

in LEAD SOIL



Yards and gardens can contain contaminated soil, putting you and your family at risk of swallowing or inhaling lead.

The good news is that there are many things to prevent exposure to yourself and your family.

Lead is harmful to everyone, but most dangerous to children and pregnant women

- Lead can damage the brain, nervous system, kidneys, and immune system.
- Lead exposure can result in slowed growth and development.
- Lead exposure can cause learning and behavior problems.
- Pregnant women exposed to lead may have an increased risk for miscarriage, low birth weight, and premature births. Prenatal exposure to lead may hurt the baby's brain, kidneys and nervous system, or cause the child to have learning or behavior problems.

Lead poisoning is preventable! Protect yourself and your family. There is no safe level of lead. Stay safe while enjoying homegrown vegetables and fruit.

Sources of Lead in soil

- **Lead-based paint** in pre-1978 homes—contamination in the soil can occur from old paint chips falling to the ground or from past renovation activities and mix with soil near the house or other structures.
- **Leaded gasoline** in vehicles until the late 1980s—can leach into the soil.
- **Old equipment** near gardens may leach lead into soil.
- **Historic mine sites and areas close to industrial sites.** Industrial sites, such as lead smelters, such as lead smelters, auto repair facilities, ect., can release lead into the environment and contaminate the soil.
- **Pesticides and fertilizers**—lead and arsenic were once used in the production of pesticides and fertilizer.

If you are concerned about lead exposure from soil

- Contact your health care provider and ask for a simple blood lead level test for you and your family. Tests are covered by Medicaid and most private health insurance.
- **There is no safe blood lead level in children.** Even low levels of lead have been shown to affect a child's learning capability, ability to pay attention, and academic achievement. The effects of lead exposure can be permanent. The most important step parents, doctors, and others can take is to prevent lead exposure before it occurs.
- Follow practices, such as those listed below, that reduce exposure to you and your family.

Reduce Exposure

- Wear gloves while gardening and keep used gloves outside away from children.
- Wash hands immediately after gardening.
- If you are concerned about lead in your soil, or are aware of elevated lead in your garden soil, keep children away from those areas.
- Remove shoes and clothing before entering the home—clothing should be washed separately from the rest of your laundry.
- Wash all vegetables and fruits before eating.
- Clean tools before bringing indoors.
- Keep soils moist to reduce dust.



Clean up of soil that is suspected of having lead

Do not allow children to access or use the area if you are unable to remove the contaminated soil.

- Soil can be removed and replaced by an EPA certified lead-safe contractor.
- Cover area with heavy duty landscaping cloth over the ground and top with gravel or mulch, or a permanent cover such as concrete.
- Use planter boxes or raised garden beds with heavy duty landscaping cloth and at least 18 inches tall and fill with uncontaminated soil.

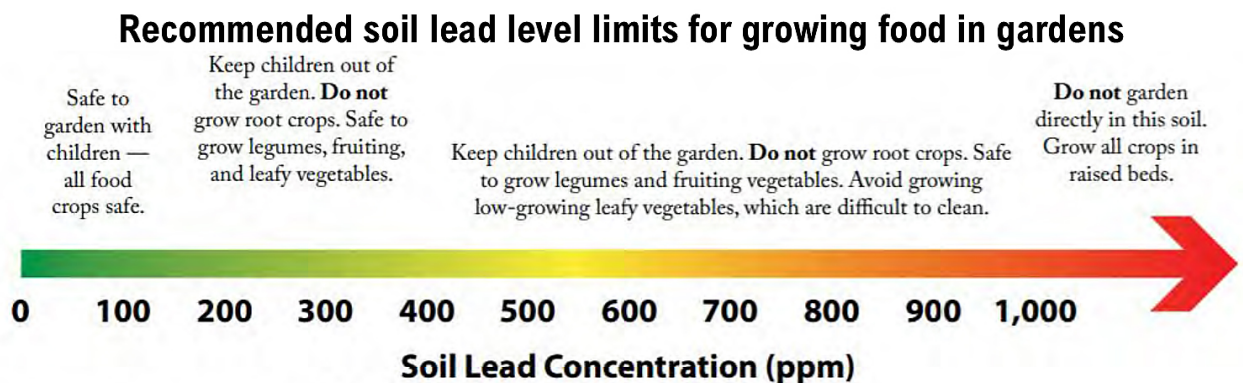
Additional safe gardening practices

- Plant gardens at least 10 feet away from building foundations, roads, and driveways to avoid contamination from exterior paint chipping from buildings.
- Do not use treated wood, old railroad ties, single-use plastics, or similar materials in your garden.

- Wash all fruits and vegetables from the garden with clean, cold running water before storing and before consumption. A vinegar solution will help remove soil particles and keep your vegetables and fruits fresh longer.
- Hire an EPA certified lead contractor to remove or permanently cover the soil.

Recommended soil level limits for growing food in gardens

EPA's standard for lead in bare soil in play areas is 400 parts per million (ppm) by weight and 1200 ppm for non-play areas. It is important to keep in mind that results from just a few samples collected from your yard may not represent soil levels throughout your yard. Soil can change, and lead concentrations may be very different throughout. If you are concerned, please contact the Idaho Environmental Health Program for more information and the next steps you can take.



† Assume soil testing for lead with EPA Method 3051A

From Kansas State University Agricultural Experiment Station and Cooperative Extension Service, and adopted by the Penn State Cooperative Extension Service

Additional Resources:

CDC:

www.cdc.gov/nceh/lead/default.htm

ATSDR:

www.atsdr.cdc.gov/csem/leadtoxicity/safety_standards.

[ATSDR - Environmental Health and Medicine Education.](#)

EPA:

[Lead in Soil, August 2020 EPA](#)

For additional information contact:

Idaho Department of Health and Welfare
Environmental Health Program

Healthandwelfare.idaho.gov/health-wellness/environmental-health

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