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Lead In Your Home:
A Parent s Reference Guide

Contents

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Lead in Your Home: A Parent s Guide

1. Lead exposure can be dangerous, especially to children ages 6 and younger.
2. Exposure to lead-contaminated dust, not lead-based paint, is the most common way to get lead poisoning.
3. Lead poisoning can be prevented.

Lead is highly toxic. Exposure to it can be dangerous, especially for children who are 6 or younger. But lead is also stable and easy to work with, so it has been used for many purposes even in our homes. It is important that every parent know where lead can be found, and how to control it. It is also important to know what to do if you or a member of your family is exposed to lead.

How Lead Has Commonly Been Used

Lead is a metal that has been mined for thousands of years. In the past, it was used to make common items found in or near homes. These items include paint, gasoline, water pipes, and food cans.

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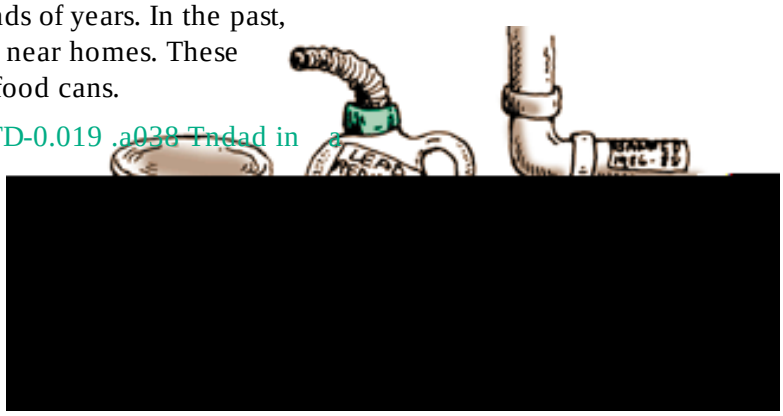


- Lead in household pipes. Lead used in fixtures, pipes, or pipe soldering can leach into water that flows through the pipes. In 1986, and again in 1988, Congress changed the Safe Drinking Water Act to restrict the use of lead in pipes, solder, and other components used in public water systems and residential and nonresidential plumbing. Unfortunately, lead may still be found in pipes today.
- Lead in food cans. The lead solder used to seal food cans can mix with the food in the can. The United States banned the use of lead solder in cans in 1995, but it is still used in many other countries. Lead solder may be found in cans imported to the United States.

Finding Lead Hazards in Your Home

Changes in the law have greatly reduced the amount of lead in our homes and in the air today. But it is important to remember that lead does not break down over time. Therefore, you should know how to identify sources of lead in your home and how to keep your family safe.

Common Lead Hazards

The most common household lead hazards are lead-based paint, lead dust, and contaminated soil:

- Lead-based paint is a hazard if it is peeling, chipping, chalking, or

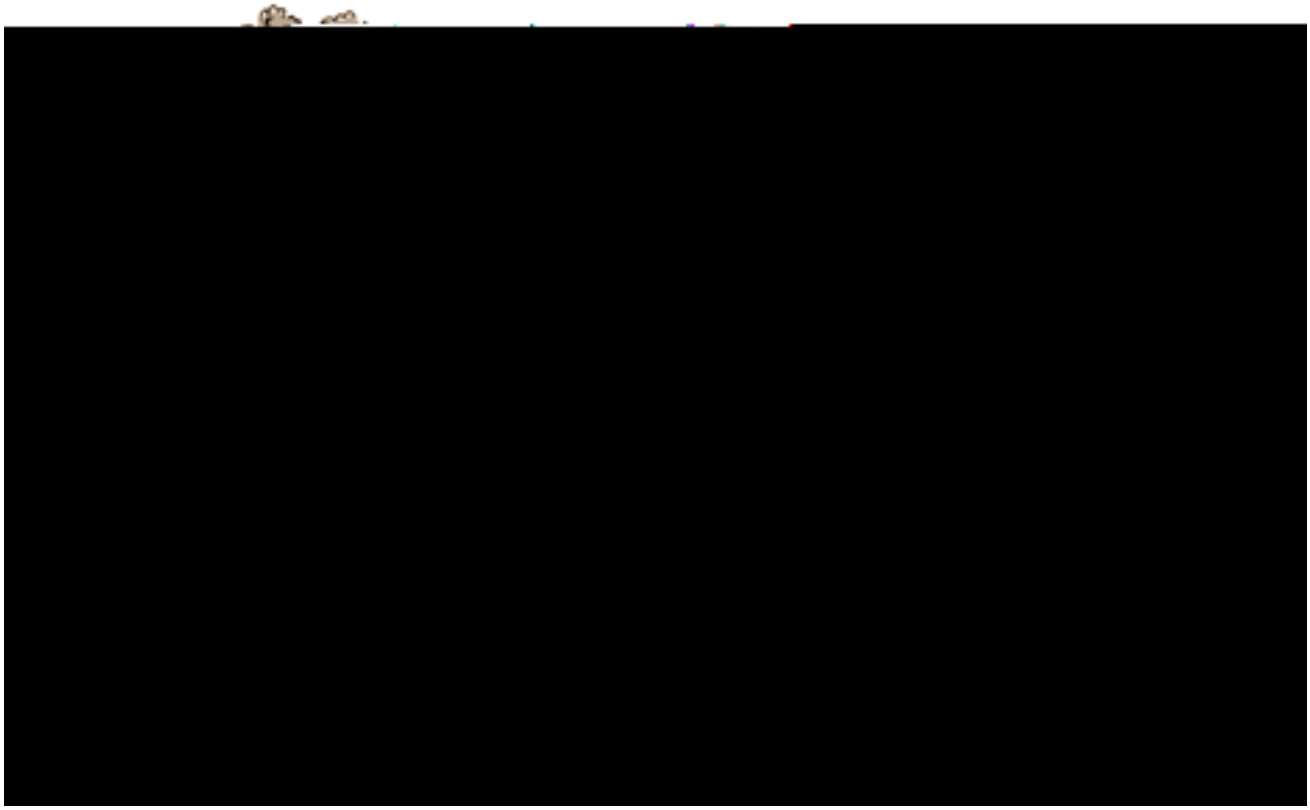
- Soil can become contaminated when exterior lead-based paint from houses, buildings, or other structures flakes or peels and gets into the soil. Soil near roadways may also be contaminated from past use of leaded gasoline in cars. Avoid these areas when planting vegetable gardens.

Other Sources of Lead Hazards

Although less common, a number of other lead hazards can be found in homes:

- Older plumbing fixtures, such as faucets, lead pipes, and pipes connected with lead solder, can contaminate drinking water. Older water well pumps made with brass or bronze parts that contain lead can also contaminate drinking water. The amount of lead in your water depends on the types and amounts of minerals in the water, how long the water stays in the pipes, the amount of wear in the pipes, the water s acidity, and its temperature. Lead can leach into water at any temperature, but the amount of lead can be much greater when the water is hot or warm, so don t drink or cook with water from the hot faucet. Carbon, sand, and cartridge filters do not remove lead from water, although some filters are certified for lead removal.

Boiling your water will not get rid of the lead.



