

Protect Your Family From Lead During Renovation, Repair & Painting





EPA is soliciting comment on this draft version of *Protect Your Family from Lead During Renovation, Repair, & Painting*. EPA will consider the comments when developing a final version of the pamphlet.

In addition, in the final version of *Protect Your Family from Lead During Renovation, Repair, & Painting* EPA plans to provide information on new requirements to minimize the introduction of lead hazards resulting from the disturbance of lead-based paint during renovation, repair, and painting activities in most housing built before 1978. EPA proposed these requirements, *Lead; Renovation, Repair, and Painting Program*, in the **Federal Register** of January 10, 2006 (71 FR 1588) (FRL-7755-5). The proposal introduces lead training, certification, and safe work practice requirements for contractors involved in renovation, repair, and painting activities. After considering comments submitted on the proposed rule and on this pamphlet, EPA plans to publish final versions of the rule and pamphlet.

Information on how to submit comments on *Protect Your Family from Lead During Renovation, Repair, & Painting* and on the Renovation, Repair, and Painting Program proposed rule and additional information can be accessed on the Internet at <http://www.epa.gov/lead>.

Renovating, Repairing, or Painting?



Is your home being renovated, repaired, or painted; or are you considering such a project?

Was your home built before 1978? If so, there are a few things that are important for you to know about lead-based paint.

This pamphlet provides basic facts about lead and information to guide you through planning and completing a renovation, repair, or painting project using lead safe work practices.

Federal regulations require that contractors provide a copy of a lead hazard information pamphlet to residents prior to starting work in pre-1978 housing.

[Summarize requirements of final Renovation, Repair, and Painting Program rule.]

The Facts About Lead

- Lead exposure can cause serious behavior and learning problems in children and high blood pressure and other health problems in adults.
 - Lead in dust is the most common way people are exposed to lead. People can also get lead in their bodies from lead in soil or paint chips. Lead dust is often invisible.
 - A major source of lead is the lead-based paint in peoples' homes. Lead-based paint was used in many homes until 1978.
 - In most cases, lead-based paint in good condition is not a hazard. However, disturbing lead-based paint can endanger you and your family.
-



Who Should Read This Pamphlet?

This pamphlet is for you if you live in a home that was built before 1978 that is being renovated, repaired, or painted; or if you are considering such a project.

It will teach you:

- The basic facts about lead and your health.
- Questions to ask prospective contractors.
- How to prepare your home for the job.
- What to look for during the job and when the job is done.
- Where to get more information about lead.

This pamphlet is not for:

- **Abatement projects.** Abatement is a set of activities aimed specifically at eliminating lead or lead hazards. EPA has regulations for certification and training of abatement professionals. If your goal is to eliminate lead or lead hazards, contact the National Lead Information Center at **1-800-424-LEAD (5323)** for more information.
- **“Do-it-yourself” projects.** If you plan to do renovation work yourself, this document is a good start, but you will need more information to complete the work safely. Call the National Lead Information Center at **1-800-424-LEAD (5323)** and ask for more information on how to work safely in a home with lead-based paint.
- **Contractor education.** Contractors who want information about working safely with lead should contact the National Lead Information Center at **1-800-424-LEAD (5323)** for information about courses and resources on lead safe work practices.

Work in older homes can be done safely. Lead can be a hazard in older homes if work is not done properly, but if you follow proper work practices, the job can be done safely. Proper work practices include worksite containment, dust-minimizing work methods, and a careful clean up, as described in this pamphlet.

Lead and Your Health

Lead is especially dangerous for children under 6 years of age.

Among other problems, lead can affect children's brains and developing nervous systems, causing:

- Reduced IQ and learning disabilities.
- Behavior problems.

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

Lead is also harmful for adults. In adults, high lead levels can pose many dangers, including:

- High blood pressure, headaches, and memory and concentration problems.
- Difficulties during pregnancy and other fertility problems in both men and women.



Lead gets into the body when it is swallowed or breathed.

- People, especially children, can swallow lead dust as they eat, play, and do other normal hand-to-mouth activities.
- People may also breathe in lead dust or fumes while they work on jobs that sand, scrape, burn, brush, or blast lead-based paint, or otherwise disturb painted surfaces.

What should I do if I am concerned about my family's exposure to lead? Call your doctor or local health department to arrange for a blood test. A blood test is the only way to find out if you or a family member has lead poisoning.

For more information about the health effects of lead exposure, call 1-800-424-LEAD (5323).

Where Does the Lead Come From?

Dust is the main problem. The most common way to get lead in your body is from dust. Lead dust comes from deteriorating lead-based paint and lead-contaminated soil that gets tracked into your home. This dust accumulates to unsafe levels. Then, normal hand-to-mouth activities, like playing and eating, move that dust from surfaces like floors and windowsills into your body.

