



This fact sheet provides basic advice for gardening and farming in urban areas where there may be concerns about environmental contamination.

Growing food in urban environments provides many economic, environmental, social, and health benefits. It promotes food security, brings communities together and makes good use of unused or abandoned land. The act of gardening promotes physical activity and provides fresh and nutritious foods. However, because of the nature of urban and industrial activities in cities, environmental contaminants are sometimes found in urban soil.

Where do I start?

Know your garden plot:

Do you know what your farm or garden plot was used for in the past? Is it near heavy traffic, painted structures or industrial emissions? Do you know anything about the soil? Answers to these questions will help you decide whether to test your soil for environmental contaminants, and what to test it for. Following are some simple gardening practices for everyone to consider, in order to enjoy the many benefits of gardening while avoiding the contaminants sometimes found in soil.





Most garden fruits and vegetables do not easily absorb chemicals. It depends on soil type and pH, types of and concentrations of chemicals, organic matter in the soil, levels of nutrients like calcium, plant type, and plant growth stage. Some produce such as tubers and root vegetables are more likely to absorb chemicals into the edible portions, but most plants do not absorb chemicals into the fruits or leaves. Careful planning and specific actions can reduce the exposure to and uptake of many chemicals by plants.

There are several ways to do this:

- Keep the soil damp while gardening to limit kicking up dust where you can breathe it in and where it can collect on garden foods. Covering bare ground also limits exposure to soil by creating a physical barrier. Examples may include mulch, landscape fabric, grass or other groundcover plants.
- Consider investing in soaker hoses, or water at the base of a plant. This minimizes splash back that can occur when watering plants from above, and can help prevent plant diseases and save on water.
- Plant your crops away from buildings, utility poles, busy roadways or other sources of potential contamination.
- Do your best to remove the dirt from your edibles. Vegetables like broccoli and leafy greens need to be soaked in water for a few minutes in order to remove the small amounts of dirt and dust that can “hide” in hard to reach areas. For all other veggies, use running water and scrub them well before eating them. This is especially important for root crops.
- Avoid planting root crops in soil with known lead contamination.





Treated wood and railroad ties:

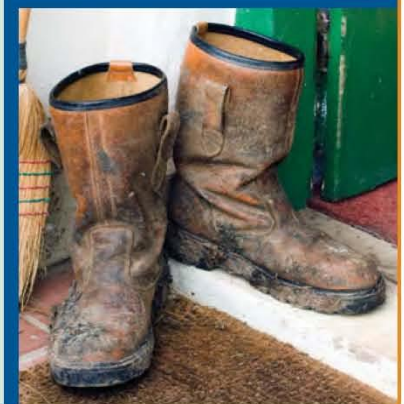
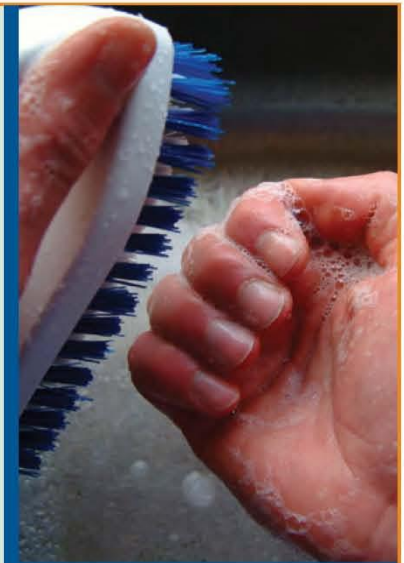
Treated wood and railroad ties are not a good choice to place near food crops because they contain chemicals that make them resistant to rot. Over time, these chemicals can leach into the soil. Consider removing this type of wood if it is already in place. If that is not practical, plant crops at least a foot away from the edge of the wood. As an alternative, you can use a plastic liner to create a barrier between the wood and the garden soil.

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.

Other things to consider:

- Plant gardens at least a foot away from the “drip line” of a house or building, which is where water runs off the roof. This keeps food crops away from potential chemical residues coming off roof shingles, or from where house painting activities may have occurred over the years.
- Improve your soil quality by adding composted foods, grass clippings and leaves that are free of pesticides or fertilizers, or garden amendments intended for food crops.
- Test your soil if you have concerns about contaminants (see resources on the last page.)
- Take shoes off when entering the home.
- Wash hands right after gardening, even if you use gloves.
- Children are more sensitive to environmental contaminants and need teaching and encouragement to become healthy urban gardeners.
- Animals that play in or around the garden can collect soil on their fur and feet.
- Bringing in clean soil and using raised beds is an option in areas with known high levels of contamination.



HEALTHY URBAN GARDENING



HOW TO START A COMMUNITY GARDEN

1. Form a garden planning committee
2. Identify resources (funds, people, equipment)
3. Approach potential sponsors
4. Choose a site
5. Prepare and develop the site
 - Research property history
 - Analyze soil samples
 - Determine site clean-up and garden design
 - Plan the garden design for children, other sensitive groups, and those with special needs
6. Decide on membership, identify management, roles, and responsibilities
7. Prepare volunteer crews and gather needed materials and equipment
8. Write garden rules and bylaws
9. Determine insurance needs
10. Establish communication network for members

GEORGIA RESOURCES

UGA Cooperative Extension
University of Georgia
www.extension.uga.edu
(800) ASK-UGA1

UGA Agriculture Testing Laboratory
<http://aesi.ces.uga.edu>
(706) 542-5350

USDA Alternative Farming Systems Information Center
<http://afsic.nal.usda.gov>
(301) 504-6559

EPA Urban Agriculture Program
www.epa.gov/brownfields/urbanag

GEPD Brownfields Program
www.gaepd.org/brownfields
(404) 656-2833

American Community Garden Association
www.communitygarden.org
email info@communitygarden.org
(877) ASK-ACGA

Community Food Security Coalition
www.foodsecurity.org
(310) 822-5410

Agency for Toxic Substances and Disease Registry
www.atsdr.cdc.gov/sites/brownfields
(800) 232-4636



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