PASADENA PUBLIC HEALTH DEPARTMENT

LEAD POISONING PREVENTION
Frequently Asked Questions (FAQs)

What is lead and lead poisoning?

- Lead is a naturally occurring metal that has been used in many products.
- Lead is harmful to the human body.
- There is no known safe level of lead in the body.
- Lead poisoning occurs when small amounts of lead build up in the body.
- Lead poisoning can cause lifelong learning and behavior problems.
- Lead poisoning is one of the most common environmental illnesses in California children.
- **Lead poisoning is preventable!**

How does exposure to hazardous wildfire residue, such as lead, occur?

- 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.

What are the health effects of lead exposure?

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.

How can I get residential soil tested for lead?

Some examples of resources for soil testing and analysis are listed here. This list is not exhaustive nor an endorsement of any particular group or entity; nor is criticism implied of similar groups or entities not listed.

Contact the lab before collecting soil samples because each lab will have specific testing guidelines. 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. Before sending your sample, call or check the lab's website for details on:

- Test types, cost, and sample instructions, and
- Turnaround time and if they provide a detailed report.

Academic Institutions:

- University of Southern California (USC) – Contaminant Level Evaluation & Analysis for Neighborhoods (CLEAN) Project
- Colorado State University, College of Agriculture Sciences
- University of California, Davis Analytical Laboratory

Private Laboratories:

- American Environmental Testing Laboratory Inc.

- CLS Labs (Soil, Water, Environmental), Rancho Cordova
  (800) 638-7301
- Eurofins Environmental Testing Calscience, Garden Grove
  (714) 895-5494
- Mayfield Environmental Solutions
  (310) 880-9647
- Soil & Plant Laboratory (Soil, Plants, Crops, Horticulture), Anaheim
  (714) 282-8777
- Waypoint Analytical, Inc.
  (714) 282-8777
- Wallace Laboratories
  (800) 473-3699

Environmental Consultants:

- GeoSoils Inc.
- American Technologies Inc.
- National Construction and Remediation Inc.
- Brunsing Associates
- Unlimited Environmental Inc.

What are some 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 in a home built before 1978, or near 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.
- 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.

Garden Safety

- Home gardens and soil FAQs can be found online at the LA County Department of Public Health Fire Recovery Guidance website.
- Testing soils in urban gardens is always a good idea. For more information, review the University of California Cooperative Extension's Produce Safety After Urban Wildfire guidance.
- If contamination is suspected, use raised beds or containers with clean soil for gardening to create a barrier between potentially contaminated 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; peel before cooking or serving. Avoid root crops that grow in the soil like carrots or potatoes as they absorb more contaminants.

Practice Clean Habits

- Wash hands after contact with soil and before eating.
- Wash pet paws and toys after contact with soil.
- Remove shoes before entering your home or use “sticky mats” in entryways to remove dust from your shoes.
- Use doormats and wash them regularly.
- Frequently wet mop entryways and hard floor surfaces.
- Use a wet cleaning method to capture and remove dust from horizontal surfaces
- Avoid cleaning methods that can resuspend dust in the air such as dry-sweeping or vacuuming without a HEPA filter.
- Run air purifiers that use HEPA filters.

Lead Poisoning Testing Resource

- Lead in the body can be measured by a blood test for lead. Los Angeles County Department of Public Health offers free blood lead testing.

Who should worry about lead poisoning?

Children under six years old are at greatest risk of harmful health effects from lead poisoning.

Here's why:

- Their brains and nervous systems are still forming.
- They frequently crawl on floors or furniture that may be contaminated with lead dust and put their hands or other objects in their mouths.
- More of the lead that gets into their mouths is taken up into their bodies.
- Much of the lead is stored in their bones.
- Lead remains in their bodies for a long time.

Children at high risk of getting lead into their bodies are:

- Young children under six years of age who spend time in homes, childcare centers, or buildings built before 1978 that have chipping or peeling paint (old paint may still have lead in it).
- Young children who play in bare soil. Lead may be in the dirt around your home from the past use of lead in paint and gasoline, and from lead from factories. Some factories, such as metal smelters, battery manufacturers, or battery recycling plants currently emit lead.
- Young children who eat non-food items, a behavior is known as “pica”. This may be more common in children with a diet low in iron and calcium.

- Children who have recently come from or who spend time in other countries where more lead is found.
- Infants born to mothers with an elevated level of lead in their blood. Lead crosses the placenta and has harmful effects on the fetus. Pregnant women exposed to lead should ask their doctor about a blood lead test.
- Adults with jobs or hobbies that work with lead may bring lead dust home on their clothes or equipment and expose household members.
- To learn more about preventing lead-tainted soil and dust from harming your child, visit the California Department of Public Health Lead Education Materials website.

Lead can affect a child in the following ways:

- Lead exposure can harm a child's nervous system and brain when they are still forming.
- Lead can lead to a low blood count (anemia).
- Even small amounts of lead in the body can make it hard for children to learn, pay attention, and do well in school.
- Higher amounts of lead exposure can damage the nervous system, kidneys, and other major organs. Very high exposure can lead to seizures or death.