- Some imported, non-glossy, vinyl miniblinds can be a lead hazard, especially to young children. Sunlight and heat can break down the blinds and may release lead-contaminated dust. Children who touch the miniblinds and put their fingers in their mouths may ingest the lead particles. It s best to remove these blinds if you have children who are 6 or younger. If you purchase new miniblinds, look for products with labels that say New Formulation, non-leaded formula, no lead added, or New! Non-leaded vinyl formulation.
- Painted toys and household furniture made before 1978 may be painted with lead-based paint. Do not let children chew on any older, painted toys or furniture, such as cribs or playpens.
- Lead-glazed ceramic ware, pottery, and leaded crystal can contaminate food and liquids stored in them.
- If you are exposed to lead at your job site, you could bring lead dust home on your cwou h o fu114(o)-1[(0.077(c)-s)53(e)-20(b)13(l)21(i-18(o1g)Id2)-568d

It is important to know that even exposure to low levels of lead can permanently affect children. In low levels, lead can cause

- Nervous system and kidney damage.
- Learning disabilities, attention deficit disorder, and decreased intelligence.
- Speech, language, and behavior problems.
- Poor muscle coordination.
- Decreased muscle and bone growth.
- Hearing damage.

While low-level exposure is most common, exposure to high levels of lead can have devastating effects on children, including seizures, unconsciousness, and, in some cases, death.

In the United States, approximately 900,000 children ages 1 to 5 have a blood-lead level exceeding the level of concern.

Although children are especially susceptible to lead exposure, lead can be dangerous for adults too. In adults, high lead levels can cause

- Increased chance of illness during pregnancy.
- Harm to a fetus, including brain damage or death.
- Fertility problems (in men and women).
- High blood pressure.
- Digestive problems.
- Nerve disorders.
- Memory and concentration problems.
- Muscle and joint pain.

Lead poisoning is not easy to detect. Sometimes no symptoms occur, and sometimes the symptoms are the same as those of more common illnesses. Some of the early signs and symptoms of lead poisoning in children are

- Persistent tiredness or hyperactivity.
- Irritability.
- Loss of appetite.
- Weight loss.
- Reduced attention span.
- Difficulty sleeping.
- Constipation.

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Reducing the Risk of Lead in Your Home

QUICK TIPS

1. Some simple steps like keeping your home clean and feeding your family a well-balanced diet will go a long way in preventing lead poisoning.
2. Going one step further and getting your home tested for lead can also help you and your family. This kind of test known as a risk assessment will tell you where lead hazards are and what to do about them.
3. Lead-based paint is usually not harmful if it
   - is not chipping or flaking AND
   - is not bumped, rubbed, or chewed.
4. Lead-based paint can create harmful lead dust if it is chipping, flaking, bumped, rubbed, or chewed.

Testing for Lead

Should I Get My Home Tested?

If your home was built before 1978 and you have children ages 6 or younger, consider testing. A good time to do it is before you move into a new home or have a baby. You may also want to test your home if it has painted surfaces that are in poor condition. Before you begin home repair or remodeling projects, test any painted surfaces that will be removed or remodeled. Remember, disturbing lead-based paint can create a lead-poisoning hazard.

How Can I Get My Home Tested?

To test your home for lead, have either a risk assessment or a lead inspection done. Read on to find out which is better for your situation.

- A risk assessment. A risk assessor tells you if your home contains sources of lead exposure such as peeling paint or lead dust. The risk assessor will give you a report that identifies lead hazards and ways to control them. If you suspect you have a lead problem, a risk assessment is usually the most appropriate way to test for lead hazards.

Lead inspection: The inspector will give you a report that tells you whether your home contains lead-based paint and where it is found. The report will not tell you whether it is a hazard or how it should be treated.

What Are Home Test Kits?

Home test kits use chemicals to detect lead in paint, soil, and dust. Some kits can test water, dishes, glasses, and ceramics. A reaction occurs when the chemicals in the kit are exposed to lead.

Does the Federal Government Recommend Home Test Kits?

If you decide to hire a professional firm to control lead hazards, you may want to hire someone other than the person who did the testing.

How to Reduce Your Family s Risk of Lead Poisoning

What Can I Do Now to Protect My Family?

If you think your home has lead-based paint, take these simple steps to help protect your family:

- Keep your home clean by washing floors, window frames, window sills, and other surfaces weekly. Use a mop or a sponge with a solution of water and an all-purpose cleaner or a cleaner made specifically for lead to clean up dust. Clean up paint chips using a wet sponge or rag. (For information on repairing chipped surfaces, see Chapter 6.)
- Completely rinse sponges and mop heads after cleaning dirty or dusty areas.
- [redacted]emove shoes before entering your home to [redacted]ing in lead from soil.
- Have children play in grassy areas instead of soil.
- Never allow children to play under windows or around painted surfaces that often rub together or get bumped.
- Make sure children wash their hands after playing outside and before eating or going to bed.
- [redacted]an. Wash bottles, pacifiers, toys, and [redacted]larly.
- [redacted] chewing on painted surfaces, such as [redacted]or playpens.
- [redacted]amily eat a well-balanced diet that is low in fat and high in calcium and iron. Include foods such as fish, green vegetables, milk, and cheese. (More on why this helps in Chapter 3.)
- Use cold water for drinking or cooking since lead is more likely to leach into warm or hot water.
- If you rent property, tell your landlord about peeling or chipping paint.

How Can I Reduce or Get Rid of the Lead-Based Paint Hazards in My Home?

In addition to the day-to-day steps outlined in the previous section, you can prevent lead poisoning by using either interim controls, abatement, or both.

- Interim controls. Interim controls are treatments that temporarily reduce the risk of exposure to lead hazards. For example, you can repair damaged painted surfaces or plant grass to cover soil. (For more information on interim controls, see Chapter 6.)
- Abatement. Abatement is the permanent elimination of lead-based paint hazards. The four methods below are for abatement of structural components in housing.

  Replacement. The removal of lead-painted items such as windows, doors, and trim and the installation of new, lead-free items.

  Enclosure. The covering of lead-painted surfaces with a stiff material such as paneling or wallboard to prevent lead dust from getting into the environment. Enclosure also prevents contact with the lead-based paint.

activities. If you must perform any of the activities that follow, do them

Don t use

- Mops with a scrubber strip attached.
- Powered buffing or polishing machines.
- Vacuums with beater bars that may wear away the painted surface.

Cleaning Carpets and Rugs

Do use

- Wet scrubbing methods to remove stains.
- Steam cleaning methods.
- Standard vacuum cleaners if no visible dust or debris from chipping or flaking paint is present.

Don t use

- Dry sweeping of surface dust and debris.
- Shaking or beating of carpets and rugs.