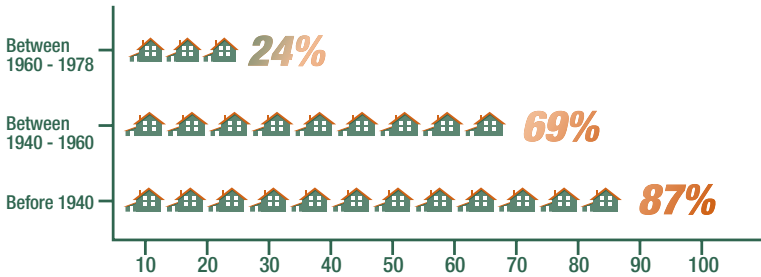
When you renovate your home, you create dust. Common renovation activities like sanding, cutting, and demolition can create lead dust and chips and release lead dust that has accumulated in the home.

Proper work practices protect you from the dust. The key is to do the work using lead safe work practices including worksite containment, dust-minimizing work methods, and a careful clean-up, as described in this pamphlet.

Who is responsible? You are. Even if you use a contractor you will play a key role.

- **Stay out of the work area.** Prepare for the job (as discussed on p. 5) and keep your family out of the worksite.
- **Know your home.** Following the steps in this pamphlet can help protect your family from dust that results from a renovation, repair, or painting project. If you are concerned about other lead-based paint or lead dust in your home, see p. 3.
- **Know about other lead sources.** Remember, lead can also come from outside soil, your water, or household items (such as lead-glazed pottery and lead crystal). Contact the National Lead Information Center at **1-800-424-LEAD (5323)** for more information on these sources.

Checking Your Home for Lead-Based Paint



Source: HUD's National Survey on Lead and Allergens, Vol 1, Table 4.1, April 18, 2001.

Older homes are more likely to contain lead-based paint.

These homes may be single family homes or apartments. They may be private, federally assisted, or public housing. They may be urban, suburban, or rural.

You can assume your home contains lead. Especially in older homes, you may simply want to assume lead is in your home and use lead safe work practices during your renovation, repair, or painting job.

Or, you can hire a professional to check for lead-based paint in your home. A certified professional can determine if your home has lead or lead hazards.

- A professional can test the surfaces that will be affected by the renovation activities. This will tell you the areas in your home where lead safe work practices are needed.
- Or, this professional can evaluate your entire home to find all the lead and/or lead hazards in your home. Talk to this professional about the type of evaluation that is best for you.
- To find a qualified professional, call the National Lead Information Center at **1-800-424-LEAD (5323)**.



If You Choose to Use a Contractor

You have the ultimate responsibility for your family's safety.

This means properly preparing for the renovation and keeping your family out of the work area (see p. 5). It also means choosing a contractor who will use lead safe work practices.

As you interview contractors, make sure they can explain clearly how they will minimize lead hazards during the work.

- Ask if the contractor is certified to perform renovations.
- Ask them what lead safe methods they will use to set up and perform the job in your home.
- Ask if the contractor is aware of the laws about lead. For example, contractors are required to provide you with a copy of EPA's lead hazard information pamphlet before beginning work. A sample pre-renovation disclosure form is provided on p. 12 of this pamphlet. Contractors may use this form to make documentation of compliance easier.
[Requirements of Renovation, Repair, and Painting Program rule.]
- Ask for references from at least three recent jobs involving homes built before 1978, and speak to each personally.



Make sure the contract is clear about how the work will be set up, performed, and cleaned.

- Share the results of any previous lead tests with the contractor.
- The contract should specify which parts of your home are part of the work area and specify which lead safe work practices should be used in those areas. Remember, your contractor should confine dust and debris to the work area and should minimize spreading that dust to other areas of the home.
- The contract should also specify that the contractor should clean the work area and verify that it was cleaned adequately (as discussed on p. 6&7).

Getting Your Home Ready

The work areas may not be accessible to you while the work occurs. The rooms or areas where work is being done may be blocked off or sealed with plastic sheeting to contain any dust that is generated. The contained area may not be available to you until the work in that room or area is complete, cleaned thoroughly, and the containment has been removed. This means you will need to plan how to live in your home without access to some areas. You may need:

- Alternative bedroom, bathroom, and kitchen arrangements if work is occurring in those areas of your home.
- A safe place for pets because they, too, can be poisoned by lead and can track lead dust into other areas of the home.
- A separate pathway from the work area to the outside in order to bring materials in and out of the home. It should not be through the same entrance that your family uses.
- A place to store your furniture. All furniture and belongings may have to be moved from the work area while the work is done. (Items that can't be moved, such as cabinets, should be wrapped in heavy duty plastic.)

You may even want to move out of your home temporarily while all or parts of the work are being done.

