

LEAD-SAFE GARDEN PRACTICES

San Francisco Department of Public Health
Children's Environmental Health Promotion

Gardening is a healthy activity for kids... but many soils in San Francisco are contaminated with harmful lead. Learn how to prevent exposure to lead from gardening, soil, paint and dust found around the garden.

How Can Kids Get **LEAD** *into* THEIR BODIES *from* GARDENING ?

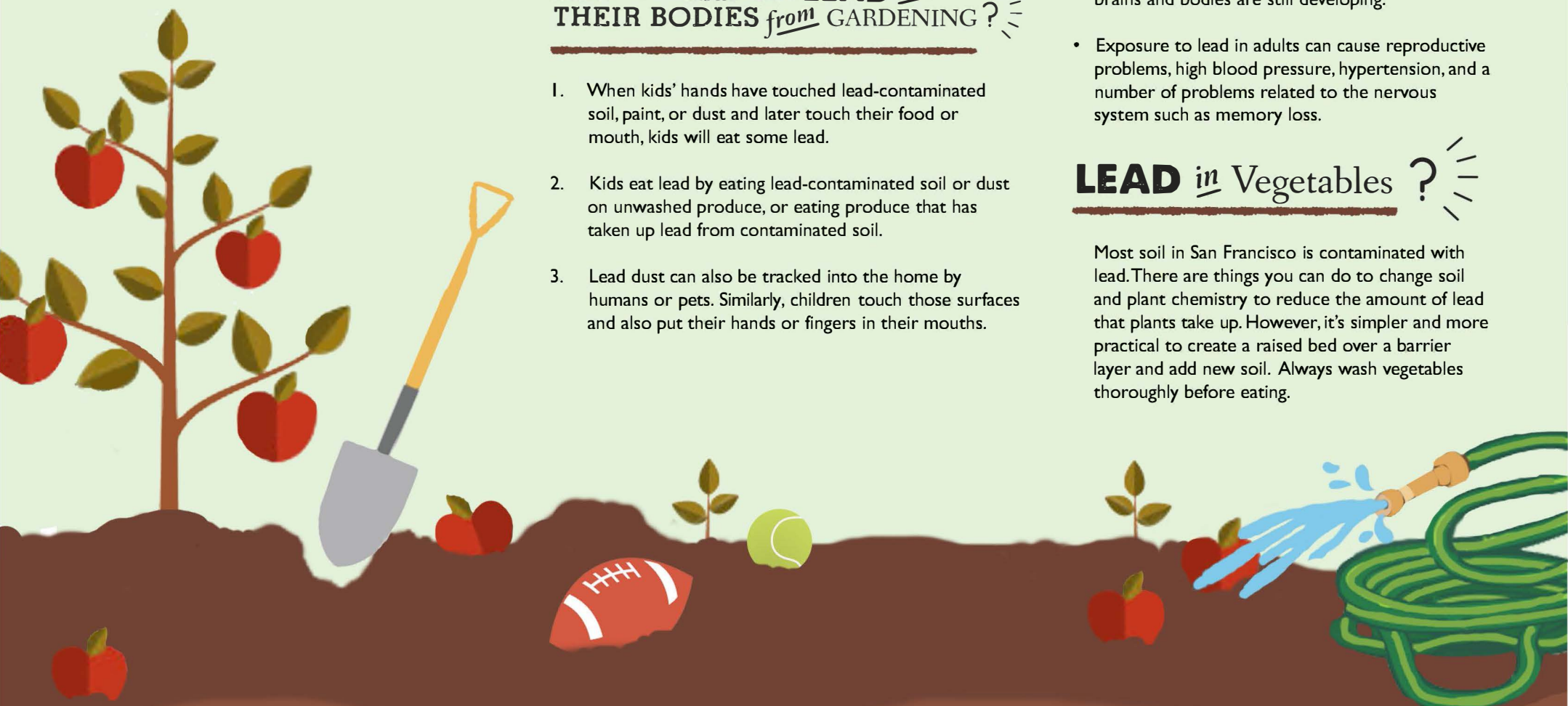
1. When kids' hands have touched lead-contaminated soil, paint, or dust and later touch their food or mouth, kids will eat some lead.
2. Kids eat lead by eating lead-contaminated soil or dust on unwashed produce, or eating produce that has taken up lead from contaminated soil.
3. Lead dust can also be tracked into the home by humans or pets. Similarly, children touch those surfaces and also put their hands or fingers in their mouths.