Cleaning Walls

Do use

- Soft cloths to wet wipe walls.
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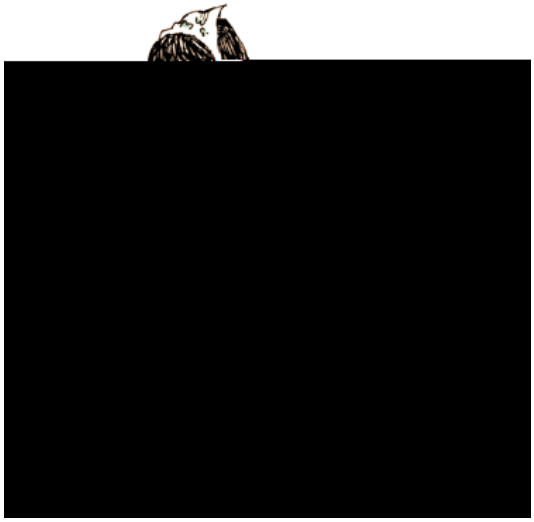
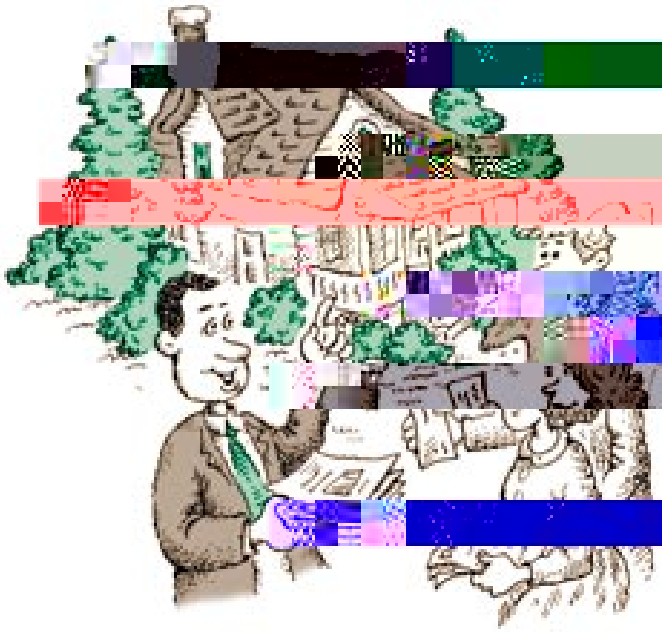


New Rules for Sellers and Landlords

Lead-based paint can be found on the painted surfaces inside and outside of many residences built before the 1978 ban. The U.S.



If you plan to buy a home built before 1978, the seller must give you 10 days, or another mutually agreeable period, to

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Protecting Your Children From Lead Poisoning

When your doctor gives you the results of your blood test, use the following chart. It will help explain what the numbers mean.

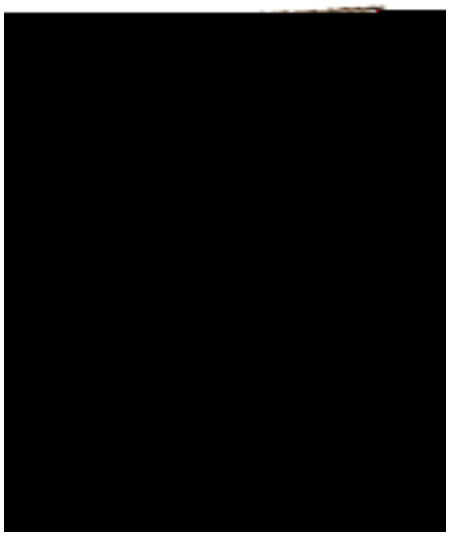
Choosing a Child-Care Provider

Although your home may be free of lead-based paint hazards, your child could still be exposed elsewhere. It is important that any place in which your child spends more than 10 hours a week be free of lead hazards. If you take your child to a day-care center, look around the inside and the outside of the day-care center for lead hazards.

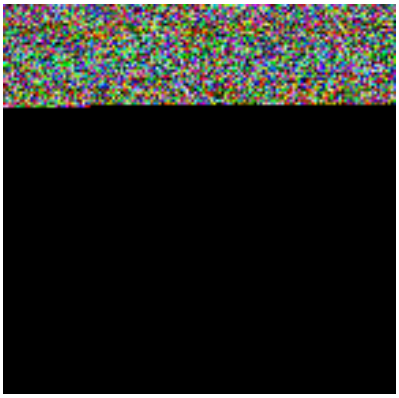
The best thing to do for any family member of any age who may have been exposed to lead is to have the level of lead in that person s body checked.

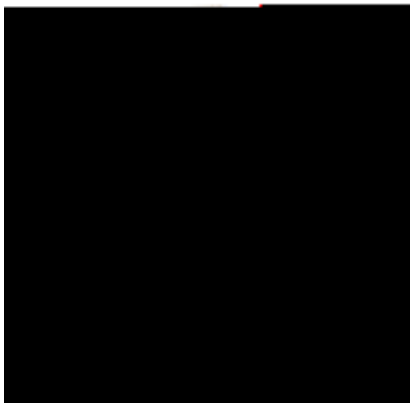
When checking the facility, look at

- Interior painted areas. Examine walls and interior surfaces to see



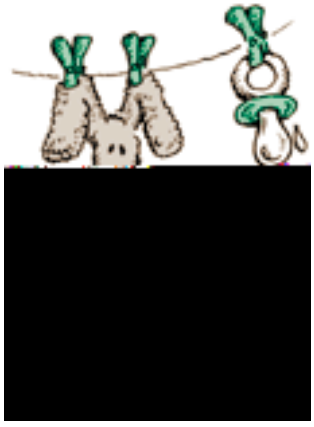
Don t eat too many fried or fatty foods.





Don t put things other than food in your mouth.

Wash your
hands often.



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What You Need to Know Before Working on Your Home

Using the right equipment when working with lead will keep you and your family safe from dangerous lead dust.

One of the most important pieces of equipment to use is a respirator with a HEPA filter on it. The respirator and filter will remove lead particles from the air you breathe.

Another important piece of equipment is a type of thick plastic sheeting called six-mil polyethylene plastic sheeting. The plastic must cover all work areas to prevent lead dust from spreading throughout your home.

Equipment

Before beginning a remodeling, renovation, or interim control project, it is important to plan. For example, decide where you will begin and how long the project will take. It is also important to get the right equipment to protect you and your family from lead exposure. The following section will explain the equipment you will need and how to use it.

- NIOSH-certified respirator with a HEPA (High-Efficiency Particulate Air) filter. You should wear a properly fitted respirator equipped with a HEPA filter, which is always purple, when doing any work that might create lead dust. A respirator will filter lead dust particles out of the air you breathe. You can buy respirators at many industrial supply centers or home improvement stores for abe5552(t)]TJT*-0.002 Tc03237 Tw$20 (t)-$30. W Tm y

(2) Negative-pressure fit check. Cover the two filters with both hands and inhale. The respirator should tighten to your face and you should not feel any air flowing in. If you feel air coming in, the respirator does not fit properly. You need to adjust it or try another size.

Keep the following points in mind when buying and using a respirator:

Get the right size.

If you are working with lead, your respirator must be equipped with a HEPA filter.

Perform negative- and positive-pressure fit checks every time you use your respirator.

If you have a beard, are not clean-shaven, or have a broken nose, a respirator cannot completely seal to your face. Dust particles can leak in.

