

Oregon-specific resources

How to test your soil:

Oregon State University, Soil Sampling for Home Gardens and Small Acreages.
<http://ir.library.oregonstate.edu/xmlui/bitstream/handle/1957/18696/ec628.pdf>

Oregon State University, Laboratories Serving Oregon.
<http://ir.library.oregonstate.edu/xmlui/bitstream/handle/1957/20037/em8677.pdf>

Interpreting soil test results:

For health risks contact OHA-Public Health Division at 1-877-290-6767.

For pH, nutrient and soil quality, contact your county extension office.
<http://extension.oregonstate.edu/find-us>

Information on common contaminants:

Washington State University Gardening on Lead and Arsenic Contaminated Soils.
www.ecy.wa.gov/programs/tcp/area_wide/AW/AppK_gardening_guide.pdf

Oregon State University, Yesterdays Orchard Today's Home Legacy Pesticides on Former Orchard Property.
<http://extension.oregonstate.edu/catalog/pdf/ec/ec1513-e.pdf>

Oregon State University, Evaluating and Reducing Lead Hazard in Gardens and Landscape.
<http://ir.library.oregonstate.edu/xmlui/bitstream/handle/1957/19844/ec1616-e.pdf?sequence=1>

Other resources for healthy gardening in urban areas:

Cornell, Soil contaminants and best practices for healthy gardens.
Brownfields and Urban Gardening <http://www.gardeningonbrownfields.org/p.aspx?tabid=26>

Environmental Protection Agency, Brownfields and Urban Agriculture: Interim Guidelines for Safe Gardening Practices. http://epa.gov/brownfields/urbanag/pdf/bf_urban_ag.pdf

Environmental Protection Agency, Reusing Potentially Contaminated Landscapes: Growing Gardens in Urban Soil that has been tested and is clean.
www.clu-in.org/download/misc/urban_gardening_fact_sheet.pdf



<http://healthoregon.org/gardening>

For more information please call toll free: 1-877-290-6767.

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This fact sheet provides basic advice for growing food in areas where there may be concerns about environmental contamination. Learn how you can enjoy the health benefits of gardening while protecting yourself from contaminants commonly found in soil.

Growing your own food provides many health benefits. It encourages a healthy diet and promotes physical activity. It also brings communities together, creates learning opportunities and transforms idled or abandoned land.

Whether you are an urban farmer, a weekend gardener or just growing plants outside your apartment window, start by learning about the soil you will grow in. What used to be there? What may have been left behind? Answers to these questions will help you decide whether to test your soil for contaminants and what to test it for.





Common contaminants found in soil:

Lead and arsenic: These common heavy metals occur naturally. Lead can also be found in soil from old paint (homes painted before 1978), emissions from vehicles (near roadways) and historical pesticide use (former orchards). Levels of lead and arsenic in the soil can be 10–1,000 times higher than what is found in the plants that grow in the soil. Because of this, focus on limiting your exposure to the soil itself.

Pesticides: These include a variety of products used in residential and agricultural settings. Examples include weed killers, bug killers, mold and mildew removers and other chemicals used to control pests. Many residential areas in Oregon were once orchards or farmland. The use of persistent pesticides was common in the 1940s-1970s. Knowing the history of your garden plot can give you information on whether persistent pesticides may be a concern. Using Integrated Pest Management (IPM) techniques decreases the need for pesticides.

Treated wood and railroad ties: These contain chemicals that make them resistant to rot, and should not be placed near food crops. Over time, these chemicals leach into the soil. Consider removing this type of wood if it is already in place. If that is not practical, plant crops at least a foot away from the edge of the wood.

Rain barrel water: If using rain water collected from your roof, consider what your roofing materials are made of. Many standard roofing shingles are made of asphalt and now contain flame retardants and mildew resistant chemicals, in addition to petroleum products. This may be OK for your flower garden, but not for your food crops or your health.

Simple gardening practices for everyone to consider:

- Test your soil based on what you know about the soil you will grow in. Bring in clean soil and use raised beds in areas where levels of contamination cannot be addressed in other ways.
- Plant gardens at least a foot away from the “drip line” of a house or building, where water runs off the roof. This keeps your food away from potential residues coming off roof shingles when it rains and where house painting and scraping activities may have occurred over the years. Also avoid planting crops near utility poles, busy roadways or other sources of potential contamination.
- Improve your soil quality by adding garden amendments intended for food such as composted foods, grass clippings and leaves that are free of pesticides or fertilizers.
- Keep the soil damp while gardening to prevent dust and dirt from collecting on garden foods. Use soaker hoses or water at the base of your plants to minimize splash-back of soil onto plants. This also helps to prevent plant diseases and saves water.
- Take off shoes and wipe any dirt off of your pet before entering your home.
- Wash hands with soap and water right after gardening, even if you use gloves.
- Wash your garden produce to remove dirt. Vegetables like broccoli and leafy greens need to be soaked in water for a few minutes to remove the small amounts of dirt and dust that can “hide” in hard to reach areas. For all other produce, use running water and scrub well before eating.
- Cover bare ground with mulch, landscape fabric, grass or other groundcover plants.
- Teach and encourage children to follow healthy gardening practices.

