

# Lead Poisoning Prevention



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## Lead Poisoning Prevention

Lead poisoning is one of the most common environmental illnesses among young children. Around 1 in 100 children under age 6 years old in California are found to have blood lead levels that could be harmful. (CDPH, 2015). Childhood lead poisoning can lead to problems with learning, behavior, and growth.

### YOUNG CHILDREN ARE AT RISK

Young children are naturally curious. They explore by crawling around, touching, and putting toys and objects in their mouths. They spend a lot of time on the floor and ground where sources of lead may be found. Children absorb more lead than adults, and the toxic effects are greater because they are growing and developing.

### LEAD TESTING FOR CHILDREN

Most children with lead poisoning do not look or act sick. Testing is the only way to know. Health care providers should assess young children for risk of lead exposure at every well-child visit up to age 6 years. Children with risk factors (for example, living in a building built before 1978 that has peeling or chipped paint or has recently been remodeled, or having recently moved from a country with high levels of environmental lead) should have a blood test. Publicly funded programs for low-income children (for example, Medi-Cal, Child Health and Disability Prevention Program (CHDP), Head Start, WIC) are required to test children for lead at 1 and 2 years old.

### HOW YOU CAN HELP PROTECT CHILDREN FROM LEAD

Prevention is the most important way to protect children from lead poisoning. The following steps help to protect children from lead poisoning:

#### Raise awareness

Child care providers are required to give enrolling families written information about childhood lead poisoning, including the risks and effects of lead exposure and options for blood lead testing. A brochure with this information is available on the Community Care Licensing (CCL) website or by calling your regional CCL office. Encourage families to ask their child's health care provider about lead screening and testing. Educational posters, flyers, and brochures are also available in many languages on the California Department of Public Health (CDPH) website.

#### Reduce exposure. Eliminate possible sources of lead:

- Lead-based paint in homes built before 1978, especially if it is chipping, peeling, or generating dust from friction caused by opening windows and doors
- Vinyl mini-blinds
- Bare dirt
- Artificial play surfaces, including turf and rubber mulch.
- Water from wells or running through plumbing that contains lead
- Old painted toys, old vinyl toys, or toys imported from outside the USA
- Some foods, including candy, spices, and seasonings, imported from outside the USA
- Some home remedies, make-up, and jewelry
- Some handmade or imported pottery\*, dishes, and water crocks
- Lead brought home on clothes and shoes by parents who may be exposed at work
- Some hobbies such as making stained glass (lead solder), hunting or firing ranges (lead bullets), or fishing (lead sinkers)
- Property near busy highways and some industries

*\*Test kits for pottery are available in hardware stores.*

#### Provide good nutrition

Anemia and lead poisoning may occur together. Feed children healthy meals and snacks on a regular basis. See Module 3 for more information on healthy nutrition for young children.

#### Use lead-safe toys

Only use toys that are safe for children. Check toys for chipping paint and do not use old or imported toys unless you know they do not contain lead. You can check the Consumer Products Safety Commission (CPSC) for toys that have been recalled: [www.cpsc.gov/Recalls/](http://www.cpsc.gov/Recalls/). Also, do not let young children play with keys, as they may contain lead.

Use the Lead Poisoning Prevention Checklist on page 5 to perform monthly inspections for sources of lead.

#### Wash children's hands

Hands can carry germs and other harmful substances, like lead dust, to children's mouths. See pages 1.19 for detailed instruction on when and how to wash children's hands. Children who self-soothe

by sucking fingers and thumbs may need to wash their hands more often and when going to sleep (nap and bedtime).

### **Provide safe drinking water**

Most tap water in California does not contain lead. However, testing your water is the only way to be sure that tap water is free from lead. See Module 1 for more information on drinking water safety. Licensed child care programs in buildings built before 2010 need to have their tap water tested for lead between January 1, 2020 and January 1, 2023, and every five years thereafter. Centers must also inform parents of testing results.

### **You can reduce potential exposure to lead in tap water by:**

Flushing the pipes in your home or center. Run water until it feels coldest, usually at least 30 seconds and up to a few minutes. This may take longer if the taps have been off for 6 or more hours.

Using only cold tap water for cooking, drinking, and mixing baby formula (if used as an alternative to breastfeeding).

If using a water filter, be sure to use an NSF-certified filter that removes lead. Change water filter according to manufacturer's instructions.

### **Paint, repair, and remodel your facility safely**

If your child care facility was built before 1978, there may be a risk for contamination when painting, repairing, or remodeling. Choose contractors who follow lead-safety practices.

