

# Reducing the Risk from Lead Contaminated Soil After Wildfires

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ENVIRONMENTAL HEALTH



Wildfires can leave behind ash, debris, and contaminated soil that may contain harmful substances, such as lead, arsenic, and other chemicals. Exposure to these materials can pose serious health risks, especially to children, pregnant individuals, seniors, and those with existing health conditions. The most common way people are exposed is through hand-to-mouth contact after touching contaminated soil or surfaces.

**Lead** is a harmful heavy metal that, if present, can be released during wildfires when homes, buildings, or other structures burn. It may become airborne during a fire as toxic lead vapor or settle in ash and soil.

## Exposure to hazardous wildfire residue can occur through:

- Handling or digging in soil contaminated by wildfire ash without protection.
- Breathing in ash or fire dust during cleanup or on windy days.
- Tracking soil or dust indoors on shoes, clothes, or pets.
- Eating produce from gardens or yards with contaminated soil.

## Health Effects:

- **Lead** can harm the brain, kidneys, liver, and other organs. Children less than 6 years old and pregnant individuals are especially vulnerable to the harmful effects of lead, as low levels can affect neurological development and fetal health.

## Tips to Prevent Exposure and Protect Your Health

### Best Practices for Soil

- Knowing what you're dealing with is *the most protective step*—especially if you live near an old house, a current or former industrial area, or a busy road.
- Soil test kits sold at garden stores are **not** recommended for this kind of testing because they cannot test for many contaminants or heavy metals. Instead, use a lab to test your soil.
- Select your lab before collecting soil samples because each lab will have specific testing guidelines. Some examples of labs that may offer soil testing are listed below. This is not an exhaustive list and not an endorsement of any particular group; other labs may also provide similar services. Before sending your sample, call or check the lab's website for details on:
  1. Test types, cost, and sample instructions, and
  2. Turnaround time and if they provide a detailed report.
- Cover bare soil to prevent dust and direct contact - use grass, mulch, wood chips, gravel, or ground cover plants. Prioritize play areas, garden paths, and spots near doors or patios.
- Keep children and pets from digging or playing in bare dirt.

### Environmental Health Division

5050 Commerce Drive, Baldwin Park, CA 91706

[www.publichealth.lacounty.gov/eh](http://www.publichealth.lacounty.gov/eh)

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- More *Home Gardens and Soil* FAQs can be found online at [LA County Department of Public Health Fire Safe and Health Information](https://www.publichealth.lacounty.gov/wildfire/faq.htm#soil_resources) website.

### Garden and Soil Safety

- Testing soils in urban gardens is always a good idea. Review the UC Cooperative Extension's [Produce Safety After Urban Wildfire](#) guidance document for more information and recommendations.
- If contamination is suspected, use raised beds or containers with clean soil for gardening to create a barrier between potentially contaminated soil and the clean soil and plant roots.
- Adding compost, manure, and peat moss to your soil may decrease chemical absorption into produce. Covering bare soil with wood chips, grass clippings, compost and more clean soil can also decrease exposure.
- Wash hands thoroughly after handling soil or gardening, particularly before handling food and produce inside.
- Remove the outer leaves of lettuce or leafy greens. Rinse and rub fruits and vegetables well under cool running water, and peel root vegetables before eating or cooking.

### Practice Clean Habits

- Wash hands, pet paws, and toys thoroughly after contact with soil.
- Take your shoes off before coming into your home. Use doormats and wash them regularly.
- Vacuum, gently sweep, or mop entryways to help keep dirt particles out.
- Keep your home clean and dust free to reduce lead and dirt particles.

### Additional Guidance

- Consult an environmental professional if you suspect your soil is contaminated to determine the best course of action. You can find a list of soil testing resources on Public Health's website: [http://publichealth.lacounty.gov/media/wildfire/faq.htm#soil\\_resources](http://publichealth.lacounty.gov/media/wildfire/faq.htm#soil_resources).
- If you are concerned about lead exposure from the wildfires, **free blood lead testing** is available. You can visit your medical provider, call **1-800-LA-4-LEAD** to schedule an appointment with Quest Labs, or attend a community event where Public Health is offering blood lead testing. For more information visit: [ph.lacounty.gov/wildfires](http://ph.lacounty.gov/wildfires)
- Stay informed: Follow public health advisories on air, soil, and water safety.
- **Learn more at the Department of Public Health website.** <http://publichealth.lacounty.gov/media/wildfire/faq.htm#protecting>