

Lead and Lead-Contaminated Soil Information

What is lead?

Lead is a metal found in small amounts in the earth's crust. Lead can enter the environment through different human activities and can be harmful to humans when swallowed or inhaled.

How does lead affect me?

Drinking, eating, and breathing particles containing lead can result in lead poisoning. High blood lead levels in adults can cause permanent damage to the brain and nervous system, resulting in behavior, learning problems, and slowed growth.

What are the symptoms of lead poisoning?

Signs of lead poisoning may not be present or may be mistaken for the flu or other illnesses. If present, symptoms may include stomach ache and cramps, fatigue, constipation, sleep disorders, irritability, frequent vomiting, headache, and poor appetite.

Where does lead contamination come from?

Lead can be found in all parts of our environment – the air, the soil, the water, and even inside our homes. Some sources include leaded gas, incinerator or industrial emissions, lead-based paint in older homes. Lead can collect around the home in the form of dust on floors and windowsills. It can also collect in the soil outside of the home where plants for food or for landscape purposes are grown.



Lead and Lead-Contaminated Soil Information

How do I know if my soil is contaminated?

The best way to find out if you have unsafe levels of lead in your soil is to have a sample tested by a soil-testing laboratory. LSU AgCenter's Soil Testing and Plant Analysis Lab in Baton Rouge offers analysis for lead found in soil.

My soil is contaminated, what can I do?

You can start by moving your garden away from areas where lead levels are higher. You can change soil by adding lime to it 3 months before planting. You can also build a raised bed with untreated lumber and fill with new soil and compost.

How do I perform a soil test?

For an average garden, take five to six samples at a depth of 4 inches. Mix the samples in a bucket or other container and pour the contents into a container or plastic bag (the soil has to be dry). Be sure you have 2 cups of soil. The LSU AgCenter tests soil for farmers and home gardeners.

Source: Louisiana State University Ag Center. Soil Sampling. July 19, 2012.

http://www.lsuagcenter.com/en/our_offices/parishes/st.+tammany/features/agriculture_horticulture/soil+sampling.htm

Soil lead test (ppm)	Recommendations
Less than 50 ppm	Little or no lead contamination in soil. No special precautions needed.
50-400 ppm	Some lead present from human activities. Grow any vegetable crops. Choose practices that limit dust or soil consumption by children.
400-1200 ppm	Do not grow leafy vegetables or root crops. Choose practices that limit dust or soil consumption by children.
1200 ppm and above	Not recommended for vegetable gardening.

Source: Oregon State University. Toxic Heavy Metals in Soil. 2010. <http://smallfarms.oregonstate.edu/sfn/su10toxicmetals>



Where can I learn more?

Louisiana State University Ag Center. How to Take Soil Samples.

<http://cms.lsuagcenter.net/MCMS/RelatedFiles/{AE131393-A608-4A70-8392-F3B57109435B}/SSFlyer.pdf>

United States Environmental Protection Agency. Lead.

<http://www2.epa.gov/lead>

United States Environmental Protection Agency. Lead in Soil.

<http://www.epa.gov/region1/leadsafe/pdf/chapter3.pdf>