Facilities with play yards exposed to heavy automobile traffic or located near an industrial area where lead products have been used or produced may also expose children to lead. In this case, have your facility evaluated by a lead-certified inspector. A list of lead certified contractors and inspectors is available on the CDPH website. Contact your local Lead Poisoning Prevention Program at your local Public Health Department for further information about lead inspections, including testing the soil, paint, and any old artificial turf at your facility.

### **Clean surfaces**

Damp mop your floors and wipe down furniture, window sills, and other surfaces with a damp cloth regularly. Wash toys regularly. See Module 1 for detailed information on cleaning, sanitizing, and disinfecting.

## **Resources**

Local Childhood Lead Poisoning Prevention Program:

( \_\_\_\_\_ ) \_\_\_\_\_

*(Instructors should customize this section by placing their local Lead Poisoning Prevention Program telephone number here.)*

CDPH Childhood Lead Poisoning Branch:  
(510) 620-5600  
[www.cdph.ca.gov/Programs/CLPPB](http://www.cdph.ca.gov/Programs/CLPPB)

California Child Care Health Program:  
<https://cchp.ucsf.edu>

Resource & Referral Consumer Education Line:  
(800) 543-7793

Link to the one-hour Lead Poisoning Prevention Curriculum:  
<https://cchp.ucsf.edu/content/child-care-lead-poisoning-prevention-curriculum>

Centers for Disease Control (CDC):  
5 Things for Lead Prevention  
<https://www.cdc.gov/nceh/lead/tools/5things.pdf>

CDC: Lead in Toys  
<https://www.cdc.gov/features/leadintoy/index.html>

Environmental Protection Agency (EPA) Brochure:  
Protect Your Family from Lead in your Home  
[https://www.epa.gov/sites/production/files/2017-06/documents/pyf\\_color\\_landscape\\_format\\_2017\\_508.pdf](https://www.epa.gov/sites/production/files/2017-06/documents/pyf_color_landscape_format_2017_508.pdf)

EPA Toolkit: Reducing Lead in Drinking Water  
<https://www.epa.gov/ground-water-and-drinking-water/3ts-reducing-lead-drinking-water-toolkit>

Food and Drug Administration (FDA):  
Lead in Food and Dishware  
<https://www.fda.gov/food/metals/lead-food-foodwares-and-dietary-supplements>

California Department of Public Health (CDPH):  
Childhood Lead Poisoning Prevention Branch  
[https://www.cdph.ca.gov/Programs/CCDPHP/DEODC/CLPPB/Pages/prov\\_services.aspx](https://www.cdph.ca.gov/Programs/CCDPHP/DEODC/CLPPB/Pages/prov_services.aspx)

An index of lead-certified professionals in California is available on the CDPH website. <https://www.cdph.ca.gov/Programs/CCDPHP/DEODC/CLPPB/Pages/LRCcertlist.aspx>

## POTENTIAL SOURCES OF LEAD

- Old paint, especially if it is chipped or peeling or if the home has been recently repaired or remodeled
- House dust
- Soil
- Some imported dishes, pots and water crocks. Some older dishware, especially if it is cracked, chipped, or worn
- Work clothes and shoes worn if working with lead
- Some food, candies and spices from other countries
- Some jewelry, toys, and other consumer products
- Some traditional home remedies and traditional make-up
- Lead fishing weights and lead bullets
- Water, especially if plumbing materials contain lead

## SYMPTOMS OF LEAD EXPOSURE

Most children who have lead poisoning do not look or act sick. Symptoms, if any, may be confused with common childhood complaints, such as stomachache, crankiness, headaches, or loss of appetite.



## OPTIONS FOR LEAD TESTING



A blood lead test is free if you have Medi-Cal or if you are in the Child Health and Disability Prevention Program (CHDP). Children on Medi-Cal, CHDP, Head Start, WIC, or at risk for lead poisoning, should be tested at age 1 and 2. Health insurance plans will also pay for this test. Ask your child's doctor about blood lead testing.

For more information, go to the California Childhood Lead Poisoning Prevention Branch's website at [www.cdph.ca.gov/programs/clppb](http://www.cdph.ca.gov/programs/clppb), or call them at (510) 620-5600.

(The information and images found on this publication are adapted from the California Department of Public Health Childhood Lead Poisoning Prevention Program.)

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## EFFECTS OF LEAD EXPOSURE

Children 1-6 years old are the most at risk for lead poisoning.

