

FACT SHEET



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

Lead in Soils

Office of Land Quality – Science Services Branch

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Description

Lead is a metal that occurs in nature but can be especially harmful to children and pregnant women. Children who are exposed to lead may grow more slowly and have more trouble learning than other children. They may suffer damage to their brains, nerves, hearing, or speech.

Sources of Lead

As we learn more about the harm that lead can cause, fewer products contain lead. Lead has not been added to paint since 1978 or to automotive gasoline since 1990. However, some products still contain lead. Also, many older products that contain lead may still be in the places where we live or work. Products like old paint, batteries, toys, jewelry, or even imported candy or home remedies may contain lead. Old paint may flake off or create dust that contains lead. Other products may break down over time and produce lead dust or particles.

Some workers are, or were, exposed to lead while doing their jobs. Workers who made batteries, rubber, or ammunition, or who did jobs like welding, plumbing, or auto repair may be, or may have been, exposed to lead. Lead on shoes and clothing worn at work sometimes ended up at home, where children could be exposed.

Some industries released lead into the air. So did vehicles that burned leaded gasoline. After a while, that lead fell to the ground, and it may still be in areas where people live and work.

Routes of Exposure and Potential Health Effects

You can be exposed to lead in soil by:

- Accidentally eating soil or dust with lead;
- Breathing in air that has soil or dust with lead; and
- Eating vegetables that have not been cleaned or peeled that were grown in soil with lead.

There are other routes of exposure to lead that are not discussed in this handout: drinking water that has lead or eating foods that were made with water that has lead, or even by eating leaded paint chips.

Children are at higher risk because they put their hands and other objects in their mouth, and they are developing rapidly over a short period of time. Potential health effects from lead depend on how much, how long, how often, and in what way(s) you are exposed. The United States Environmental Protection Agency (U.S. EPA) has determined that lead can possibly cause cancer in humans.

The Indiana State Department of Health recommends testing the blood of at-risk children. Please talk with your health professional or local health department to determine if your child is at-risk and should be tested. If your building is located near a historic or current industrial facility that deals with lead, consider having your soil, dust, peeling paint and/or drinking water tested.

Reduce Exposure

There are things you may be able to do to reduce your exposure to lead:

- Wash garden vegetables before eating to remove soil.
- Garden using raised beds with clean topsoil.
- Wipe your shoes on an outside doormat to avoid tracking soil into your home.
- If your job exposes you to lead, shower and change clothes at work before coming home.
- Wash your hands to decrease the chance of ingesting contaminated dust or soil.
- Clean toys regularly.

IDEM's Role and Responsibility

- The mission of the Indiana Department of Environmental Management (IDEM) is to implement federal and state law to protect human health and the environment while allowing the environmentally sound operations of industrial, agricultural, commercial, and governmental activities vital to a prosperous economy.
- IDEM's Office of Land Quality (OLQ) regulates lead disposal and the potential cleanup of lead in soil.
- IDEM OLQ provides cleanup recommendations for lead based on potential health effects.
- IDEM's Office of Water Quality enforces the federal limit on how much lead is allowed in public drinking water supplies.
- IDEM's Office of Air Quality regulates the amount of lead that businesses can release into the outdoor air.

Additional Resources

- For additional recommendations and best practices surrounding gardening and reducing exposure to lead-contaminated soils, see the EPA Publication at <https://semspub.epa.gov/work/HQ/174577.pdf>.
- For more information on lead, see the Agency for Toxic Substances and Disease Registry (ATSDR) website at <https://www.atsdr.cdc.gov/toxfaqs/tf.asp?id=93&tid=22>.
- Alternatively, you can call the CDC-INFO line for ATSDR's information on lead: 800-232-4636 (M-F 8a-8p Eastern in English or Spanish) or TTY 888-232-6348.
- For information on lead exposure at work, please visit CDC's NIOSH website at <https://www.cdc.gov/niosh/topics/lead/default.html>.
- For more information on reducing childhood lead poisoning through blood lead screening and remediation of environmental causes of lead poisoning, please visit the Indiana State Department of Health's Lead & Health Homes Division website at <https://www.in.gov/isdh/26550.htm>
- For information regarding the health effects of lead please visit the Center for Disease Control and Prevention's (CDC) website at <https://www.cdc.gov/nceh/lead/>.
- For a list of approved risk assessors and testing laboratories, please contact the National Lead Information Center. The Center's contact information can be found on U.S. EPA's website at: <https://www.epa.gov/lead/forms/lead-hotline-national-lead-information-center>.
- For questions and concerns about lead contamination or environmental cleanup, contact IDEM's Office of Land Quality at (317) 232-3215 or (800) 451-6027, ext. 2-3215.
- To report an accidental release or spill, call IDEM's 24-Hour Spill line at (888) 233-7745 (toll free).