



Protect Your Family From Lead In Your Home



EPA United States Environmental Protection Agency



United States Consumer Product Safety Commission



United States Department of Housing and Urban Development

U.S. EPA Washington DC 20460
U.S. CPSC Washington DC 20207
U.S. HUD Washington DC 20410

EPA 747-K-99-001
September 2001

Are You Planning To Buy, Rent, or Renovate a Home Built Before 1978?

Many houses and apartments built before 1978 have paint that contains high levels of lead (called lead-based paint). Lead from paint, chips, and dust can pose serious health hazards if not taken care of properly. Federal law requires that individuals receive certain information before renting, buying, or renovating pre-1978 housing:



LANDLORDS have to disclose known information on lead-based paint and lead-based paint hazards before leases take effect. Leases must include a disclosure form about lead-based paint.



SELLERS have to disclose known information on lead-based paint and lead-based paint hazards before selling a house. Sales contracts must include a disclosure form about lead-based paint. Buyers have up to 10 days to check for lead.



RENOVATORS have to give you this pamphlet before starting work.

IF YOU WANT MORE INFORMATION on these requirements, call the National Lead Information Center at **1-800-424-LEAD (424-5323)**.

This document is in the public domain. It may be reproduced by an individual or organization without permission. Information provided in this booklet is based upon current scientific and technical understanding of the issues presented and is reflective of the jurisdictional boundaries established by the statutes governing the co-authoring agencies. Following the advice given will not necessarily provide complete protection in all situations or against all health hazards that can be caused by lead exposure.

IMPORTANT!

Lead From Paint, Dust, and Soil Can Be Dangerous If Not Managed Properly

- FACT:** Lead exposure can harm young children and babies even before they are born.
- FACT:** Even children who seem healthy can have high levels of lead in their bodies.
- FACT:** People can get lead in their bodies by breathing or swallowing lead dust, or by eating soil or paint chips containing lead.
- FACT:** People have many options for reducing lead hazards. In most cases, lead-based paint that is in good condition is not a hazard.
- FACT:** Removing lead-based paint improperly can increase the danger to your family.

If you think your home might have lead hazards, read this pamphlet to learn some simple steps to protect your family.

Lead Gets in the Body in Many Ways

Childhood lead poisoning remains a major environmental health problem in the U.S.

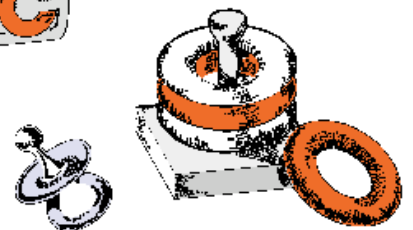
People can get lead in their body if they:

- ◆ Breathe in lead dust (especially during renovations that disturb painted surfaces).
- ◆ Put their hands or other objects covered with lead dust in their mouths.
- ◆ Eat paint chips or soil that contains lead.

Lead is even more dangerous to children than adults because:

- ◆ Children's brains and nervous systems are more sensitive to the damaging effects of lead.
- ◆ Children's growing bodies absorb more lead.
- ◆ Babies and young children often put their hands and other objects in their mouths. These objects can have lead dust on them.

Even children who appear healthy can have dangerous levels of lead in their bodies.



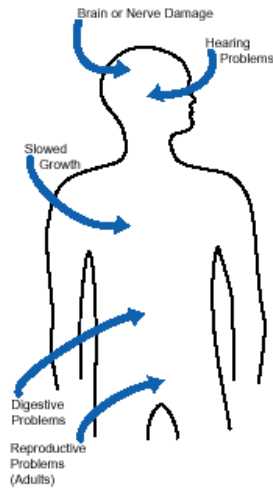
Lead's Effects

If not detected early, children with high levels of lead in their bodies can suffer from:

- ◆ Damage to the brain and nervous system
- ◆ Behavior and learning problems (such as hyperactivity)
- ◆ Slowed growth
- ◆ Hearing problems
- ◆ Headaches

Lead is also harmful to adults. Adults can suffer from:

- ◆ Difficulties during pregnancy
- ◆ Other reproductive problems (in both men and women)
- ◆ High blood pressure
- ◆ Digestive problems
- ◆ Nerve disorders
- ◆ Memory and concentration problems
- ◆ Muscle and joint pain



Lead affects the body in many ways.

3

Identifying Lead Hazards

Lead-based paint is usually not a hazard if it is in good condition, and it is not on an impact or friction surface, like a window. It is defined by the federal government as paint with lead levels greater than or equal to 1.0 milligram per square centimeter, or more than 0.5% by weight.