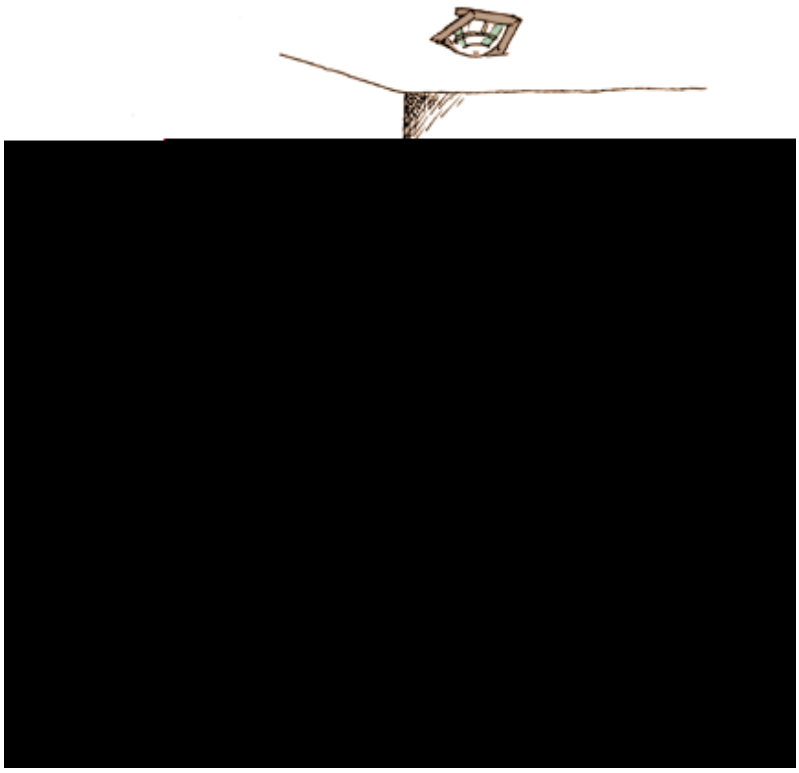
If you have gained or lost weight since buying your respirator, it may no longer fit. You may have to purchase a different size.

Never take off your respirator until after you have removed your outer protective clothing.

Q. Should I wear any protective gear when doing something in my home that may expose me to

- HEPA filter-equipped vacuum cleaner. This is a special type of vacuum that removes small lead particles from floors, window sills, and carpets, and stores them inside the vacuum cleaner. Household vacuums will not work; their exhaust systems release the lead particles into the air. You can rent a HEPA vacuum from stores that carry remodeling tools. Some laboratory safety and supply catalogs sell them starting at about $300. Remember when you finish vacuuming carefully empty the dust collected in the vacuum cleaner, being sure to dampen it with water first to control the spread of the collected dust.
- Wet-sanding equipment, wet/dry abrasive paper, and wet-sanding sponges for wet-methods. These can be purchased at hardware stores.
- All-purpose cleaner or a cleaner made specifically for lead. A solution of water and an all-purpose cleaner or a cleaner made specifically for lead should be used to clean up lead dust from work areas. Use one bucket for the cleaning solution and one bucket for rinsing. Change the rinse water frequently (at least once for each room being cleaned) and replace rags, sponges, and mops often.

► Six-mil polyethylene plastic sheeting. This thick, plastic sheeting



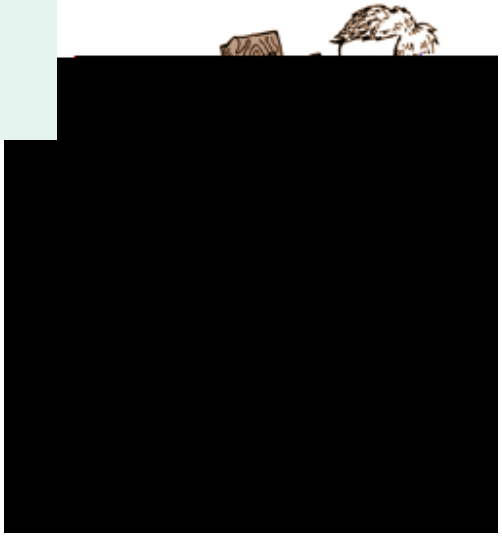
Do not eat, drink, or smoke in the work area.

- Cover openings, such as gaps around pipes and between floorboards, with plastic or duct tape to prevent lead dust from sifting down to lower floors and rising to upper floors.
- Cover exposed surfaces that you cannot remove with the plastic sheeting. Examples include floors, carpeting, counter tops, and shelves.
- Tape around the door seals of refrigerators to prevent dust from getting into the food inside.
- Spray water on lead-painted surfaces to keep dust from spreading.

Remodeling and Renovation

Lead-based paint is most often found around windows, in kitchens, and in bathrooms.

Home projects done on lead-painted areas can create harmful lead dust.



Replacing or Working on Windows

Window sills and frames on homes built before 1978 can have high amounts of lead-based paint. Because these items are seldom replaced, paint tends to build up on them. To remove a window safely, follow these basic safety precautions:

- Tape the thick, plastic sheeting (mentioned on page 25) over the entire inside window opening.
- Cover the floor under the window with the plastic sheeting to catch any falling dust. Also, cover the ground outside the window with the plastic sheeting to catch dust and chips.
- Spray the window sill and frame with water to reduce the dust.
- Remove the window unit from the outside, if possible. If you must remove it from the inside, make sure you cover all entryways into the room in which you are working with the plastic sheeting.
- Clean up and dispose of all waste according to the directions in Chapter 8.

Be careful when performing the following renovation and remodeling activities. They can disturb lead-painted surfaces and create lead dust.

- Removing paint
- Sanding
- Patching
- Scraping or tearing down walls
- Making holes in walls or ceilings to gain access to pipes or install electrical outlets
- Removing or replacing windows, baseboards, doors, plumbing fixtures, heating and ventilation duct work, or electrical systems

Preparing Surfaces for New Paint or Wallpaper

Preparing walls and other surfaces for painting, staining, or papering can create lead exposure risks. Follow these good work practices to reduce your risk of exposure to lead:

- Cover the floor and furniture with the thick, plastic sheeting.
- Avoid sanding lead-painted surfaces whenever possible. If you must sand, use a sander with a vacuum attachment connected to a HEPA filter-equipped vacuum cleaner or use a wet-sanding sponge.
- Wipe the area you are sanding often and rinse the sponge in a bucket of water. Strain out any paint chips and dispose of them in heavy-duty plastic bags.
- Wash the walls with a solution of water and an all-purpose cleaner or a cleaner made specifically for lead. Let them dry before painting or papering. Never power-wash or blast lead-painted surfaces inside your home; this can contaminate dust, which can spread to other areas of your home.
- Heat guns may be used to remove paint, but do not use those that operate above 1100° F.