Forced-air heating and air conditioning systems may need to be turned off while work is done. This prevents dust from spreading through vents from the work area to the rest of your home. Consider how this may affect your living arrangements.

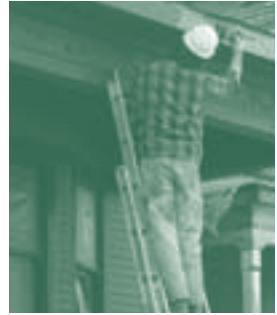


While the Work is Happening

Always follow a standard set of lead safe work practices. Lead safe work practices are based on the three simple procedures, described below:

Contain the work area. The area where work is happening should be contained so that dust and debris stay in that area. Heavy duty plastic should be used as appropriate to:

- Cover the floors and any furniture that can't be moved.
- Seal off doors and heating and cooling system vents.
- Create a contained pathway from the work area to the outside.



This means that you should not see any dust or debris outside the work area.

Use work methods that minimize dust. There is no way to eliminate dust, but some methods make less dust than others. For example, misting areas before sanding or scraping, scoring paint before separating components, and prying and pulling apart components instead of breaking them are techniques that generate less dust than alternatives. Some methods generate large amounts of lead dust and the use of these methods should be minimized—examples include open flame burning, abrasive blasting, and extensive sanding. Any power tools should include a high efficiency particulate air (HEPA) vacuum attachment to capture dust created by these tools.

Clean up thoroughly. The work area should be cleaned up daily to keep it as clean as possible. When all the work is done, the area should be cleaned up using special cleaning methods before taking down any plastic that isolates the work area from the rest of the home. The special cleaning methods will likely include:

- Using a high efficiency particulate air (HEPA) vacuum to clean up dust and debris on all surfaces, and
- Wet mopping with plenty of rinse water.

When the cleaning is done, you should see no dust or debris in the work area.

After the Work is Done

When all the work is finished, you will want to know if your home is a safe environment for you and your family. Here are some ways to check.

Look around. After the final cleaning, look around to make sure the work area looks clean. If you see any dust, paint chips, or debris, the area should be re-cleaned.

Perform a cleanup verification. Use disposable cleaning cloths to wipe the floor of the work area and compare them to a cleaning verification card to determine if the work area was adequately cleaned. Contact the National Lead Information Center at 1-800-424-LEAD (5323) or visit their website at www.epa.gov/lead/nlic.htm to order a cleaning verification card and detailed instructions.

You may also choose to do a lead dust test instead of, or in addition to, cleanup verification when the job is done. There are a few ways to get this done.

- You can specify in your contract that the test will be done. In this case, make it clear who will do the testing.
- Testing can be done by you, the contractor, or a lead professional. If you choose to do the testing some EPA-recognized laboratories will send you a kit that allows you to collect samples and send them back to the lab for analysis.

Contact the National Lead Information Center at **1-800-424-LEAD (5323)** for lists of qualified professionals and testing labs.

If your home fails the dust test, the area should be re-cleaned. Where the project is done by contract, it is a good idea to specify in the contract who is responsible for cleaning if the home fails the test.



For Additional Information

You may need additional information on how to protect yourself while a job is going on in your home.

■ The **National Lead Information Center** at **1-800-424-LEAD (5323)** or **www.epa.gov/lead/nlic.htm** can tell you how to contact your state, local, and/or tribal programs or get general information about lead poisoning prevention.

- State and tribal lead poisoning prevention or environmental protection programs can provide information about the lead regulations that apply in your community, and tell you about sources of financial aid for reducing lead hazards.
- Local building code officials can tell you the regulations that apply to the renovation work that you are planning.
- Local health departments can provide information about local programs, including assistance for poisoned children.



■ **The National Lead Information Center** can also provide a variety of resource materials, including the following guides to lead safe work practices:

- *Lead Paint Safety, a Field Guide for Painting, Home Maintenance, and Renovation Work*
- *Reducing Lead Hazards When Remodeling Your Home*
- *Protect Your Family from Lead in Your Home*
- *Lead in Your Home: Parent's Reference Guide*



Contact the Center to obtain additional copies of this pamphlet or other materials.

EPA, CDC, CPSC, and HUD Contacts

EPA Regional Offices

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

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

Regional Lead Contact
U.S. EPA Region 1
Suite 1100
One Congress Street
Boston, MA 02114-2023
(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) 321-6769

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

Regional Lead Contact
U.S. EPA Region 3
1650 Arch Street
Philadelphia, PA 19103-2029
(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 30303-8960
(404) 562-9900

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

Regional Lead Contact
U.S. EPA Region 5
77 West Jackson Boulevard
Chicago, IL 60604-3507
(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) 665-6444

Region 7 (Iowa, Kansas, Missouri, Nebraska)

Regional Lead Contact
U.S. EPA Region 7
901 N. 5th Street
Kansas City, KS 66101
(913) 551-7003

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

Regional Lead Contact
U.S. EPA Region 8
999 18th Street, Suite 300
Denver, CO 80202-2466
(303) 312-6312

Region 9 (Arizona, California, Hawaii, Nevada)

Regional Lead Contact
U.S. Region 9
75 Hawthorne Street
San Francisco, CA 94105
(415) 947-8021

Region 10 (Alaska, Idaho, Oregon, Washington)

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

CDC Childhood Lead Poisoning Prevention Office

Contact the CDC Childhood Lead Poisoning Prevention Program for additional materials and links on the topic of lead.

