



Department of Health

Bureau of Environmental
Health & Radiation
Protection

Lead and Your Health

Learn about the harmful effects of lead.

What is lead?

Lead is a metal found in the earth's crust that is harmful to humans. In the past, lead was used in gasoline, paints, batteries, and ammunition.

What happens to lead in the environment?

Manufacturing, construction, and human activity can release lead into the world we live in. For example, certain industries that use lead to make their products can create lead dust which can be blown into nearby gardens and yards. In some older homes, children can be exposed to lead from chipping paint containing lead.

Lead does not break down in nature. It sticks to soil and stays there for a long time. Lead dust can enter the air from soil that contains lead if that soil is stirred up. This dust can easily be breathed or swallowed. Construction work and gardening are ways that lead can be released into the air when it is in soil.

Gardens grown in soil containing lead can produce fruits, vegetables, and grains with lead in them. Plants (especially root vegetables like beets, potatoes, and carrots) can absorb lead through their roots or be covered in lead dust.



Construction work can stir up lead dust from lead-contaminated soil.

How does lead get into my body?

The main route of exposure is through accidentally swallowing lead-based paint. People are also exposed to lead when they breathe in dust containing lead, or when they swallow lead in food and water, or by accidentally eating soil or dust containing lead. Lead cannot easily enter your body through skin contact.



Older homes can have peeling lead-based paint that may be tempting for young children to eat.

What kind of health problems can lead cause?

When people become sick from lead getting into their body it is called lead poisoning. The harmful effects of lead are the same whether you breathe it or swallow it. Lead can damage every organ system in the body, but its main targets are the brain, spinal cord, and nerves.

Some signs and symptoms of lead poisoning can include:

- Stomach pain.
- Poor appetite.
- Sleep disorders like insomnia.
- Kidney damage.
- Hearing problems.
- Damage to the male reproductive system.
- Memory problems.

Are children at more risk of getting sick from lead?

Yes. Children are at higher risk of lead poisoning than adults because of their behaviors and rapid development. They play outside more often, are closer to the ground, and tend to eat more dirt. When children are exposed to lead, their blood concentration will be a lot higher than when adults are exposed because their bodies aren't as good at getting rid of lead as adults.

Children who are exposed to lead before they are born (in the womb) or in early childhood can have slow mental development and lower intelligence later in childhood. Lead can also cause children to be irritable (angry) and aggressive. Pregnant women who are exposed to high levels of lead can give birth to babies with low birth weight or can have miscarriages.

Is there a medical test that can show if I have been exposed to lead?

Yes. A blood test is used to find the lead in the blood. This test can tell you if you have recently been exposed to lead. There is no safe amount of lead to have in your body.

Blood testing of at-risk/lead hazard exposed children is recommended/required at least twice prior to age 3-years-old (ages 1 year old and 2 years old).

Always contact a medical professional or local health department to discuss lead exposure concerns or blood testing.

Resources

Agency for Toxic Substances and Disease Registry (ATSDR). 2020. [Lead ToxFAQs](#).

Where can I get more information?

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