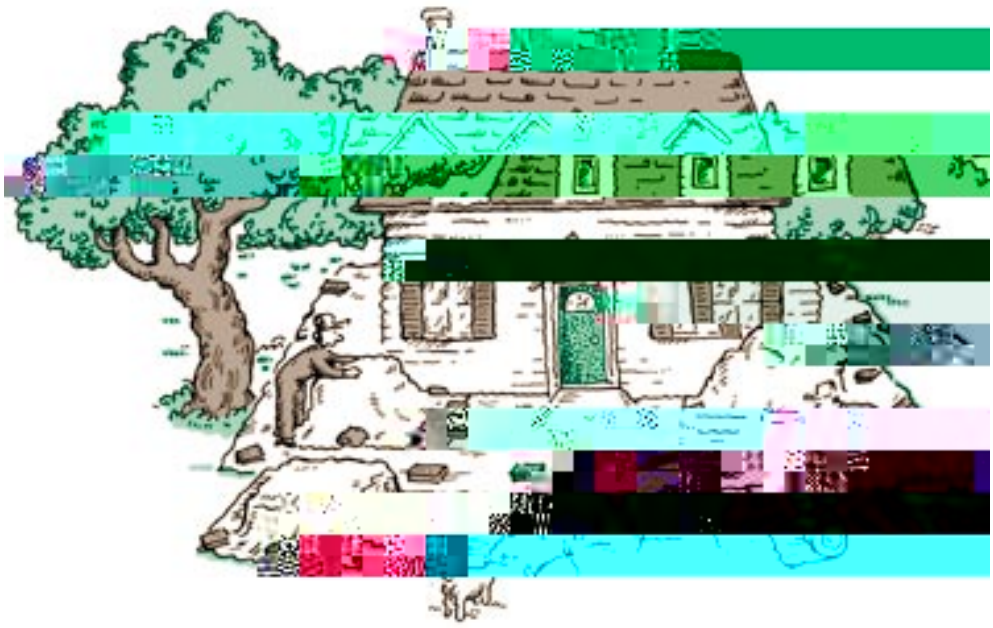
Plumbing

Disturbing lead-soldered pipes can knock loose pieces of lead solder

Working on the Exterior of Your Home

Working on the outside of your home can produce dust, paint chips, larger pieces of material, and liquids that contain lead. To prevent contaminating the areas around your home

- Cover the ground and any flowers or plants with the thick, plastic sheeting to catch dust and trash. It should extend at least 5 feet from the base of your house and an additional 3 feet for each additional story. Use bricks or rocks to hold the edges of the plastic sheeting in place.
- Cover sandboxes with the plastic sheeting. If possible, move play equipment at least 20 feet away from the work area.
- Close all windows, including windows in adjacent dwellings, within 20 feet of the work area. If dust gets inside, use wet mops and rags to clean it up.
- Anchor ladders securely to the ground. Do not put them on the thick, plastic sheeting, which can be punctured.
- Make one lead-safe entryway available to residents at all times. Do not treat front and rear entrances simultaneously if there is not a third doorway.
- Avoid working in windy conditions. Strong winds can blow lead dust to areas that are not covered. If the chips and dust are blowing off the plastic sheeting, set up a barrier to block the wind or do the work another day.



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Interim Controls

There are ways you can temporarily control exposure to lead-based paint, dust, and soil. They are called interim controls.

Keep in mind interim controls will not get rid of lead hazards forever. They can, however, help cut down on the risk of exposure.

Lead dust in your home can be harmful to you and your family. It should be removed.

Safe Management of Lead-Based Paint in Your Home

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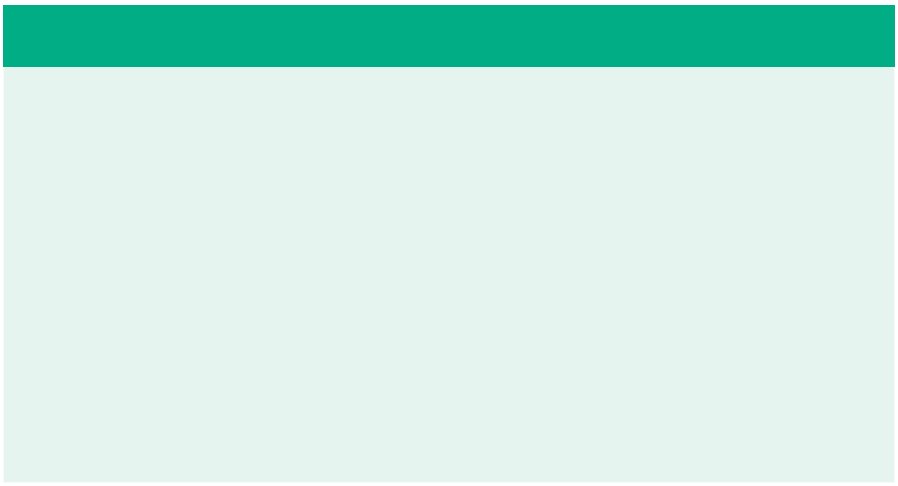
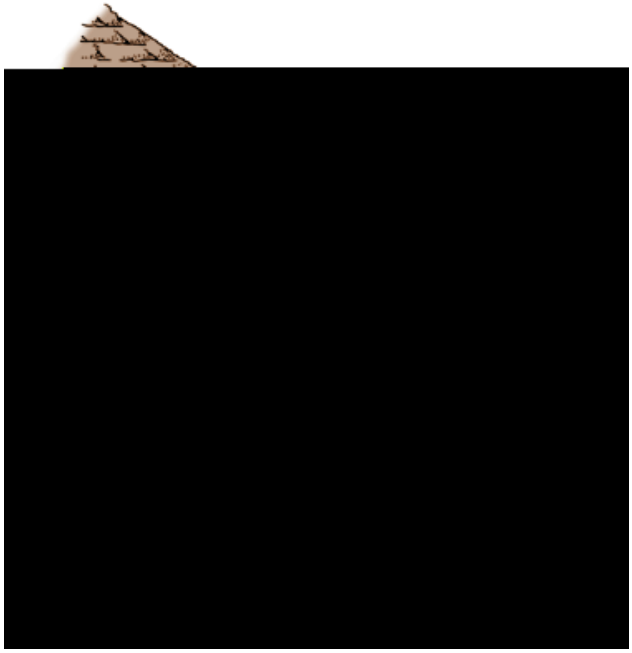


Major Dust Collectors and Potential Dust Traps

Interior	Exterior
Window sills	Porch swings
Floors or steps	Window troughs
Cracks and crevices	Steps
Carpets and rugs	Exposed soil
Mats	Sandboxes
Upholstered furnishings	Window coverings
Radiators	Heating, ventilation, or air conditioners
Grates and registers	

Removing Lead Dust Inside Your Home

It is very hard to remove lead dust without specialized equipment. You will need to use a vacuum equipped with a HEPA filter combined with



Repainting Lead-Painted Surfaces

What to Do After a Soil Lead Test

If the test results in parts per million (ppm) are . . .	It is recommended that you do the following . . .
Less than 400 ppm	Nothing
400 5,000 ppm	Cover bare soil by planting grass, piling mulch or sand on top of it, or landscaping with sod and bushes. To keep children from playing in soil near your home (which may have higher concentrations of lead), plant bushes close to the house. In areas near children s playgrounds, cover soil with mulch and gravel piled at least 6 inches. Move play areas away from contaminated soil. Put doormats outside and inside all entryways. Remove your shoes before entering.
Higher than 5,000 ppm	Abatement (see Chapter 7 and Appendix D).

