

# LEAD IN SOIL: WHAT YOU NEED TO KNOW

## Did you know?

Lead can be found in the air, water, soil, and in the paint of old homes.

Flaking paint, years of leaded gasoline, and old industrial operations have all caused a build-up of lead in soil.

Children face the greatest risk from lead exposure. Lead exposure can lead to hyperactivity, reduced IQ, ADHD, and other neurological problems.

Urban environments (like Baltimore City) often have higher levels of lead in soil than other places.

Contaminated soil can be brought into the home on clothing, shoes & tools.

## Testing

Both private and university soil test labs can determine lead levels in soils.

Soil laboratory results will be returned listing the parts per million (ppm) of lead.

Unfortunately, there are no legal regulations for lead levels in soil.



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## What do the numbers mean?

Level	Risk	Risk
50 ppm	Most soil naturally has small amounts of lead in it.	LOW
400 ppm or less	No treatment is necessary for most uses by children, adults and pets.	LOW
400-2000 ppm	Treatment is recommended for use as a children's play area and for gardening.	MODERATELY HIGH
2000-5000 ppm	Treatment is necessary for any recreational use. Unsafe for all gardening.	HIGH
5000 ppm or more	Must be treated with permanent barrier. Unsafe.	VERY HIGH

## Baltimore<sup>1</sup>: Results from a Soil Sample Study

30 percent of Baltimore homes sampled had an *average* level of 400 ppm of lead in the soil

Over 50 percent of Baltimore homes sampled had *at least one area* of the yard with soil lead levels above 400 ppm.

<sup>1</sup> Spatial distribution of lead in urban residential soils. Presented by Kirsten Schwarz, Rutgers University.

Properties at greater risk for high levels of lead in soil:

- Old (pre-1978)
- Close to a major road

### What can you do?

**Tip #1:** Locate your garden or child's play area as far away from busy streets or highways and older buildings as possible.

**Tip #2:** Locate your garden or child's play area away from drip lines.

**Tip #3:** Use a heavy-duty doormat and leave your shoes at the door.

**Tip #4:** Wash your child's hands after playing outside.

**Tip #5:** Wash and peel fruits and vegetables. Use a small amount of vinegar with water to help remove excess soil.

**Tip #6:** In high-risk lead areas, grow tomatoes, eggplant, peppers and squash instead of leafy vegetables.

**Tip #7:** No food crops should be grown in a soil that is contaminated (400 ppm or higher). Consider container gardening or using raised beds filled with purchased soil instead.

**Tip #8:** Soil with 1,000 ppm or higher of lead is considered hazardous. Keep children away from this area. Call for additional help.



### For More Information

**Baltimore City Health Department  
Healthy Homes Division**  
Phone: 443-984-2460

**University of Maryland  
Cooperative Extension's Home &  
Garden Information:**  
Phone: 1-800-342-2507  
Web: <http://baltimore.umd.edu/>

### To Get Your Child Tested

Contact your child's provider and ask for a blood test.

Call the Healthy Homes Division to find out about free testing.  
Phone: 443-984-2460

### To Get Your Soil Tested

Call University of Maryland Cooperative Extension's Home & Garden Information Center to get a list of regional soil test labs.  
Phone: 1-800-342-2507