

Urban Gardening, Children, and Lead in Soil



The most common way that a child can be exposed to lead during gardening is by eating contaminated soil. A child could also eat fruits or vegetables from the garden that still have soil on the surface. This is most likely to happen with root crops, such as carrots.

The research for best practices to limit lead exposure from vegetable gardening is ongoing, and the long-term benefits from the current recommended practices are unclear. The following list summarizes practices suggested by the University of Wisconsin Extension and Brown University's Superfund Outreach Program that are thought to limit exposure to lead while vegetable gardening:

Remediation of Lead-Contaminated Soil:

- Physically remove the soil and replace it with clean soil, as in raised bed gardens¹

Treating the Soil:

- Keep the soil's pH (acidity level) above 6.5 and phosphorous levels high to make any lead less accessible to plants.
- Adding organic matter to soil so that it makes up about a third of the total amount of soil may reduce the availability of lead to plants.^{1,2}

Protecting yourself and children:

- Use mulch, landscape cloth, or another type of covering for bare areas to prevent the turning up of dust.
- Wear gloves when working with soil. If the activity generates dust, you can also wear a mask.
- Wear shoes in the garden, and take them off when you go in the house.
- If the soil is dusty, you can dampen with a hose before gardening.²

Washing:

- Wash all vegetables thoroughly
- Wash and peel root crops like carrots or potatoes.
- You can use soap or a mixture of vinegar and water (1% vinegar, 99% water) to rinse vegetables.¹

¹ Soil Contaminants in Community Gardens. 2011. John Folstad, Sharon Long, Doug Soldat. Extension Bulletin A3905-03. <http://hort.uwex.edu/articles/soil-contaminants-community-gardens>

² ENACT: The Bay Street Area Raised Bed Gardens Project. Brown University Superfund Basic Research Program Community Outreach Core. <http://www.brown.edu/Research/SRP/RAISED%20GARDEN%20BEDS%20PAMPHLET.pdf>

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Urban Gardening and Soil
Contaminants Study

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16th street community Health
Center and
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Local Help with Lead

For questions about children and lead, or to learn about a child's blood lead history, call:

Milwaukee Health Department
Childhood Lead Poisoning
Prevention Program: 414-286-5987

Lead Testing for Children

The Health Department encourages that testing be done by the child's Primary Care Provider (doctor or clinic). For children without health insurance, the test can be done by one of the Milwaukee Health Department's Family Health Clinics, listed below:

Keenan Health Center
3200 N. 36th Street (53216)
286-8620

Northwest Health Center
7630 W. Mill Road (53218)
286-8620

Southside Health Center
1639 S. 23rd Street (53204)
286-8620

Milwaukee Health Department Women, Infant, and Children (WIC) programs and some Head Start programs may also offer lead tests to their clients.