Lead in Soil

August 2023



Why is there lead in soil?

Small amounts of lead may occur naturally in soil. However, soil can become contaminated with lead in different ways:

- When lead paint peels and flakes off the outside of old buildings.
- From deposits left by automobile exhaust when leaded gasoline was widely used.
- From industrial sources, such as lead battery manufacturing plants or brass foundries.

Lead is a highly toxic metal that has commonly been used in many household and industrial products — such as paint, solder, batteries, and brass. There is **no safe level of lead in the body**. Lead can harm anyone, but babies, young children and people who are pregnant are at special risk. A child with lead poisoning doesn't look or act sick, but lead can cause serious health problems.

The Health Department recommends all children get tested for lead at ages 1 and 2. Talk to your child's health care provider about testing your child for lead.

How can I find out if there is lead in the soil around my house?

Areas in your yard where children play can be tested for lead. Many samples need to be taken to find out the extent of contamination.

Testing for lead in soil needs to be done by a certified lab. Call the Healthy Homes Lead Poisoning Prevention Program at 802-863-7220 or 800-439-8550 (toll-free in Vermont) to find out which labs are certified.

If you live in an older home with peeling exterior paint, you may decide to test the paint. This test can also be done by one of the certified laboratories. If the paint contains lead, you should assume the soil is also contaminated.

What does my soil test result mean?

Soil with a lead content greater than or equal to 41 milligrams of lead per kilogram of soil (mg/kg or ppm) is considered potentially hazardous.

If the soil sample was taken from an area of bare dirt where children play, you should limit their exposure to the area.

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How can I protect my children from lead in soil?

You can reduce your children's exposure to lead in soil several ways:

- Keep children from playing near the foundations of old houses.
- Plant shrubs, bushes or grass in the contaminated area.
- Build a covered sandbox and fill it with clean sand. Encourage children to play in the sandbox instead of in the dirt.
- Cover the contaminated soil with cement, thick mulch, gravel or another material to create a protective barrier between the soil and your children.
- Till the soil to dilute the lead concentration, then plant ground cover, grass or shrubs.
- Leave shoes outside the home to avoid tracking contaminated soil inside.
- Wash your children's hands and face after outside play, especially before eating or drinking.

Should I be concerned about my vegetable garden?

Locate your garden away from old buildings — especially driplines — and roads. Prepare the garden site by adding lime and compost, then till.

If soil test results show elevated levels of lead, it may be best to plant only crops like tomatoes, peppers, beans or peas. These crops take up less lead than leafy vegetables or root crops. Wash any produce thoroughly before eating. Contact the University of Vermont Extension Master Gardener for more information at UVM.edu/mastergardener.

Questions?

For more information about lead in soil, call the Healthy Homes Lead Poisoning Prevention Program at 802-863-7220 or 800-439-8550 (toll-free in Vermont) or visit www.healthvermont.gov/lead.