



Frequently Asked Questions About Lead and Garden Soil

1. How can I tell if there is lead in my soil?

All soil contains some level of lead, which is called the background level. The only way to tell if the lead level is above background amounts is to test for it. Because all soil contains some lead, it is important to avoid accidentally swallowing it.

2. What might cause soil lead levels to be higher than the background level?

There are a few situations that might cause higher soil lead levels:

- If you live in an area close to a street that had a lot of traffic on it when gas had lead in it. Most gas was unleaded by the mid-1980s.
- If you live in an urban or industrial area. These areas are more likely to have soil lead levels that can be a health concern.
- If you live in an older house built before 1978. Lead was taken out of paint in 1978, but lead is still present in the paint that remains on many homes, though it may be under several coats of newer lead-free paint. Outside, the concern is the older paint may have chipped off the house and landed in the soil close to the house.
- You live on land that was formerly a fruit orchard. Pesticides that contained lead were commonly used in orchards to control insects from the late 1800s through the 1950s. Lead can remain in the soil if the soil was not removed.

3. If I want to purchase 'clean soil' for raised beds or container gardening, how do I know it does not contain lead?

To know for sure, the soil would have to be tested by a lab. One organization that provides soil lead testing is Pennsylvania State University. You can find the fee schedule and contact information on the [PSU Environmental Soil Testing website](https://agsci.psu.edu/aasl/soil-testing/environmental) (URL: agsci.psu.edu/aasl/soil-testing/environmental). (There may be other labs that offer soil testing. MDHHS does not endorse this lab or any other.)

4. Should I water my garden with water that has tested positive for lead?

Irrigating (watering) your garden with lead-contaminated water does not significantly increase soil lead levels. If you are concerned about watering with lead-contaminated water, you can purchase a lead filter that attaches to your garden hose or purchase a rain barrel to make a rainwater catchment system.

5. What ways can my family and I be exposed through gardening and the soil around my house?

- Children can be exposed to lead in soil by swallowing or breathing in lead-contaminated soil while playing.
- Lead-contaminated soil particles can also be brought inside as lead dust on shoes, clothing, or pets.
- You can accidentally swallow lead when you eat unwashed fruits and vegetables grown in or near lead-contaminated soil.

- Outside water faucets are not designed to deliver safe drinking water. Drinking from an outside faucet or hose can have high amounts of lead or other contaminants.

6. Who is most at risk from lead in soil?

- People who live in homes built before 1978, especially children.
- Children are more at risk because they:
 - Eat and drink more based on their body size than compared to adults.
 - Breathe faster than adults and, as a result, breathe in more lead dust particles than adults.
 - Absorb four to five times more of the lead they swallow than adults.
 - May be missing key nutrients in their body, such as calcium and iron. The body mistakes lead for nutrients and holds onto it.
 - Often put their hands, which may have lead from soil, in their mouths.
- Fetuses and breastfeeding babies can be exposed to lead during pregnancy or through breastmilk. See this fact sheet to learn more about lead, pregnancy and breastfeeding: [Protecting You and Your Child From the Harmful Effects of Lead](https://bit.ly/Lead-and-breastfeeding-pregnancy) (URL: bit.ly/Lead-and-breastfeeding-pregnancy).
- People with pica. Pica is the craving to eat nonfood items such as dirt, paint chips, and clay. Pica is most common in 1- and 2-year-old children and usually goes away as they get older. Pica has also been observed in adults, especially pregnant women. Pica is sometimes a result of a nutritional shortage, such as iron-deficiency anemia.
- Read more about health and lead at MDHHS's webpage, [Lead and Your Health](https://michigan.gov/mileadsafe/learn/lead-and-your-health) (URL: michigan.gov/mileadsafe/learn/lead-and-your-health).



7. Is it okay for my child to garden with me?

Small children are more likely than older children to accidentally swallow soil. Depending on the level of lead in your soil, you may want to wait until your child is older to invite them into the garden. Model safe gardening practices, like using gloves, washing hands after gardening, and taking off shoes before walking into the living area of the home.

8. What precautions can I take to prevent my pet from tracking soil and lead into the house?

If your soil is covered with grass or mulch, pets are not likely to get lead on their paws. Keeping pets away from bare soil is a good way to ensure that they do not track it into the house.



**Call us with your other questions about lead in soil at
800-648-6942.**

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