



## Alameda County Lead Poisoning Prevention Program

510-567-8280  
[www.aclppp.org](http://www.aclppp.org)

# A Key to Healthy Housing

## LEAD-SAFE URBAN GARDENING

In the Bay Area, soil is often contaminated with lead. Lead poisoning is a serious problem for children because it causes brain damage, behavior problems and other health problems. The primary source of lead exposure for adults and children is paint from pre-1978 buildings. Lead dust may be inside a home and outside in the soil. Children should not have contact with contaminated soil in play areas and gardens.



### How to reduce lead exposure in a vegetable garden

While a low level of lead is naturally present in all soil, most soil in urban areas has an increased lead level due to the prior use of leaded gasoline and lead paint on buildings built before 1978. Lead paint that has flaked off or was scraped, sanded or disturbed during renovations any time in the past, may still be contaminating the soil.

#### Protect young children from bare soil

- Cover all bare soil in pathways, play areas and non-growing areas. Don't track dirt inside.

#### Carefully choose the garden location

- Consider all possible historic sources of lead and other contaminants on your property.
- Avoid planting in or using soil from locations next to buildings built before 1978.
- Consider using raised beds. Make sure all containers are made from lead-free materials.

#### Test or assume there is lead in the soil

- Have your soil tested or assume it is contaminated and bring in clean soil.
- There is no universally-accepted safe level of lead in vegetable garden soil. Refer to the **Lead in Soil Guidelines** chart and **Tips for a Safer and Healthier Garden** (on the reverse side).



Good nutrition helps reduce children's absorption of lead.

#### Children in the Garden

If your garden is accessible to children, limit their direct contact with the soil, provide hand-washing stations, clean garden toys, don't track dirt inside and wash all vegetables before tasting.

**All children should be tested for lead exposure at age 1 and 2, and more often, if necessary. Talk to their doctor about your child's risk level.**

#### Apply Today!

Alameda, Berkeley, Emeryville and Oakland pre-1978 residential property owners are eligible to receive a free In-Home Consultation.

For more information, visit [www.aclppp.org](http://www.aclppp.org) or call (510) 567-8280.

## Tips for a Safer & Healthier Garden

- ❑ **Cover bare soil in beds and in non-growing areas** such as pathways to reduce children’s exposure to soil, and to reduce soil splash, dust and tracking of soil into the home. Different materials are available such as stones, wood chips, grass, or pavers for paths. Leave gardening shoes outside.
- ❑ **Use or build raised beds and bring in new soil.** Have your soil tested to verify low lead levels. Add in new compost or other organic materials often.
- ❑ **Do not use pressure-treated lumber** or painted materials to create raised beds or greenhouses. Also, avoid use of railroad ties, telephone poles, tires, old cast iron bathtubs, old painted lumber, old painted windows, or other painted recycled products.
- ❑ **Maintain a good soil nutrient balance.** Plant lead concentrations typically decrease with increasing soil pH. Use of phosphate containing soil amendments such as triple superphosphate can reduce plant uptake of lead.
- ❑ **Always wash hands after gardening and handling livestock.** Children and adults, who play or work in the garden or with livestock should wash their hands often.
- ❑ **Avoid bringing soil and livestock waste into your home after gardening** by washing garden tools and harvested vegetables and changing your shoes before going indoors.
- ❑ **Thoroughly wash and/or peel garden produce** and don’t sample from the garden. This is especially important for leafy greens and root vegetables, which are more likely to have soil particles on their surfaces.

### Lead In Soil Guidelines

Consider these guidelines when establishing a vegetable garden. Be aware that test results can vary greatly in different locations within the same yard. Hire a lead certified risk assessor.

10-50 parts per million (ppm)	This is the naturally present level of lead in most surface soil.
Less than 300 ppm	University of Minnesota publication, “ <i>Lead in the Home Garden and Urban Soil</i> ”, states this is “a safe level” for growing produce.
400 ppm or greater	Federal & California agencies set this as the “hazard level for bare soil in play areas”.
1000 ppm or greater	California agencies consider this the hazard level for bare soil in non-play areas.
1200 ppm or greater	Federal agencies consider this the hazard level for bare soil in non-play areas

### Carefully choose crops

- ❑ *Below-ground crops* (potatoes, radishes, beets, carrots) take up the most lead and also are a concern because lead in soil adheres to the skin.
- ❑ *Leafing crops* (lettuce, kale, spinach) take up some lead and may have lead containing dust on the edible leaves.
- ❑ *Above-ground crops* (strawberries, beans, squash, tomatoes, fruit trees) are the least likely to accumulate any lead.

For a list of local labs that can test soil samples, please go to our website at:  
[www.aclppp.org](http://www.aclppp.org) or call 510-567-8280.

**Resource Links**  
**Alameda County Master Gardeners:**  
<http://acmg.ucdavis.edu/>  
**Bay-Friendly Gardening:**  
[www.stopwaste.org](http://www.stopwaste.org)