CDC Childhood Lead Poisoning Prevention Program

4770 Buford Highway, MS F-40
Atlanta, GA 30341
(770) 488-3300
<http://www.cdc.gov/nceh/lead>

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

EPA, CDC, CPSC, and HUD Contacts (continued)

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

Sample Pre-Renovation Form

This sample form may be used by contractors in documenting compliance with the Federal lead disclosure and renovation regulations.

Occupant Confirmation

- I have received a copy of the lead hazard information pamphlet informing me of the potential risk of the lead hazard exposure from renovation activity to be performed in my dwelling unit. I received this pamphlet before the work began.
- I confirm that I own and live in this property, and that no child under the age of 6 resides here.

Note: A child may reside in the primary residence of his or her custodial parents, legal guardians, foster parents, or informal caretaker if the child lives and sleeps most of the time at the caretaker's residence.

- I confirm that no child under the age of 6 residing in this home has been diagnosed with an increased blood lead level by a qualified medical professional.

Printed name of recipient

Date

Signature of recipient

Self Certification Option (for tenant-occupied dwellings only)

If the lead hazard information pamphlet was delivered but a tenant signature was not obtainable, you may check the appropriate box below.

- Refusal to sign** – I certify that I have made a good faith effort to deliver the lead hazard information pamphlet to the rental dwelling unit listed below at the date and time indicated and that the occupant refused to sign the confirmation of receipt. I further certify that I have left a copy of the pamphlet at the unit with the occupant.
- Unavailable for signature** – I certify that I have made a good faith effort to deliver the lead hazard information pamphlet to the rental dwelling unit listed below and that the occupant was unavailable to sign the confirmation and time of receipt. I further certify that I have left a copy of the pamphlet at the unit by sliding it under the door.

Printed name of person certifying
lead pamphlet delivery

Attempted delivery date

Signature of person certifying lead pamphlet delivery

Unit Address

Note Regarding Mailing Option – As an alternative to delivery in person, you may mail the lead hazard information pamphlet to the owner and/or tenant. Pamphlet must be mailed at least seven days before renovation. Document with a certificate of mailing from the post office.

—Occupant's Copy—



Sample Pre-Renovation Form

This sample form may be used by contractors in documenting compliance with the Federal lead disclosure and renovation regulations.

Occupant Confirmation

- I have received a copy of the lead hazard information pamphlet informing me of the potential risk of the lead hazard exposure from renovation activity to be performed in my dwelling unit. I received this pamphlet before the work began.
- I confirm that I own and live in this property, and that no child under the age of 6 resides here.

Note: A child may reside in the primary residence of his or her custodial parents, legal guardians, foster parents, or informal caretaker if the child lives and sleeps most of the time at the caretaker's residence.

- I confirm that no child under the age of 6 residing in this home has been diagnosed with an increased blood lead level by a qualified medical professional.

Printed name of recipient

Date

Signature of recipient

Self Certification Option (for tenant-occupied dwellings only)

If the lead hazard information pamphlet was delivered but a tenant signature was not obtainable, you may check the appropriate box below.

- Refusal to sign** – I certify that I have made a good faith effort to deliver the lead hazard information pamphlet to the rental dwelling unit listed below at the date and time indicated and that the occupant refused to sign the confirmation of receipt. I further certify that I have left a copy of the pamphlet at the unit with the occupant.
- Unavailable for signature** – I certify that I have made a good faith effort to deliver the lead hazard information pamphlet to the rental dwelling unit listed below and that the occupant was unavailable to sign the confirmation and time of receipt. I further certify that I have left a copy of the pamphlet at the unit by sliding it under the door.

Printed name of person certifying
lead pamphlet delivery

Attempted delivery date

Signature of person certifying lead pamphlet delivery

Unit Address

Note Regarding Mailing Option – As an alternative to delivery in person, you may mail the lead hazard information pamphlet to the owner and/or tenant. Pamphlet must be mailed at least seven days before renovation. Document with a certificate of mailing from the post office.

— Contractor's Copy —





1-800-424-LEAD (5323)

www.epa.gov/lead



Printed with Vegetable Oil-Based Inks, Recycled Paper
(Minimum 50% Post-consumers) Process Chlorine Free