7

Abatement

QUICK TIPS

1. An abatement will permanently control or get rid of lead hazards in your home.
2. Never perform an abatement yourself. An abatement must be done by a trained and licensed professional.
3. If an abatement is done incorrectly, the chances of lead poisoning can increase.

Lead Abatement: What It Is, Who Should Do It

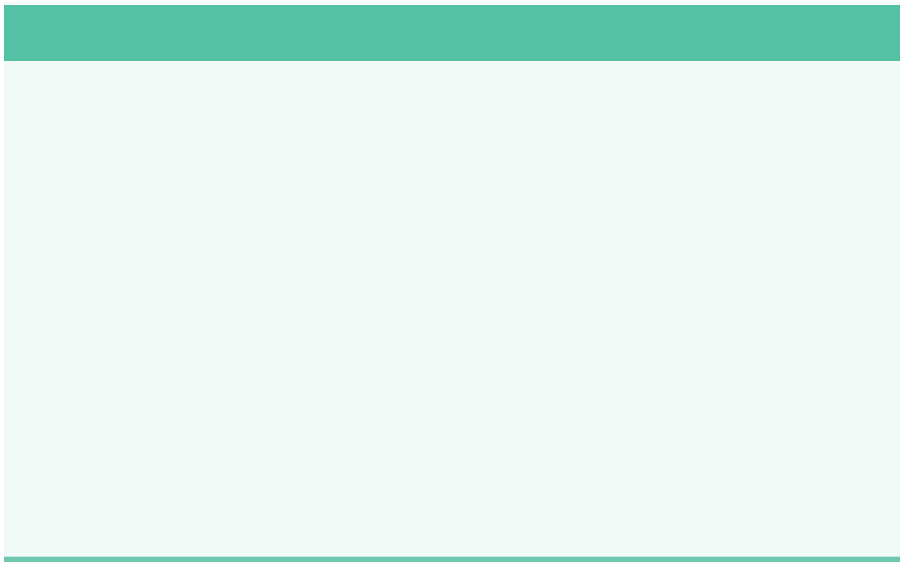
You can reduce the risk of lead exposure in your home by having a contractor perform an abatement. An abatement is a way to permanently contain or remove lead hazards. Merely painting or papering over lead-painted surfaces is not abatement.

The four abatement methods for structural components are

- Replacement. Removing a part of a building that contains lead-based paint and replacing it with a new, lead-free part.
- Enclosure. Building a new wall, ceiling, or floor over an existing one.
- Encapsulation. Using a special type of coating to cover a lead-painted surface.
- Paint removal. Stripping the lead-based paint off an object.

EPA strongly recommends that you use a certified abatement contractor. If the abatement and the cleanup following it are not done right, the chance of lead poisoning will increase. A contractor trained in lead-based paint hazards and abatement will know how to safeguard your family before, during, and after an abatement.

If your child has a blood-lead level at or above 10 micrograms per deciliter (ug/dl), some states require you to hire a certified and trained contractor to abate the lead in your home. Check with your state lead contact (Appendix B).



Advantages of Replacement

- Removes lead-based paint permanently.
- Safest permanent intervention.
- Upgrades your home.
- Can lower heat and maintenance costs.

Disadvantages of Replacement

- Expensive.
- Areas next to replaced part may be damaged.
- Replacement part may not be as good as the original.

Enclosure

Enclosure is the process of covering lead-painted surfaces with paneling, wallboard, or other materials. The materials are fastened with screws and sealed with caulking to prevent exposure to the lead-painted surfaces.

Enclosure is useful for surfaces that are cracked or chipped. Encapsulation may be a better choice for surfaces in good condition.

Enclosure is most appropriate for walls, ceilings, and floors.

Advantages of Enclosure

- Cost-effective.
- Durable.
- Generates little contamination.

Disadvantages of Enclosure

- May not be a permanent solution.
- Must be checked every 3 to 6 months to make sure it stays intact.

Encapsulation

Like enclosure, encapsulation provides a barrier that prevents lead dust from spreading. With encapsulation, however, the barrier is a special type of coating called an encapsulant applied to a lead-painted surface. Once dry, it forms a stiff barrier, which can then be painted. This method of abatement is a good choice for wall surfaces in good condition, for surfaces that are not rubbed often, and for curved surfaces.

Advantages of Encapsulation

- Generates little contamination.
- Inexpensive.

Disadvantages of Encapsulation

- Use of some encapsulant products will create hazardous waste.
- Cannot be used in high-friction areas.
- May not be a permanent solution.
- Must be checked every 3 to 6 months to make sure it stays intact.

Paint Removal

Paint removal is the stripping of lead-based paint from an object. This process creates a large amount of lead and waste, so choose paint removal only if no other abatement strategy will work, or if an object has historical value.

It is possible to have paint removed e.88

To get rid of the lead-based paint on the exterior of your house, your contractor will likely use vacuum blasting, water blasting, or exterior enclosure.

Advantages of Vacuum or Water Blasting

- Can be used on the exterior of your home.

Disadvantages of Vacuum or Water Blasting

- Can damage the treated surface, especially wood.
- Creates a lot of waste and can spread paint chips around nearby areas.
- Very expensive.

For more information on vacuum blasting, water blasting, and exterior enclosure, see Appendix D.

Soil Abatement

8

Cleaning Up Lead Waste

QUICK TIPS

1. Cleanup is the most important step in controlling or getting rid of lead hazards.
2. If the cleanup is done incorrectly, your home may be more hazardous than it was before the work began.

Dust contaminated with lead by home projects from remodeling to interim controls and abatement can be hazardous to you and your family. In fact, if this dust is not properly removed both during and after projects your home could be more hazardous than it was before work began.

Pay special attention to cleanup activities that prevent the spread of lead dust to other areas of your home or exposing your family to lead.

Cleanup is the most important step in your project. Here are some tips for daily cleanup, personal cleanup, and final cleanup after the job is done.

Daily Cleanup

Daily cleanup is important whenever you or your contractor work with lead. Daily cleaning prevents the spread of lead dust and makes cleanup at the end of the project much easier.

At the end of every project day, do the following:

- Wrap up and label any debris or trash.
- Mop floors and wash exposed surfaces and tools with a solution of water and an all-purpose cleaner or a cleaner made specifically for lead. Allow to dry.
- Strain out paint chips from liquid waste and dispose of them in a heavy-duty plastic bag.
- Vacuum all exposed surfaces and any plastic sheeting with a HEPA filter-equipped vacuum cleaner.

Cleanup is the most important step.

Clearance Examination

After any type of lead work has been performed in your home, it is strongly recommended that you hire a professional to perform a clearance examination. This is especially important after an abatement procedure. Because an abatement is likely to disturb lead-painted surfaces, you need to be certain that you and your family will not be exposed to lead hazards.

A clearance examination includes a visual examination and an analysis of dust samples to ensure that lead levels are not a danger to you and your family and that cleanup was done properly. The clearance examination should take place no sooner than 1 hour after any cleaning activity to allow lead particles to settle.

For a list of qualified professionals in your area who perform testing services, call your state lead contact (Appendix B) or the U.S. Department of Housing and Urban Development s Lead Listing at (888) LEAD LIST. You can also get testing and laboratory information by calling the National Lead Information Center s Clearinghouse at (800) 424 LEAD.

