vacuum.

Lead can pass from a mother to an unborn baby. *If you or your partner are pregnant or thinking about becoming pregnant and are concerned that you may have been exposed to lead, consult with your healthcare provider about getting a blood lead test.*

What Are My Employer's Responsibilities?

By law, your employer is required to provide a safe working environment, which includes, but is not limited to, providing workplace safety and health training, installing properly functioning ventilation systems, supplying personal protective equipment (PPE), and testing workplace air and workers' blood levels for lead. For more information, please check with your employer and visit OSHA's: osha.gov/workers/employer-responsibilities.