Deteriorating lead-based paint (peeling, chipping, chalking, cracking or damaged) is a hazard and needs immediate attention. It may also be a hazard when found on surfaces that children can chew or that get a lot of wear-and-tear, such as:

- ◆ Windows and window sills.
- ◆ Doors and door frames.
- ◆ Stairs, railings, banisters, and porches.

Lead dust can form when lead-based paint is dry scraped, dry sanded, or heated. Dust also forms when painted surfaces bump or rub together. Lead chips and dust can get on surfaces and objects that people touch. Settled lead dust can re-enter the air when people vacuum, sweep, or walk through it. The following two federal standards have been set for lead hazards in dust:

- ◆ 40 micrograms per square foot ($\mu\text{g}/\text{ft}^2$) and higher for floors, including carpeted floors.
- ◆ 250 $\mu\text{g}/\text{ft}^2$ and higher for interior window sills.

Lead in soil can be a hazard when children play in bare soil or when people bring soil into the house on their shoes. The following two federal standards have been set for lead hazards in residential soil:

- ◆ 400 parts per million (ppm) and higher in play areas of bare soil.
- ◆ 1,200 ppm (average) and higher in bare soil in the remainder of the yard.

The only way to find out if paint, dust and soil lead hazards exist is to test for them. The next page describes the most common methods used.

5

Where Lead-Based Paint Is Found

In general, the older your home, the more likely it has lead-based paint.

Many homes built before 1978 have lead-based paint. The federal government banned lead-based paint from housing in 1978. Some states stopped its use even earlier. Lead can be found:

- ◆ In homes in the city, country, or suburbs.
- ◆ In apartments, single-family homes, and both private and public housing.
- ◆ Inside *and* outside of the house.
- ◆ In soil around a home. (Soil can pick up lead from exterior paint or other sources such as past use of leaded gas in cars.)

Checking Your Family for Lead

Get your children and home tested if you think your home has high levels of lead.

To reduce your child's exposure to lead, get your child checked, have your home tested (especially if your home has paint in poor condition and was built before 1978), and fix any hazards you may have. Children's blood lead levels tend to increase rapidly from 6 to 12 months of age, and tend to peak at 18 to 24 months of age.

Consult your doctor for advice on testing your children. A simple blood test can detect high levels of lead. Blood tests are usually recommended for:

- ◆ Children at ages 1 and 2.
- ◆ Children or other family members who have been exposed to high levels of lead.
- ◆ Children who should be tested under your state or local health screening plan.

Your doctor can explain what the test results mean and if more testing will be needed.

4

Checking Your Home for Lead

Just knowing that a home has lead-based paint may not tell you if there is a hazard.

You can get your home checked for lead in one of two ways, or both:

- ◆ A **paint inspection** tells you the lead content of every different type of painted surface in your home. It won't tell you whether the paint is a hazard or how you should deal with it.
- ◆ A **risk assessment** tells you if there are any sources of serious lead exposure (such as peeling paint and lead dust). It also tells you what actions to take to address these hazards.

Hire a trained, certified professional who will use a range of reliable methods when checking your home, such as:

- ◆ Visual inspection of paint condition and location.
- ◆ A portable x-ray fluorescence (XRF) machine.
- ◆ Lab tests of paint, dust, and soil samples.

There are standards in place to ensure the work is done safely, reliably, and effectively. Contact your local lead poisoning prevention program for more information, or call **1-800-424-LEAD** for a list of contacts in your area.

Home test kits for lead are available, but may not always be accurate. Consumers should not rely on these tests before doing renovations or to assure safety.



6

What You Can Do Now To Protect Your Family

If you suspect that your house has lead hazards, you can take some immediate steps to reduce your family's risk:

- ◆ If you rent, notify your landlord of peeling or chipping paint.
- ◆ Clean up paint chips immediately.
- ◆ Clean floors, window frames, window sills, and other surfaces weekly. Use a mop or sponge with warm water and a general all-purpose cleaner or a cleaner made specifically for lead. REMEMBER: NEVER MIX AMMONIA AND BLEACH PRODUCTS TOGETHER SINCE THEY CAN FORM A DANGEROUS GAS.
- ◆ Thoroughly rinse sponges and mop heads after cleaning dirty or dusty areas.
- ◆ Wash children's hands often, especially before they eat and before nap time and bed time.
- ◆ Keep play areas clean. Wash bottles, pacifiers, toys, and stuffed animals regularly.
- ◆ Keep children from chewing window sills or other painted surfaces.
- ◆ Clean or remove shoes before entering your home to avoid tracking in lead from soil.
- ◆ Make sure children eat nutritious, low-fat meals high in iron and calcium, such as spinach and dairy products. Children with good diets absorb less lead.