Hazardous Waste Disposal

Working with lead produces many types of waste materials including lead-based paint chips, liquid waste, used cleaning materials, and lead-painted doors and windows. Do not keep waste materials like doors,

Financial Assistance for Lead Activities

- Call your state lead contact (see Appendix B) to get information on financial assistance programs in your area. Some state and local agencies can arrange for needed services at no cost to you, and some offer financial help. For example, many agencies

  Conduct free blood-lead screenings or direct you to a source of free testing.

  Help pay for a lead inspection and, if necessary, the removal of lead-based paint by a trained professional.

  Provide temporary housing, called Safe Houses, for families undergoing lead removal.

- Call the HUD Office of Affordable Housing Programs at (202) 708 2470 for information on the HUD HOME Program. One of the activities provided for under this program is financial help for major home repairs to low-income people who have lead-based paint in their homes.

APPENDIX B

State Lead Program Contacts

Need more information about lead hazards and the prevention of lead poisoning in your state? Call your state lead contact.

Alabama

Bureau of Environmental Services
Department of Public Health
201 Monroe Street, Suite 1250
PO Box 303017
Montgomery, AL 36130 3017
(334) 206 5373

Alaska

Department of Health and Social Services
Division of Public Health
Section of Epidemiology
3601 C Street, Suite 540
P.O. Box 240249
Anchorage, AK 99524-0249
(907) 269 8044

Arizona

Office of Environmental Health
Arizona Department of Health Services
3815 N. Black Canyon Highway
Phoenix, AZ 85015
(602) 230 5943

Arkansas

Department of Health
Environmental Health and Protection
4815 West Markham Street, Slot 46
Little Rock, AR 72205 3867
(501) 661 2171

California

Childhood Lead Poisoning Prevention Branch
California Department of Health Services
5801 Christie Avenue, 6th Floor, Suite 600
Emeryville, CA 94608
(510) 450 2453

Colorado

Lead Poisoning Prevention Program
DCEED-LEAD-A3
4300 Cherry Creek Drive, South
Denver, CO 80246-1530
(303) 692 2685

Connecticut

Division of Environmental Health

Georgia
Georgia Childhood Lead Poisoning Prevention Program
Department of Human Resources
2 Peachtree Street, NW, 5th Floor Annex
Atlanta, GA 30303-3186
(404) 657 6514

Hawaii
Department of Health
Environmental Health
P.O. Box 3378
Honolulu, HI 96801
(808) 586 4424

Idaho
Idaho Department of Health and Welfare
Bureau of Environmental Health and Safety
Towers Building, 4th Floor
P.O. Box 83720
Boise, ID 83720 0036
(208) 334 6584

Illinois
Division of Environmental Health
Asbestos and Lead Programs
Department of Public Health
525 W. Jefferson
Springfield, IL 62761
(217) 782 3517

Indiana
Childhood Lead Poisoning Prevention Program
Maternal and Child Health Services
State Department of Health
2 North Meridian
Indianapolis, IN 46204
(317) 233 1232

Iowa
Lead Poisoning Prevention Program
Department of Public Health
Lucas State Office Building
321 E. 12th Street
Des Moines, IA 50319 0075
(515) 242 6340

Kansas
Bureau of Environmental Health
Mills Building
Suite 604
109 SW 9th Street
Topeka, KS 66612 1274
(785) 296 0189

Kentucky
Division of Environmental Health and Community Safety
275 E. Main Street
Frankfort, KY 40621
(502) 564 4856

Louisiana
Asbestos and Lead Program
Department of Environmental Quality
Office of Air Quality Division
5222 Summa Court
Baton Rouge, LA 70809
(504) 765 2547

Maine
Maine Childhood Lead Poisoning Prevention Program
Division of Community and Family Health
151 Capitol Street
Augusta, ME 04333
(207) 287 4311

Maryland
Environmental Lead Division
Waste Management Administration
Department of the Environment
2500 Broening Highway
Baltimore, MD 21224
(410) 631 3825

Massachusetts
Childhood Lead Poisoning Prevention Program
Department of Public Health
470 Atlantic Avenue, 2nd Floor
Boston, MA 02210 2224
(617) 753 8401
(888) NOLEAD0 or (888) 665 3230

Michigan
Department of Community Health
Public Health Agency
3423 N. Martin Luther King Jr. Boulevard
P.O. Box 30195
Lansing, MI 48909
(517) 335 8011

Minnesota
Director of Environmental Health
Minnesota Department of Health
121 East 7th Place
P.O. Box 64975
St. Paul, MN 55164-0975
(612) 215 0731

Mississippi

Department of Environmental Quality
P.O. Box 10385
Jackson, MS 39289 0385
(601) 961 5171

Missouri

Office of Lead Licensing and Accreditation

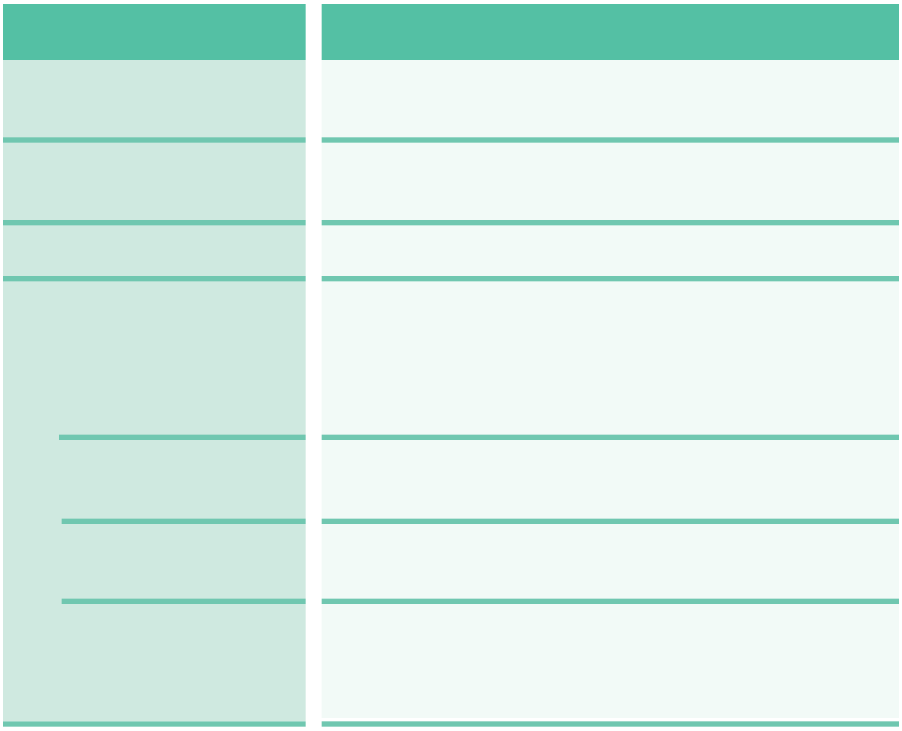
Illinois, Indiana, Michigan, Minnesota, Ohio, Wisconsin	Regional Lead Contact U.S. EPA Region 5 (DT-8J) 77 West Jackson Boulevard Chicago, IL 60604 3507 (312) 886 7836

REGION 6	Contact:
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

Iowa, Kansas, Missouri, Nebraska	Regional Lead Contact U.S. EPA Region 7 (ARTD RAL1) 726 Minnesota Avenue Kansas City, KS 66101 (913) 551 7020

APPENDIX D

Abatement Guidelines for Your Contractor



Replacement

Whenever possible, windows should be removed from the outside of your home to prevent the spread of lead dust inside.

