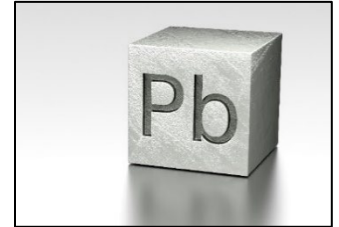


Lead is a naturally occurring element in the Earth's crust. It is a bluish-gray metal with no smell or taste. It can be found in all parts of our environment – air, soil, and water – and it does not break down. Manmade sources of lead such as burning fossil fuels, mining and manufacturing, and lead-based paint are especially concerning because lead is toxic to humans. Lead has been detected in consumer products, such as cookware and dinnerware, cosmetics, metallic or painted jewelry and toys.

HOW DOES LEAD GET INTO MY BODY?

You ingest it by drinking water or eating foods that contain lead. Drinking water may be contaminated by lead if lead solder in water pipes leaches into the water supply. Foods grown in lead-contaminated soil may contain lead. Cookware contaminated with lead can leach into food during cooking. Children may also ingest it by chewing on toys or surfaces that contain bits of lead-based paint. You breathe in lead from air that is contaminated with lead dust and fumes.



WHAT CAN LEAD DO TO ME?

Lead is toxic. There is no known safe blood lead level, the measure of lead in a person's body. Lead is particularly dangerous for children because of their developing bodies and can result in brain and nervous system damage as well as other health effects. In adults, lead can cause high blood pressure and kidney damage. The longer a person is exposed to lead, the greater the chance of health problems.

WHAT ARE THE ENVIRONMENTAL REGULATIONS FOR LEAD?

The Environmental Protection Agency (EPA) limits lead in public drinking water. A lead contamination action level of 0.015 parts per million (ppm) triggers public water suppliers to reduce the lead level in water. Additionally, EPA limits lead in outdoor air to 0.15 micrograms per cubic meter ($\mu\text{g}/\text{m}^3$). The Occupational Safety and Health Agency limits lead in workplace air to 50 $\mu\text{g}/\text{m}^3$ during an 8-hour day and 40-hour week.

In response to evidence linking lead exposure to adverse health effects, lead was banned from household paints in 1978 and from gasoline in 1996.

The background level of lead has been estimated for soil in Pennsylvania. In 1998, a [Penn State University report¹](#) found the median concentration of lead in soil samples collected from counties around the state in the 1980s ranged from 9.90 ppm to 177.00 ppm.

WHAT CAN I DO?

- Regularly test drinking water for lead.
- Use raised bed gardens and store-bought soil.
- Wear dust masks, gloves, and protective clothing when working with lead or lead-based products.
- If your water is high in lead, consider installing a water treatment system or change water sources.
- If you work in an occupation that may expose you to lead, be aware that you may carry it home. Shower and change clothes before going home.
- Concerned about lead in your body? Visit a health care provider for testing and follow-up.

If you have questions or concerns about lead, please contact the Division of Environmental Health Epidemiology at dehe@pa.gov or 717-787-3350.