

## Good gardening habits

- ✓ Wear gloves and shoes while gardening, and remove them before entering the house.
- ✓ Avoid gardening on windy, dusty days, or cover face with a dust mask or bandana.
- ✓ Moisten soil before gardening to control dust.
- ✓ Cover bare patches of ground with a soil cover such as gravel, wood mulch or plants.
- ✓ Don't smoke, eat or drink while gardening.
- ✓ Wash soil off your skin and brush soil off clothes after gardening.
- ✓ Wash hands after gardening.
- ✓ Use a scrub brush to clean dirt from under your nails.

## Enjoying fruits and vegetables

Eating dusty or muddy fruits or vegetables can cause you to accidentally eat soil.

- ✓ Wash fruits and vegetables with a scrub brush, making sure all dirt is removed.
- ✓ Peel carrots, potatoes, and other root crops. Throw away the peelings.

## For more information

Visit Public Health – Seattle & King County's web site:

<http://www.metrokc.gov/health/tsp/arseniclead.htm> or call the Hazards Line (206) 296-4692

Consult "Gardening on Lead and Arsenic Contaminated Soils," by Frank J. Peryea, Ph.D. Washington State University soil scientist and horticulturist. The article may be obtained at: <http://cru.cahe.wsu.edu/CEpublications/eb1884/eb1884.pdf>

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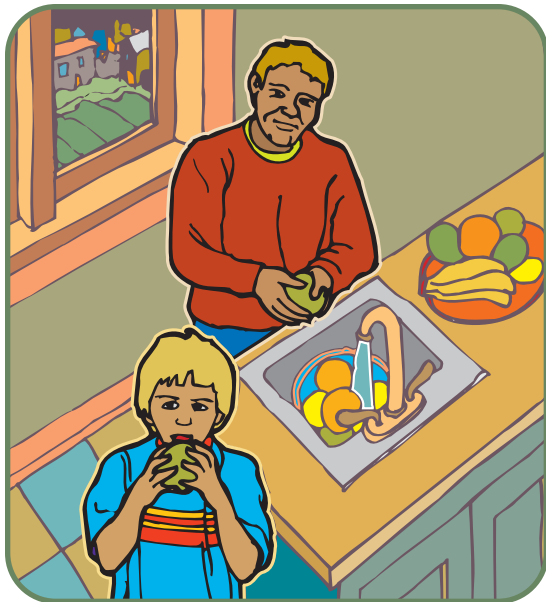
# Healthy Gardening in King County



## Gardening in Soils with Heavy Metals

## How soil can become contaminated

Soil can become contaminated from past industrial use, heavily traveled roadways, peeling and weathering lead-based paint, and past farming practices. Another source of arsenic and lead in King County soils is the now-closed ASARCO smelter that operated for about 100 years near Tacoma. Emissions from the smelter were carried by wind and deposited over a wide area.



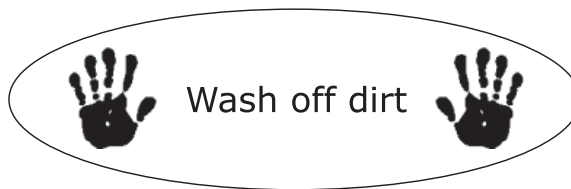
## Exposure

Most people do not eat soil on purpose, but when you work outdoors you take in small amounts of soil and dust as you breathe and swallow. Arsenic and lead are not well absorbed through the skin. People at greatest risk are those exposed to soil on a regular basis including gardeners, landscapers, children, and those who work with livestock.

## Plan and manage your garden to reduce uptake of metals.

*The more you know about your soils the healthier your garden can be.*

- ✓ Create gardens away from driveways and roads, and away from buildings that could be sources of lead paint dust or chips
- ✓ Garden in containers or raised beds:
  - ☞ Build raised beds using cedar, plastic lumber, or concrete, and use ceramic pots for container gardens. Do not use arsenic-treated (CCA) lumber for raised beds.
  - ☞ Place a geotextile fabric (special plastic sheet) over contaminated soils and underneath new soil you bring in. This will help prevent plant roots from growing down into contaminated soil. However, you may need to provide for bed drainage.
  - ☞ Add organic material to raised beds, and mix soils well. Compost, manure and other organic additions are good for plants and they dilute contaminated soil.
  - ☞ Keep the soil at a neutral pH of 7.0



## Health effects

Gardening in soil contaminated with metals is unlikely to cause sudden illness. However, if exposure occurs over many years, metals may build up in the body and cause harm. You can reduce the chance that you may become ill from long-term exposure by taking the precautions listed in this brochure.

## How to tell if soil has heavy metals

Most of us do not know all of our property's past uses or possible sources of contaminants. If you are concerned about the metal levels in your soil, soil testing is an option. For information on how to test your soil, and for links to soil testing laboratories, visit our website at:

<http://www.metrokc.gov/health/hazard/residenttesting.htm>

