

Lead in Soil

Lead is a highly toxic metal that has commonly been used in many household and industrial products like paint, solder, batteries, and brass. Lead can cause serious health problems, especially for infants, children and pregnant women. Too much lead in the human body can cause damage to the brain, kidneys, nervous system and red blood cells.

The only way to find out if someone has been exposed to too much lead is by a blood test. Your local Department of Health may recommend that all children be tested for lead at ages 1 and 2. Your health care provider may advise you to have your children tested more often.

Why is there lead in soil?

In some areas, soil has been contaminated by lead paint flaking from the outside of old buildings. Lead in soil also comes from the deposits left by automobile exhaust when leaded gasoline was widely used. Small amounts of lead may occur naturally in soil. Some lead contamination comes from industrial sources like lead battery manufacturing plants or brass foundries.

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. To find out the extent of contamination, many samples need to be taken. The results of one or two samples are not enough to determine the extent of the problem.

The Health Department can supply you with a list of certified laboratories that perform this type of testing. Once you have selected a certified laboratory, call for directions on how to collect and submit samples.

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 may assume that the soil is contaminated as well.

What does my soil test result mean?

Soil with a lead content greater than or equal to 400 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 take steps to limit their exposure to this area.

How can I protect my children from lead in soil?

- 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. This will create a protective barrier between the contaminated soil and your children.
- Till the soil to dilute the lead concentration, then plant ground cover, grass or shrubs.

- Have people leave shoes outside the home to avoid tracking contaminated soil inside.
- Wash your child's hands and face after outside play, especially before eating.

Should I be concerned about my vegetable garden?

Locate your garden away from old buildings 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 fruit 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.