

General Guidelines for Soil Lead Contamination

Total content	Contamination level	<u>Recommended Precautions</u>		
		Ornamentals/Lawns	Vegetable Gardens	Play areas
< 50 ppm	Normal Background	None needed	None needed	None needed
50 – 300 ppm	Slight	None needed	Wash all vegetables. Wash & peel root crops.	Move play area to uncontaminated site.
300 – 500 ppm	Moderate	None needed	Fruiting vegetables OK. Avoid leafy vegetables and root crops. Wash all produce thoroughly. Maintain soil pH 6.5-7.0, organic matter 8-10%.	Move play area to uncontaminated site. Have blood lead level checked.
> 500 ppm	Heavy	Avoid breathing dust. Mulch or maintain grass cover to minimize dust, rain spatter, and direct contact.	Move garden to uncontaminated area or put down a barrier and bring in clean soil for a new raised bed garden.	Move play area to uncontaminated site. Have blood lead level checked.

These are only general suggested guidelines, since every case and the potential for exposure to or intake of lead is different. Lead contamination is first and foremost a concern with children, since they are the most sensitive to lead toxicity and because of their greater likelihood of exposure from play habits. To add some perspective, the soil levels listed above are nowhere near those in lead paint chips, which may contain more than 3 to 5 percent lead (30,000-50,000 ppm). However, prolonged exposure to areas of heavy soil contamination can significantly add to the total intake of lead for those individuals working or playing in it or eating unwashed produce from it. Our ultimate purpose is not to alarm, but to inform you of a potential problem.

Be aware that the lead level in a contaminated area will not decline significantly with time. Resampling the same area in the future may show an increase or decrease in lead, not because more has been added or lost, but because contaminated soils tend to be quite variable from spot to spot. Around buildings, the lead level will be highest at the foundation and decrease outward. To remove lead requires that the soil itself be removed or covered with some sort of barrier, such as grass or mulch, to limit contact with soil and dust. If you have a heavily contaminated soil in an area of high foot traffic or activity, it is advisable to set up a sampling pattern to better define the extent of the contaminated area.

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