

Lead Poisoning:

Take Home Exposures



Source: Masterfile

Approximately 24,000 children in the United States have lead poisoning due to lead dust being brought home from work by parents.

We Protect Lives

What is Lead Poisoning?



Source: Nebraska Department of Health and Human Services

Lead is a metal found naturally in the earth's crust. However, lead that enters the environment (i.e. air, soil, water, homes, etc.) through human activities and usage can be toxic. Lead poisoning occurs when there is a buildup of lead in the body that can cause severe health problems. In the past, lead was used in gasoline, indoor and outdoor paint, and was found in everyday household items such as kitchen appliances and children's toys.

Even though lead is hazardous, it is still frequently used today in certain industries such as battery manufacturing, scrap metal recycling, and construction. Employees in those workplaces may have an increased exposure to lead. In addition to workplaces, adults can also be exposed to lead through hobbies such as refinishing furniture and going to indoor shooting ranges. Understanding how you can be exposed to lead is important because lead dust can stay on clothes and skin, allowing you to expose others.

While the U.S. Occupational Safety and Health Administration (OSHA) states that the permissible blood lead level for workers in general industry is below $60\mu g/dL$ and below $50\mu g/dL$ for workers in the construction industry, even the smallest traces of lead can lead to health issues. The U.S. Centers for Disease Control and Prevention (CDC) states that a blood lead level of $5\mu g/dL$ or greater can result in lead poisoning.

Symptoms and Effects of Lead Poisoning

Lead Poisoning Symptoms in Adults and Children

Lead can enter a person's body by inhalation or ingestion, which can damage almost every organ system and cause several different health effects.



Graphic: Mark Nowlin, The Seattle Times

Lead Exposure: How Do I Expose Others?

A person can be exposed to lead by ingestion or inhalation of lead particles around them. For instance, a construction worker can breathe in lead fumes when working with metals (welding or other processing) or removing old lead paint. In addition, lead generated in the workplace or during hobbies can settle around your food, in areas where you drink and eat, in your car, and on furniture and carpet. If you do not wash your hands and face properly before eating and have been handling lead-contaminated materials, you can accidently ingest some lead dust. Lead dust can stick to your skin, clothes, and shoes. This dust can then be transferred to other areas such as your car and your home, and this allows others to come in contact with the toxic dust. Clothes containing lead dust can contaminate others' clothes if they are not washed separately. If you do not wear the proper protective gear or properly clean yourself, you can take lead home and expose your family.



Prevention Methods: How Do I Prevent Exposing Others to Lead?

There are measures that can be taken to ensure that you and those around you are not exposed to lead due to take-home contamination.

- DO thoroughly wash your hands and face after working with lead and before eating or drinking
- DO shower and change clothes and shoes after working around lead- containing products
- DO wash work clothes separate from all other clothes
- DO work in well- ventilated areas
- DO wear proper personal protective equipment (PPE) to prevent coming in contact with lead and to protect your personal clothing
- DO consult your doctor if you are planning to conceive, pregnant, or are a working mother who is breastfeeding
- DO ask your employer if routine blood lead level tests are completed
- DO keep your house clean from dust to prevent the spread of lead particles
- DO NOT eat or drink around areas where lead is being handled or processed
- DO NOT buy or use appliances or household items that are made outside of the United States or have not been tested for traces of lead
- DO NOT let your child put toys and jewelry in their mouth



More Information:

Additional Resources

For more information, please visit these websites.

Georgia Healthy Homes and Lead Poisoning Prevention Program

dph.georgia.gov/healthy-homes-and-lead-poisoning-prevention

• Georgia Tech Consultation Program

oshainfo.gatech.edu/about

• United States Department of Labor, Occupational Safety and Health Administration (OSHA)

osha.gov/SLTC/lead

• Centers for Disease Control and Prevention, National Institute for Occupational Safety and Health (NIOSH)

cdc.gov/niosh/topics/lead

• United States Environmental Protection Agency (EPA)

epa.gov/lead

Georgia Department of Public Health

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dph.georgia.gov/georgia-occupational-health-and-safety-surveillance-program