

A top-down view of a garden bed with dark brown soil. Various gardening tools are scattered around: a metal trowel, a pitchfork, and a small shovel. There are also some green plants, including a basil plant and some leafy greens in a small pot.

How to Garden Safely When You Are Concerned About Lead in the Soil

It is normal for soil to have some lead, but it can reach harmful levels when it is contaminated by other sources of lead. Extra care to avoid lead should be taken if your home:

- Was painted with **lead-based paint**. If your home was built before 1978, it may have been painted with paint that has lead in it. Lead paint may have chipped off and landed in the soil next to the house.
- Is near a **historically busy roadway**. Until the mid-1980s, car exhaust released lead into the air, which settled onto the soil around heavily traveled roadways.
- Is near **factories or businesses that use lead**. Lead can be released into the air through different industrial activities, such as the production of iron and steel; lead-acid battery manufacturing; or the burning of solid waste. When lead is released into the air, it may travel long distances before settling onto the soil.
- Is **built on an area 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.

How lead from garden soil can get into your body

- Lead can get into your body when you breathe in or swallow soil that has been contaminated with lead from paint chips, dust, or air pollution.
- Children can get soil in their mouth and swallow it when playing outdoors.
- People and pets can track lead-contaminated soil into your home.
- People can also be exposed to lead in the soil through fruits and vegetables grown in lead-contaminated soils.
 - Some plants may take in some of the lead from the soil as they grow.
 - It is sometimes difficult to wash fruits and vegetables well enough to be sure you've removed all the contaminated soil.



Gardening practices that can help you avoid exposure to lead

You can take steps to protect yourself and those in your household from lead in soil.

1.



Locate gardens away from heavily traveled streets and painted houses where lead may have chipped off and landed in the soil.

2.



Use mulch in your garden beds to reduce dust and soil from getting on fruits and vegetables.

3.



Cover walkways with grass, mulch, landscape fabric, stones, or bricks to help keep soil off your shoes so that you do not accidentally bring soil into your house or car.

4.



Build raised beds or container gardens and fill them with purchased soil. If you make a raised bed, use a liner to separate the existing soil from the new soil that you put into your bed.

5.



Wear gloves when gardening. Wash hands after gardening and before eating and drinking.

6.



To avoid bringing soil from the garden into the house, take off shoes at the door and leave gloves and gardening tools outside. Store unwashed gardening clothes separately (in a bag, for example) or wash gardening clothes by themselves in a separate load of laundry after each use.

Choosing crops when you are concerned about lead



You are more likely to accidentally swallow small amounts of soil when you eat root crops such as carrots, beets, and potatoes.

- Grow more fruiting vegetables such as tomatoes, peppers, okra, and eggplant.
- Plant vegetables that grow on vines such as peas and beans.
- Grow fruit trees and berries that grow on bushes, such as blueberries and raspberries.

Protect yourself from lead by:

- Washing fruits and vegetables before eating them.
- Getting rid of outer leaves of leafy vegetables like cabbage and lettuce.
- Peeling root vegetables such as carrots, potatoes, and beets.

Raised bed and container gardening

If you want to garden but are concerned about lead in soil, you can build raised beds to reduce the risk that you and your family could be exposed to lead. Building a raised bed can be expensive, but you can use inexpensive materials instead. Use untreated wood, stone, concrete blocks, or bricks. You can even use smaller containers like plastic pots and make a container garden.



If you have questions about lead in soil or how to safely garden, please call 800-648-6942 to talk to an MDHHS staff person.

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