Replacing Doors, Windows, and Woodwork

Opening and closing doors or windows stirs up lead dust. Bumping or banging woodwork does too. You may need to replace some of them to prevent lead dust from spreading to other areas of your home.

Make sure your contractor

- Covers the area around the part being replaced and any nearby surfaces with two or three layers of 6-mil polyethylene plastic sheeting. When the part being removed is a window, make sure the contractor attaches this plastic sheeting to the wall below the window and extends it at least 6 feet on each side of the window to catch lead dust and debris.
- Wets the component with water before removing it.
- Trims the part to be removed with a HEPA filter-equipped tool to prevent lead dust from spreading.
- After removal, wraps the part in plastic sheeting.
- Before installing the new part, disposes of the old part and cleans the work area according to the directions in Chapter 8.

Encapsulation

Depending on the task to be performed, your contractor can choose among many encapsulation products and should consider where the encapsulant will be applied. Encapsulant makers provide directions on preparing surfaces and on monitoring, maintaining, and cleaning encapsulated surfaces. If properly applied and maintained, an encapsulant should last for 20 years.

Enclosure

Preparing the Area

Make sure your contractor

- Eliminates all moisture sources and allows the surface to dry.
- Lays thick, plastic sheeting (mentioned on pages 25 and 60) around the work area to prevent lead dust from spreading to other parts of the room, or to other rooms in your home.

Enclosing a Wall

Make sure your contractor

-

Paint Removal

There are many ways to remove paint, and some of them should never

- Local exhaust hand tools. These handheld power tools are attached to a HEPA vacuum by a hose. The vacuum contains a HEPA filter to prevent the spread of lead dust.
- Chemical stripping. Chemical stripping is the use of solvents or caustic pastes to dissolve and strip off paint. Chemical strippers are dangerous and may give off harmful vapors, which can catch on fire. Some states prohibit the use of methylene chloride, which is often used in chemical strippers. Your contractor should know whether chemical stripping is an option in your state. If not, check with your state lead contact (Appendix B).

Vacuum Blasting, Water Blasting, and Enclosure for Exterior Paint

Although vacuum blasting or water blasting should never be done inside your home because of the waste they create, your contractor may remove paint from the exterior of your home using these methods. To avoid contaminating areas around your home and your neighbors homes, make sure your contractor controls the spread of any waste or debris.

Glossary

Abatement A procedure that eliminates lead-based paint hazards or lead-based paint. The four types of abatement methods are removal, enclosure, encapsulation, and replacement. Removal and replacement are permanent.

Abrasion Rubbing or friction that causes wear on a surface.

Accredited training provider A training provider approved by EPA to train individuals to be risk assessors, inspectors, supervisors, and workers.

All-purpose cleaner A general-purpose cleaning product.

Bare soil Soil not covered with grass, sod, other vegetation, or pavement. This also includes the sand in sandboxes.

Blood-lead level A measurement of how much lead is in the body.

Certified The designation for contractors who have completed training and other requirements to allow them to carry out risk assessments, inspections, or abatements safely. Risk assessors, inspectors, and abatement contractors should be certified by the appropriate local, state, or Federal agency.

Characteristics (of hazardous waste) EPA has identified four characteristics of hazardous waste: how easily the waste ignites, how corrosive it is, how it reacts with other substances, and how toxic it is to people and the environment. Any solid waste that has at least one of these characteristics may be classified as hazardous under the Resource Conservation and Recovery Act (RCRA), depending on how the waste is produced and how much is generated.

Chemical stripping A paint removal method that uses chemicals to strip off paint.

Chelation A medical drug treatment for lead poisoning.

Cleaner made specifically for lead Cleaning product made specifically for cleaning and removing lead-contaminated dust. Can be found in some paint and hardware stores.

Cleaning The process of using a HEPA vacuum and wet cleaning agents to remove lead dust. See also HEPA filter and wet cleaning.

Gram A metric unit of weight equal to one thousandth of a kilogram. It is close to the weight of a penny.

Hazardous waste Any waste that is considered dangerous to people or the environment by state or Federal laws.

Heat gun A device that forces warmed air onto a painted surface and softens the paint so it can be removed. Heating and burning lead-based paint makes dangerous fumes and vapors. If a heat gun must be used, it should not be warmed above 1100° F.

High-Efficiency Particulate Air (HEPA) filter A filter that can remove very small lead particles and prevent them from being redistributed into the air. HEPA filters are used on respirators and vacuum cleaners to prevent lead exposure from projects that disturb lead-based paint.

Hydroblasting The process of using high-powered water pressure to loosen exterior paint so it can be removed.

Impact surface An interior or exterior surface such as the surface of a door subject to damage by repeated impact or contact.

Inspection (of paint) An evaluation to determine if lead-based paint is present in housing and where it is located.

Inspector An individual who has completed training from an EPA-approved program and has been licensed or certified by the appropriate state or local agency to perform a lead-based paint inspection. See also inspection.

Interim controls A set of measures that temporarily reduce lead

Lead-contaminated soil Bare soil in residential settings that contains lead at levels that are hazardous to human health. The term is defined this way for the purpose of Lead In Your Home: A Parent s Reference Guide. However, this is a technical term that will be further defined by the EPA in the TSCA 403 regulation.

Lead hazard Dangerous conditions or circumstances that cause lead exposure at levels that would result in adverse human health effects. Lead hazards could include deteriorated lead-based paint, lead-contaminated dust, and lead-contaminated soil. The term is defined this way for the purpose of Lead In Your Home: A Parent s Reference Guide. However, this is a technical term that will be further defined by the EPA in the TSCA 403 regulation.

Lead hazard control Activities to control and eliminate lead hazards. They include interim controls and abatement.

Lead hazard screen A type of risk assessment performed only in housing in good condition using fewer samples but more stringent evaluation criteria to determine the absence of lead-based paint.

Maintenance Work intended to maintain adequate living conditions in a housing unit.

Mg Short for milligram. It is equal to one thousandth of a gram.

Mil An English unit often used to measure the thickness of paint film or plastic sheeting. It is equal to one thousandth of an inch.

Monitoring Surveillance to make sure lead-based paint and lead dust are kept under control and that activities performed to control lead hazards continue to be successful.

NIOSH National Institute for Occupational Safety and Health. When you purchase a respirator, make sure the package says it is certified by NIOSH.

Off-site paint removal The process of removing a component from housing and stripping the paint from the component at an off-site paint stripping facility.

On-site paint removal The process of removing paint from components inside the housing.

Owner The person who holds the title to a housing unit.

Paint removal An abatement strategy to remove lead-based paint from identified surfaces.