What's Wrong *with* **LEAD**

- Lead from older house paint, gasoline, and industrial emissions has found its way into soil in our gardens and it doesn't break down over time. As families garden, repeated exposure to lead can occur and accumulate in the body.
- Exposure to lead can contribute to learning and behavioral problems in children because their brains and bodies are still developing.
- Exposure to lead in adults can cause reproductive problems, high blood pressure, hypertension, and a number of problems related to the nervous system such as memory loss.

LEAD *in* Vegetables ?

Most soil in San Francisco is contaminated with lead. There are things you can do to change soil and plant chemistry to reduce the amount of lead that plants take up. However, it's simpler and more practical to create a raised bed over a barrier layer and add new soil. Always wash vegetables thoroughly before eating.



For More Information on **LEAD**

For more information on lead and the lead hazard guidance for urban gardeners document:

- www.sfdph.org/dph/EH/CEHP/Lead/default.asp
- www.sfdph.org/dph/EH/CEHP/Lead/InfoGardeners.asp

For proper disposal of lead-contaminated soil or plants contact Recology at:

- www.recology.com/recology-san-francisco/hazardous-waste

For OMRI-certified distributors:

- www.omri.org/omri-lists

Choose products with this OMRI certification:



Avoid products with this caution statement:

"The lead level of this product exceeds 90ppm."

Use EPA-Accredited lead testing laboratories:

- www.epa.gov/lead/national-lead-laboratory-accreditation-program-nllap

For a list of CDPH Lead-Certified Supervisors:

- www.cdph.ca.gov/Programs/CCDC/DEOD/CLPPB/Pages/find_lead_prof.aspx

For information on other potential soil contaminants and creating raised beds (University of Minnesota Extension):

- www.extension.umn.edu/garden/yard-garden/landscaping/raised-bed-gardens

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BEST PRACTICES for Reducing **LEAD EXPOSURE** from GARDENING

1. Be mindful of potential lead hazards when choosing a space to garden. Evaluate the surrounding space for peeling paint and paint chips. Avoid placing gardens near busy roadways. Don't use recycled materials that have been painted or treated with preservatives to create raised beds. You should also avoid using old bathtubs and tires as planters.
2. Garden in new soil whenever possible, such as gardening in a planter box or adding 12-18" of new soil on top of a barrier over the existing soil. If possible, you should buy new soil materials that have been certified as organic by the CA Department of Food and Agriculture (CDFA) AND Organic Materials Review Institute (OMRI). On the packaging look for the OMRI certification without a "caution" statement like the one pictured to the left.
3. You can test the new soil to assure that it has less than 80 parts per million (ppm) of lead. For more information, refer to the lead hazard guidance referenced on the left.
4. Wear gloves.
5. Wash hands:
 - before eating anything or placing anything in your mouth
 - before taking a break
 - after gardening
6. Wash all produce harvested in the garden before eating.
7. Prevent future soil contamination---look for old and flaking paint from neighboring buildings and hire CDPH Lead-Certified Supervisors to make repairs.

Gardening *in a* **RAISED BED**

Even if you test your soil, keep in mind that test results can vary in different locations within the same yard. It's safer to assume the soil is contaminated and bring in clean soil or build a raised bed.

Look for Potential Lead Hazards



Consider Historic Sources of Lead

Use a Raised Bed or Create a Barrier

Bring in Clean Soil



POPULATION HEALTH DIVISION
SAN FRANCISCO DEPARTMENT OF PUBLIC HEALTH