- Lead poisoning can harm a child's nervous system and brain when they are still forming, causing learning and behavior problems that may last a lifetime.
- 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 succeed 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.

## LEAD POISONING FACTS

- Buildup of lead in the body is referred to as lead poisoning.
- Lead is a naturally occurring metal that has been used in many products and is harmful to the human body.
- There is no known safe level of lead in the body.
- Small amounts of lead in the body can cause lifelong learning and behavior problems.
- Lead poisoning is one of the most common environmental illnesses in California children.
- The United States has taken many steps to remove sources of lead, but lead is still around us.

### IN THE US:

- Lead in house paint was severely reduced in 1978.
- Lead solder in food cans was banned in the 1980s.
- Lead in gasoline was removed in the early 1990s.



### LEAD IN TAP WATER

The only way to know if tap water has lead is to have it tested.



Tap water is more likely to have lead if:

- Plumbing materials, including fixtures, solder (used for joining metals), or service lines have lead in them;
- Water does not come from a public water system (e.g., a private well).

To reduce any potential exposure to lead in tap water:

- **Flush the pipes in your home**  
Let water run at least 30 seconds before using it for cooking, drinking, or baby formula (if used). If water has not been used for 6 hours or longer, let water run until it feels cold (1 to 5 minutes).\*
- **Use only cold tap water for cooking, drinking, or baby formula (if used)**  
If water needs to be heated, use cold water and heat on stove or in microwave.
- **Care for your plumbing**  
Lead solder should not be used for plumbing work. Periodically remove faucet strainers and run water for 3-5 minutes.\*

- **Filter your water-** Consider using a water filter certified to remove lead.

### WARNING!

Some water crocks have lead. Do not give a child water from a water crock unless you know the crock does not have lead.



(\*Water saving tip: Collect your running water and use it to water plants not intended for eating.)

For information on testing your water for lead, visit The Environmental Protection Agency at [www.epa.gov/lead/protect-your-family-exposures-lead](http://www.epa.gov/lead/protect-your-family-exposures-lead) or call (800) 426-4791.

You can also visit The California Department of Public Health's website at <https://www.cdph.ca.gov>.



## Lead Poisoning Prevention Checklist

YES	NO	
		Was the property built before 1978? If yes, have the paint tested.
		Is the paint in poor condition? Check often for cracked, damaged, or peeling paint in the interior and exterior of your structure. Check the windows, stairs, doorways, floors, and porches. Move cribs and other furniture away from the walls and other possible sources of lead. If yes, choose painting contractors who follow lead-safety practices.
		Has your property (built before 1978) been recently painted or renovated? If yes, children may be at risk for lead exposure from dust and paint chips.
		Will your property (built before 1978) be renovated soon? If yes, choose contractors who follow lead-safety practices.
		Was your facility built before 1986? Pipes in buildings built before 1986 are more likely to have pipes, solder, or fixtures that contain lead. If yes: <ul style="list-style-type: none"> <li>● Consider replacing older brass fixtures with new ones that meet the January 1, 2010, requirements. Items that carry the NSF 61, Annex G designation meet this designation.</li> <li>● Let your water run until it feels coldest (usually 30 seconds to a few minutes depending on how long the water has been sitting in the pipes) before use to get any potential lead out. Use only cold water from the tap to cook with, drink, or mix with infant formula.</li> </ul>
		Is the property near a busy roadside that may have been contaminated with leaded gasoline emitted by cars? If yes, <ul style="list-style-type: none"> <li>● Don't let children play on bare soil.</li> <li>● Plant grass, shrubs or other ground cover to prevent direct contact with the soil.</li> <li>● Remove shoes when coming inside.</li> </ul>
		Does your property have bare soil? If yes, <ul style="list-style-type: none"> <li>● Don't let children play on bare soil.</li> <li>● Plant grass, shrubs or other ground cover to prevent direct contact with the soil.</li> <li>● Remove shoes when coming inside.</li> </ul>
		Does the property have lead dust? Check high friction areas like windows and doors. If yes, clean floors and window sills often with soap and water and then rinse with fresh water. Wash children's hands before and after eating, after playing outside and before napping.
		Do you have older imported vinyl mini-blinds? If yes, remove them or have them tested to make sure they don't contain lead.
		Do you own imported or homemade china or ceramic dishware or water crocks? If yes, have it tested to make sure it does not contain lead.
		Do you have painted or plastic furniture or toys from an unknown origin? If yes, have them tested to make sure they are lead-free. Don't let children chew on painted furniture or toys.