

How Can I Garden Safely

Factsheet #4

YES!

You can still garden after finding you have lead contamination in your soil.

In most cases, you will still be able to garden safely but may need to change HOW and WHAT you are growing.



When to take action

These suggestions should be used if your soil has more than 100 ppm of lead in it.

Build a raised bed²

Raised beds (or garden boxes) are **the best way to garden safely** in soils with moderate (100 to 400 ppm) or high (above 400 ppm) levels of lead. A raised bed creates a barrier between the dirty soil in the ground and clean soil in the box, keeping your plants safe from the lead in the soil below.

Step

1

Build the box frame.

Use clean, untreated, rot-resistance woods (such as Cedar or pine). Do not use wood that was treated with chemicals (called "pressure treated wood") or painted wood. The box should be at least 12 inches tall.

Step

2

Add a barrier.

To protect the soil in the box and your unsafe garden soil from mixing, you need to add a barrier at the bottom of the box. For low soil lead, you can do this with landscape fabric. If there is a high amount of lead, build a wooden bottom or build legs on the bottom of the box.

Step

3

Fill your box with soil and compost

Fill the box with nutrient-rich soil and compost. Using compost keeps your soil healthy and will naturally absorb lead that may enter your raised bed garden. Adding raw organic matter in layers allows compost to be made slowly and continue feeding your garden over time.

Step

4

Maintain your raised bed.

If using landscape fabric, check in spring for rips and replace as needed. Continue adding compost or raw organic matter (seaweed, leaves, hay) every year to reduce risk of plants taking up contamination.

Wash everything grown in your garden

Wash thoroughly to remove all dirt. If the soil is hard to remove, peel the vegetable or remove areas with dirt.

Limit contact with the dirty soil

Leave shoes at the door to prevent bringing dirty soil into your home. Provide other places for kids to play (a sandbox, a public playground).

Cover bare soil

Address bare areas near your garden to prevent contamination from moving around using suitable mulch or ground cover plant such as grass.

Use safe pest control

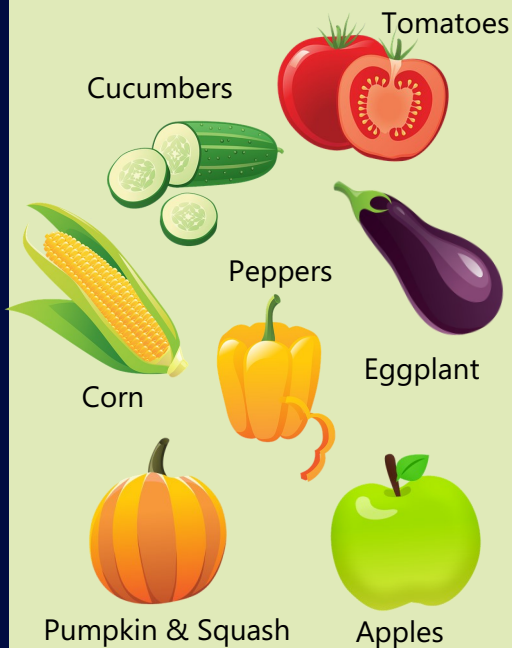
Pesticides contain chemicals that stay in soil and can harm bugs and plants that help your garden. They can also be harmful to humans. Take actions to make your soil healthier to discourage weeds that thrive in poor soil. Choose safe and organic pesticides when necessary. Visit cumberlandswcd.org/yardscape to learn more about specific pests and actions to make healthy soil.

Choose the right plants

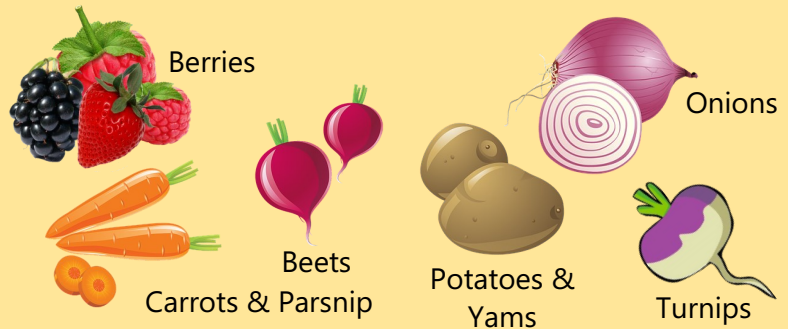
Some plants carry more soil lead than others. Choosing plants that are smooth, easy to wash, or can be peeled are better when there is more soil lead. Less safe plants grow directly in the soil but can be washed and peeled OR grow away from the soil but are hard to wash. Unsafe plants include leafy greens and herbs that grow close to the soil. These can take up lead into their leaves and are hard to wash surface soil off of.



Safe Plants



Less Safe Plants



Unsafe Plants



For more information

¹ EPA, "Technical Review Workgroup Recommendations Regarding Gardening and Reducing Exposure to Lead-Contaminated Soil," (<https://semspub.epa.gov/work/HO/174577.pdf>).

² Lowe's, "How to Build a Raised Garden Bed," (<https://www.lowes.com/n/how-to/how-to-build-a-raised-garden-bed>).

³ EPA, "Lead Poisoning And Your Children," (https://www.epa.gov/sites/production/files/2018-02/documents/epa_lead_brochure-posterlayout_508.pdf).

⁴ EPA, "Fighting Lead Poisoning with a Healthy Diet," (https://www.epa.gov/sites/production/files/2019-10/documents/fight_lead_poisoning_with_a_healthy_diet_2019.pdf).