

### How is Battery Manufacturing Associated with Lead Exposure?

Inorganic lead dust is the most significant health exposure in battery manufacturing according to the Occupational Safety and Health Administration (OSHA). Lead compounds are present during the oxide and grid production, plate processing, and assembly stages of battery manufacturing. Lead dust is created during these processes and is the main source of workers' exposure to lead because they breathe in or swallow lead dust that has settled on their hands or on surfaces not adequately cleaned.

### What is Lead Poisoning?

Lead is a heavy metal naturally found in the Earth's crust. It enters the environment through human activities and usage can be toxic. Lead can be found in the air, soil, water, and inside our homes. Lead poisoning occurs when someone swallows or inhales lead causing a buildup of lead in the body that can cause severe health problems. Lead can be harmful to anyone. No amount of lead in the blood is considered safe.

### What are the Effects of Lead Poisoning?

#### Adults



##### Brain

Memory loss, difficulty with concentration, headaches, mood disorders, depression



##### Digestive System

Constipation, nausea, abdominal pain, and poor appetite



##### Cardiovascular System

High blood pressure



##### Kidneys

Abnormal function and damage



##### Body and Nervous System

Fatigue, joint and muscle pain, pain or tingling in hands and/or feet

#### Reproductive System

**Men:** Reduced sperm count, sperm abnormalities, and decreased sex drive

**Women:** Miscarriage, stillbirth, or premature birth in pregnant women

#### Children



##### Brain

Decreased IQ, learning disabilities, speech and behavior problems



##### Digestive System

Abdominal pain, nausea, constipation, decreased appetite



##### Kidneys

Damage at high levels



##### Body

Slowed growth, muscle and joint pain



##### Blood







Anemia

Children under the age of 6 are most vulnerable to lead and their growing bodies absorb more lead than adults. Most children show no symptoms of lead exposure. Signs of lead exposure can be mistaken for other illnesses.

## How Do I Expose Others?

You cannot see lead dust. It can settle in areas where you drink and eat, in your car, furniture and carpet, your hands, face, and clothes and shoes you wear home from your job. If your hands and face are not washed properly before you eat and you have been handling lead contaminated materials, you can accidentally ingest some lead dust. It can stick to your skin, clothes, and shoes. Lead dust can transfer from your clothing and shoes onto other surfaces in your home, exposing members of your family. Clothing worn home from work may contain lead dust that can contaminate others' clothing if they are not washed separately.

## How Do I Prevent My Family's Exposure to Lead?

-  Remove shoes before entering the home to avoid tracking take-home lead throughout the house.
-  Shower and wash your hair at the end of your shift and change into clean clothes before you leave work and get into your car to go home. Put any dirty clothing worn during work under uniform into a plastic bag.
-  Keep clothing worn during work separate and wash separate from other clothes. Run the empty washing machine to rinse out any lead left behind from clothing.
-  Clean the interior of the vehicle often. Use a HEPA filter vacuum to clean upholstery and carpet. Wet clean hard surfaces using all-purpose cleaning detergent using disposable paper towels.
-  Frequently clean using a wet mop, sponge or cloth with warm soapy water on hard surfaces to remove take-home lead within the home.
-  Be sure to wash your hands often, especially children, after being outside, before eating, and before bedtime.

## Where Do I Find More Information?

For information concerning child lead exposure, monitoring, environmental and child blood lead testing visit the Georgia Healthy Homes and Lead Poisoning Prevention Program at <https://dph.georgia.gov/environmental-health/healthy-homes-and-lead-poisoning-prevention>.

For information concerning work-related injuries, illnesses, and hazards in Georgia for adults with elevated blood lead levels visit the Georgia Occupational Health Surveillance Program at <https://dph.georgia.gov/epidemiology/georgia-occupational-health-and-safety-surveillance-program>.

Your employer has an obligation to ensure safe working conditions and provide the proper personal protective equipment, trainings, and access to medical surveillance. Workplace safety and health is regulated by the Occupational Safety and Health Administration (OSHA). For more information visit <https://www.osha.gov/lead>.