How do I know if my child has lead poisoning?

- Most children who have lead poisoning do not look or act sick. Symptoms, if present, may be confused with common childhood complaints, such as stomachache, crankiness, headaches, or loss of appetite.
- The only way to know if your child has lead poisoning is for the child to get a blood test for lead. Talk to your child's health care provider to see if your child is at risk for lead poisoning. Your child may need a blood test for lead.
- Children aged 12 months and 24 months who are enrolled in publicly funded health care such as Medi-Cal or the Supplemental Nutrition Program for Women, Infants, and Children (WIC) may be at increased risk and should be tested. Cost for the test is covered by government health programs and health insurance plans.
- Children enrolled in publicly funded health care who are between 24 months and 6 years old and have not been tested at the appropriate times should be tested. Young children under six years of age who spend time in homes, childcare centers, or buildings built before 1978 that have chipping or peeling paint should be tested.

Any infant or child who is thought to be at risk or has contact with items that may contain lead should be tested.

Can lead poisoning be treated?

- Yes, but the best approach is to stop your children from exposure to lead.
- The most common way to treat lead poisoning in children is to find the lead source and remove it from their environment.
- When children have very high levels of lead in their blood, they require a medicine called a chelating agent. A chelating agent is a type of medicine that helps to remove the lead from the child's body.

- The Pasadena Childhood Lead Poisoning Prevention Program is available to help you and your health care provider to find and remove the source of lead poisoning.
- Any other problems associated with lead poisoning, such as anemia, should be treated.
- A nutritious diet is recommended to help prevent lead from getting into your child's body.

What are some steps to protect my child from lead poisoning?

- Wash your child's hands and face frequently, especially before eating.
- Wash toys, countertops and windowsills and wet mop floors weekly with an all-purpose cleanser.
- Do **not** let your child play in areas where bare soil is exposed.
- Take off your shoes or wipe them on a mat before entering the house. This will help prevent lead dust and soil from getting into your house.
- Frequently wet mop entryways and hard floor surfaces and use a wet cleaning method to capture and remove dust from horizontal surfaces
- Avoid cleaning methods that can resuspend dust in the air such as dry-sweeping or vacuuming without a HEPA filter. Clean up paint chips and peeling paint safely. Your local Childhood Lead Poisoning Prevention Program can give you information on safe cleaning.
- Keep furniture away from damaged paint. Pay special attention to keeping cribs, beds, highchairs, and playpens away from damaged paint.
- Avoid giving children imported candy or snacks containing chili or tamarind.
- Feed your child regular meals with a diet high in calcium, iron, and vitamin C. See the section below for information about a healthy diet.
- Allow cold water to run for a few minutes in the morning before using it for drinking, cooking, or mixing formula in case there may be lead in your household pipes. Use only cold water from the tap for drinking or in food preparation. If water needs to be heated, draw water from the cold tap and heat it on the stove or in the microwave.
- Avoid using handmade, older, imported dishes or crystal for food or drink preparation, storage, or serving, unless you are sure they do not contain lead.
- Avoid using traditional remedies or cosmetics that contain lead. If you are not sure, check with your local lead program.
- Avoid imported foods that come in cans with wide seams.
- Change out of work clothes before entering the house or being in contact with family members. If you work with lead at your job or hobby, take a shower at your workplace, if possible. Otherwise, shower and remove clothing immediately upon returning home. Handle clothing carefully and wash separately.
- When moving into a home, ask the owner about any problems with lead and know the age of the building.
- Before remodeling, ask a trained professional to test the paint in your home for lead.

What are common sources of lead?

The United States has taken many steps to remove sources of lead, but lead is still around us. Common sources include:

- **Lead-based paint (pre-1978).** It may have been used both inside and outside of a home and on furniture or objects in the home. Children may eat paint chips or chew on the surfaces of cribs, highchairs, windows, woodwork, walls, doors, or railings.
- **Lead-contaminated soil.** Lead may be in the soil where children play, especially near busy roadways or factories that currently or used to emit lead. The lead from gasoline used for many years has settled onto soil and is difficult to remove. This soil may also be tracked inside on shoes and clothing.
- **Lead-contaminated dust from paint or soil.** It clings to window sills, floors, doorways, and children's toys, and is dangerous to young children who crawl and often put their hands and other objects in their mouths.
- **Take-home exposure** in the dust brought home on clothing, equipment, or in a car or truck driven from work. Lead dust can also come from hobbies that use lead.
    - Some common jobs and hobbies that use lead include: Battery manufacturing, radiator repair, construction, working in or spending time in a firing range, soldering, recycling, painting, demolition, scrap metal recycling, working with stained glass, pottery making, target shooting, and casting fishing weights.
- **Drinking water** from lead service lines, galvanized steel pipes, and some pre-2010 plumbing fixtures. California water utilities are currently replacing lead service lines that they own (i.e., that run from the water main to your water meter). Learn more about California's lead service line replacement (LSLR) project by visiting the LSLR website. For information on Pasadena water quality visit the Pasadena Water and Power Department's Water Quality FAQs website.
- **Imported home remedies and imported cosmetics and ceremonial powders** may contain lead. They often are imported from the Middle East, Southeast Asia, India, the Dominican Republic, or Mexico. The remedies are often bright yellow or orange in color. Examples include: Alarcon, Alkohl, Azarcon, Bali goli, Bint al zahab, Coral, Greta, Farouk, Ghasard, Kandu, Kohl, Liga, Litargirio, Lozeena, Pay-loo-ah, Sindoor, and Surma. There are many others.
- **Imported or handmade pottery and tableware with leaded glaze.** The lead from the glaze gets into food and beverages when these ceramics are used for cooking or storing food.
- **Imported candies, foods, and spices may contain lead.** Candies made with chili or tamarind, and some foods and spices such as chapulines (dried grasshoppers), khmeli suneli, turmeric, or kurut (dehydrated yogurt) have all been found to have lead.
- **Imported food in cans that are sealed with lead solder.** Some countries other than the United States still allow lead solder in food cans. Cans that have lead solder have very wide seams.
- **Metal jewelry.** Lead has been found in inexpensive children's jewelry sold in vending machines across the country. It also has been found in inexpensive metal amulets worn for good luck or protection. Some costume jewelry designed for adults has also been found to contain lead. It is important to make sure that children don't handle, mouth, or swallow any jewelry.