7

Remodeling or Renovating a Home With Lead-Based Paint

Take precautions before your contractor or you begin remodeling or renovating anything that disturbs painted surfaces (such as scraping off paint or tearing out walls):

- ◆ Have the area tested for lead-based paint.
- ◆ Do not use a belt-sander, propane torch, heat gun, dry scraper, or dry sandpaper to remove lead-based paint. These actions create large amounts of lead dust and fumes. Lead dust can remain in your home long after the work is done.
- ◆ Temporarily move your family (especially children and pregnant women) out of the apartment or house until the work is done and the area is properly cleaned. If you can't move your family, at least completely seal off the work area.
- ◆ Follow other safety measures to reduce lead hazards. You can find out about other safety measures by calling 1-800-424-LEAD. Ask for the brochure "Reducing Lead Hazards When Remodeling Your Home." This brochure explains what to do before, during, and after renovations.

If you have already completed renovations or remodeling that could have released lead-based paint or dust, get your young children tested and follow the steps outlined on page 7 of this brochure.



If not conducted properly, certain types of renovations can release lead from paint and dust into the air.



9

Reducing Lead Hazards In The Home

Removing lead improperly can increase the hazard to your family by spreading even more lead dust around the house.

Always use a professional who is trained to remove lead hazards safely.



In addition to day-to-day cleaning and good nutrition:

- ◆ You can temporarily reduce lead hazards by taking actions such as repairing damaged painted surfaces and planting grass to cover soil with high lead levels. These actions (called "interim controls") are not permanent solutions and will need ongoing attention.
- ◆ To permanently remove lead hazards, you should hire a certified lead "abatement" contractor. Abatement (or permanent hazard elimination) methods include removing, sealing, or enclosing lead-based paint with special materials. Just painting over the hazard with regular paint is not permanent removal.

Always hire a person with special training for correcting lead problems—someone who knows how to do this work safely and has the proper equipment to clean up thoroughly. Certified contractors will employ qualified workers and follow strict safety rules as set by their state or by the federal government.

Once the work is completed, dust cleanup activities must be repeated until testing indicates that lead dust levels are below the following:

- ◆ 40 micrograms per square foot ($\mu\text{g}/\text{ft}^2$) for floors, including carpeted floors;
- ◆ 250 $\mu\text{g}/\text{ft}^2$ for interior window sills; and
- ◆ 400 $\mu\text{g}/\text{ft}^2$ for window troughs.

Call your local agency (see page 11) for help with locating certified contractors in your area and to see if financial assistance is available.

8

Other Sources of Lead



While paint, dust, and soil are the most common lead hazards, other lead sources also exist.

- ◆ **Drinking water.** Your home might have plumbing with lead or lead solder. Call your local health department or water supplier to find out about testing your water. You cannot see, smell, or taste lead, and boiling your water will not get rid of lead. If you think your plumbing might have lead in it:
 - Use only cold water for drinking and cooking.
 - Run water for 15 to 30 seconds before drinking it, especially if you have not used your water for a few hours.
- ◆ **The job.** If you work with lead, you could bring it home on your hands or clothes. Shower and change clothes before coming home. Launder your work clothes separately from the rest of your family's clothes.
- ◆ Old painted toys and furniture.
- ◆ Food and liquids stored in lead crystal or lead-glazed pottery or porcelain.
- ◆ Lead smelters or other industries that release lead into the air.
- ◆ Hobbies that use lead, such as making pottery or stained glass, or refinishing furniture.
- ◆ Folk remedies that contain lead, such as "greta" and "azarcon" used to treat an upset stomach.



10

For More Information

The National Lead Information Center

Call **1-800-424-LEAD (424-5323)** to learn how to protect children from lead poisoning and for other information on lead hazards. To access lead information via the web, visit www.epa.gov/lead and www.hud.gov/offices/lead/.

For the hearing impaired, call the Federal Information Relay Service at **1-800-877-8339** and ask for the National Lead Information Center at **1-800-424-LEAD**.

EPA's Safe Drinking Water Hotline

Call **1-800-426-4791** for information about lead in drinking water.

Consumer Product Safety Commission (CPSC) Hotline

To request information on lead in consumer products, or to report an unsafe consumer product or a product-related injury call **1-800-638-2772**, or visit CPSC's website at: www.cpsc.gov.