What services are available to you and your family?

The Pasadena Public Health Department (PPHD) Childhood Lead Poisoning Prevention Program (CLPPP) offers a range of free services to help protect your family from lead exposure. Our program provides:

- **Educational materials** on the sources of lead, nutrition, and blood lead testing recommendations.
- **Counseling** on how to prevent lead poisoning and what steps to take if lead exposure has been identified.
- **Home visits** by PPHD public health nurses to provide care management services, including health assessments, blood lead level monitoring, and guidance on next steps. These services are available for individuals under age 21, if your child has received a blood lead test and lead exposure has been identified.
- **Environmental testing** by PPHD investigators to check your home and places where your child spends time (like childcare facilities or other caregiver homes) for lead sources, if your child has received a blood lead test and lead exposure has been identified.

These services are designed to help you protect your child and family from the dangers of lead exposure.

Lead Education Resources

- Frequently Asked Questions About Lead and Lead Poisoning
- Lead Education Materials
- Child Care Provider Training Resources for Lead Poisoning Prevention
- Getting Your Child Tested for Lead (PDF)
- Sources of Lead:
    - Learn about lead in aviation gas and how to keep your family safe
    - Lead Poisoning from Ayurvedic Remedies: A Warning to Consumers (PDF)
    - Information about lead in tableware
    - Baby Food Safety
    - Lead Service Line Replacement: Information to keep families lead-safe
    - Other sources of lead
- Centers for Disease Control and Prevention "All Children Can Be Exposed to Lead" web page and fact sheet
- Community Resources for Staying Lead-Safe

Local Resources and Publicly Supported Programs

- Services provided by local Childhood Lead Poisoning Prevention Programs
- Contact Information for local Childhood Lead Poisoning Prevention Programs
- BenefitsCal: a one-stop-shop for CalFresh (food assistance), CalWORKS (cash assistance), and Medi-Cal (health coverage) benefits for eligible California families and individuals.
- Don't have health insurance? Learn about options through Medi-Cal and Covered California. Already a Medi-Cal member? Learn about the new requirement to renew eligibility every year on Medi-Cal's "Keep Me Covered" web page.

Product Recalls and Consumer Warnings

- **U. S. Food and Drug Administration (FDA)** recalls, market withdrawals, and safety alerts for food, spices, medicine, and cosmetics
- **U.S. Department of Agriculture (USDA)** recalls and public health alerts for food products
- **CDPH Food and Drug Branch (FDB)**:
    - FDB recall resources
    - FDB Lead in Candy Program
- **California Safe Cosmetics Program product database** of personal care products reported by cosmetics companies
- **Consumer Product Safety Commission** recalls of consumer items
- **Department of Toxic Substances Control** Lead in Jewelry
- **California Proposition 65**, officially known as the Safe Drinking Water and Toxic Enforcement Act of 1986. The proposition protects the state's drinking water sources from being contaminated with chemicals known to cause cancer, birth defects, or other reproductive harm, and requires businesses to inform Californians about exposure to such chemicals. Please visit the Frequently Asked Questions page for important information about Proposition 65. View the 60 Day Notices to obtain information about publicly available "Warning" notices required from violators.

Home and Environmental Lead Testing and Lead-Safe Work Practices

The California Department of Public Health Childhood Lead Poisoning Prevention Branch (CLPPB) has a program to certify construction professionals in identifying lead hazards in and around your home. The program ensures that construction activities involving lead are performed in a manner to eliminate existing lead hazards and avoid creating new lead hazards for children and other occupants, as well as the construction professionals. Learn more about the Lead-Related Construction Program.

- Information about Testing Your Home's Drinking Water
- Information for Homeowners about Testing Your Home for Lead
- CA Analytical Laboratories for Testing Paint Chips, Dust, or Soil Samples
- Assuring Safe Lead Practices
- List of certified professionals who can test your home for lead and remove lead hazards