Health and Environmental Agencies

Some cities, states, and tribes have their own rules for lead-based paint activities. Check with your local agency to see which laws apply to you. Most agencies can also provide information on finding a lead abatement firm in your area, and on possible sources of financial aid for reducing lead hazards. Receive up-to-date address and phone information for your local contacts on the Internet at www.epa.gov/lead or contact the National Lead Information Center at **1-800-424-LEAD**.



11

EPA Regional Offices

Your Regional EPA Office can provide further information regarding regulations and lead protection programs.

EPA Regional Offices

Region 1 (Connecticut, Massachusetts, Maine, New Hampshire, Rhode Island, Vermont)

Regional Lead Contact
U.S. EPA Region 1
Suite 1100 (CPT)
One Congress Street
Boston, MA 02114-2023
1 (888) 372-7341

Region 2 (New Jersey, New York, Puerto Rico, Virgin Islands)

Regional Lead Contact
U.S. EPA Region 2
2890 Woodbridge Avenue
Building 209, Mail Stop 225
Edison, NJ 08837-3679
(732) 321-6671

Region 3 (Delaware, Maryland, Pennsylvania, Virginia, Washington DC, West Virginia)

Regional Lead Contact
U.S. EPA Region 3 (3WC33)
1650 Arch Street
Philadelphia, PA 19103
(215) 814-5000

Region 4 (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee)

Regional Lead Contact
U.S. EPA Region 4
61 Forsyth Street, SW
Atlanta, GA 30303
(404) 562-8998

Region 5 (Illinois, Indiana, Michigan, Minnesota, Ohio, Wisconsin)

Regional Lead Contact
U.S. EPA Region 5 (DT-8J)
77 West Jackson Boulevard
Chicago, IL 60604-3666
(312) 886-6003

Region 6 (Arkansas, Louisiana, New Mexico, Oklahoma, Texas)

Regional Lead Contact
U.S. EPA Region 6
1445 Ross Avenue, 12th Floor
Dallas, TX 75202-2733
(214) 665-7577

Region 7 (Iowa, Kansas, Missouri, Nebraska)

Regional Lead Contact
U.S. EPA Region 7
(ARTD-RALI)
901 N. 5th Street
Kansas City, KS 66101
(913) 551-7020

Region 8 (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming)

Regional Lead Contact
U.S. EPA Region 8
999 18th Street, Suite 500
Denver, CO 80202-2466
(303) 312-6021

Region 9 (Arizona, California, Hawaii, Nevada)

Regional Lead Contact
U.S. Region 9
75 Hawthorne Street
San Francisco, CA 94105
(415) 947-4164

Region 10 (Alaska, Idaho, Oregon, Washington)

Regional Lead Contact
U.S. EPA Region 10
Toxics Section WCM-128
1200 Sixth Avenue
Seattle, WA 98101-1128
(206) 553-1985

12

CPSC Regional Offices

Your Regional CPSC Office can provide further information regarding regulations and consumer product safety.

Eastern Regional Center
Consumer Product Safety Commission
201 Varick Street, Room 903
New York, NY 10014
(212) 620-4120

Western Regional Center
Consumer Product Safety Commission
1301 Clay Street, Suite 610-N
Oakland, CA 94612
(510) 637-4050

Central Regional Center
Consumer Product Safety Commission
230 South Dearborn Street, Room 2944
Chicago, IL 60604
(312) 353-8260

HUD Lead Office

Please contact HUD's Office of Healthy Homes and Lead Hazard Control for information on lead regulations, outreach efforts, and lead hazard control and research grant programs.

U.S. Department of Housing and Urban Development
Office of Healthy Homes and Lead Hazard Control
451 Seventh Street, SW, P-3206
Washington, DC 20410
(202) 755-1785

13

Simple Steps To Protect Your Family From Lead Hazards

If you think your home has high levels of lead:

- ◆ Get your young children tested for lead, even if they seem healthy.
- ◆ Wash children's hands, bottles, pacifiers, and toys often.
- ◆ Make sure children eat healthy, low-fat foods.
- ◆ Get your home checked for lead hazards.
- ◆ Regularly clean floors, window sills, and other surfaces.
- ◆ Wipe soil off shoes before entering house.
- ◆ Talk to your landlord about fixing surfaces with peeling or chipping paint.
- ◆ Take precautions to avoid exposure to lead dust when remodeling or renovating (call 1-800-424-LEAD for guidelines).
- ◆ Don't use a belt-sander, propane torch, heat gun, dry scraper, or dry sandpaper on painted surfaces that may contain lead.
- ◆ Don't try to remove lead-based paint yourself.



Recycled/Recyclable
Printed with vegetable oil based inks on recycled paper (minimum 50% postconsumer) process chlorine free.