

# LEAD-SAFE REMODELING



Learn How to Prevent Lead Poisoning



Lead-Based Paint Program

DHS 8191

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## Introduction

Lead dust from household paint is the most common cause of lead poisoning. Homes built before 1978 may contain lead-based paint. In general, the older the house is, the more likely it is to have lead-based paint.

Remodeling, renovation and routine maintenance are all activities that can create lead dust. Although paint that is well cared for generally does not pose a danger, if the paint is chipping, peeling or cracking it may create lead dust. Lead dust can be hard to see and is often found in and around windows, on porches and stairs and near doors and other areas where painted surfaces rub or hit against one another. However, there are steps and precautions that you can take to reduce lead dust and keep your home lead safe.

This pamphlet will provide you with the information to do your own lead-safe remodeling or to find a contractor who will use lead-safe work practices. It is important learn about how you can protect your family from lead poisoning.

## Why is lead a hazard

Lead is natural metal that has been used in commercial and household products for thousands of years. Unfortunately, lead is poisonous and can be especially harmful to children and pregnant women. The dust and chips from lead-based paint are dangerous when swallowed or inhaled and they can also wash into the soil where children may play. Lead poisoning in children can result in the following:

- Learning disabilities
- Brain damage
- Decreased IQ
- Attention deficit disorder
- Hyperactivity
- Kidney and liver damage
- Coma
- Death

Adult lead poisoning can cause reproductive problems, organ damage, muscle and joint pain, mood changes, sleep disturbance, high blood pressure, hearing and vision loss, and loss of feeling in hands and feet. In severe cases, lead poisoning requires medical treatment and hospitalization.

Once lead enters the environment, there is no way to destroy it or make it harmless. Therefore, the only way to prevent poisoning is to control lead exposure.

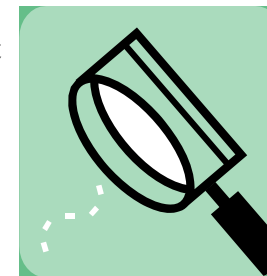
## Testing for lead-based paint

If you live in a home built before 1978 you can assume that it has lead-based paint. However, the only way to know for sure is to have the paint tested. The Department of Human Service (DHS) Lead-Based Paint Program certifies lead-based paint professionals who are trained to find lead paint hazards before, during and after lead-based paint work.

Certified inspectors look at each surface to find out if there is lead paint present and where it is located.

Certified risk assessors can do the same work as inspectors and can also tell you what type of lead-paint hazards might exist, what the severity of the problem is and how to address those hazards. It is important to note

that general home inspectors and government building inspectors are not necessarily certified to address lead paint issues. For a list of certified lead paint professionals you can contact the Lead-Based Paint Program (see Important Contacts).



Do-it-yourself lead testing kits are also available and many stores sell them. They are an easy and inexpensive way to test for lead paint. However, they can only tell you that lead might be present, but not how much or what kind of a hazard there is. It is important to follow the instructions. Be aware that a negative result does not necessarily mean there is no lead paint present.

## Lead-safe work practices

### The right equipment

It is important to have the right equipment before you start your work. Almost all these products listed below can be purchased at building supply stores or home centers.

#### Cover and contain

- Heavy plastic sheeting made of polyethylene, at least 6 mils thick (or two layers of 3 mils sheeting).
- Duct tape to hold plastic sheeting in place and seal work area.
- Protective clothing, coveralls or disposable work suits.
- Eye protection such as plastic goggles.
- Gloves. Use rubber or coated gloves if working with lead cleansers or chemical strippers (see box below).
- Signs and/or caution tape.



#### Work Wet

- Spray bottle, garden sprayer, or backpack sprayer.
- Fine-spray nozzle for hose (exterior work).
- Metal scrapers, wire brushes, wet sandpaper, and sanding sponges for removing paint by hand.

### Chemical strippers and heat guns

*Chemical strippers can contain chemicals harmful to the skin or produce fumes harmful if inhaled. Do not use products made with methylene chloride. It is always best to have plenty of fresh air moving through the work area and be sure to use chemically resistant gloves when working with these products.*

*Heat guns work by softening paint with hot air so that it can be scraped off. However, heat guns can also create toxic lead fumes. If you use a heat gun, use it at the very lowest setting possible to do the job. Do not use a heat gun above 750° and be sure to ventilate the work area very well.*

### Respirate/ventilate

- Fans to ventilate if you are using strippers or heat guns.
- Half-face respirator (APF 10) with fresh filtration cartridges and a minimum rating of N-100.
- For non-disposable respirators, be sure to get information on proper fit and filter usage.

*Note: Some high risk work conditions may require a respirator that offers a higher level of protection.*

### Clean as you go

- Heavy duty plastic garbage bags
- Mop with disposable heads
- Buckets
- Disposable cleaning cloths, sponges, or paper towels
- All-purpose household cleaner or special lead cleaner
- HEPA vacuum

### Leave it at the job

- Disposable gloves
- Disposable painter's hat
- Disposable shoe coverings
- Disposable coveralls
- Disposable hand towels and pre-moistened wipes

### The right techniques

Working lead-safe involves a few simple techniques.

#### Cover and contain

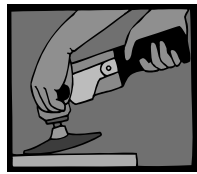
- Work in one room at a time.
- Seal off the room from other rooms and from the outside of the house with plastic sheeting.
- Seal off air/ heating ducts so lead-paint dust isn't circulated.
- Remove all belongings and cover everything that can't be removed with plastic sheeting because once lead paint dust gets into a carpet or upholstery, it is almost impossible to get it out.
- Tape down all of the edges of the plastic with duct tape.

- When working outside:
  - Cover the ground with plastic sheeting up to at least 10 feet from the foundation.
  - Cover areas of bare soil where children play.
  - Put up signs to let neighbors know that lead paint work is in progress.
  - Use plastic sheeting or landscaping cloth to control spray when pressure washing.
- Wear eye protection, a respirator, and proper work clothing.
- Turn off all heating, air conditioning and ventilation systems.
- Cover and seal windows from the inside using plastic sheeting to keep lead debris out of window screens.



#### *Work wet*

- Use a sprayer or hose to keep surfaces moist.
- Use a scraper, wire brush, wet/dry sandpaper or sanding sponge to remove paint by hand.



#### **About Power Sanding:**

*Power sanding to remove lead-based paint can create an enormous amount of toxic lead dust. You should only use power sanders that are equipped with a HEPA filtration vacuum system.*

#### *Respirate/ventilate*

- Lead dust can easily get into your bloodstream through the lungs so it is important to use proper protection.
- Use a respirator and change the filters according to manufacturers directions. **DO NOT** use paper dust masks.
- Keep fresh air moving through the work area if using a chemical stripper or heat gun.

#### *Clean as you go*

- Clean up daily. Do not leave lead-based paint debris lying around where it can be disturbed or spread around. Put debris in double plastic bags and place it in the garbage.
- Use separate wash and rinse buckets and change rinse water often. This prevents the lead dust and debris from contaminating your cleaning solution or your rinse water.
- Use a general household cleanser or a special lead cleaner, and prepare the washing solution according to the manufacturer's directions.
- Use one mop, sponge or cloth for cleaning and another for rinsing and throw them away after use.
- When washing surfaces, start at the top and work toward the bottom and from the farthest point away and work toward the exit.
- After clean-up, discard sponges, mop heads and cloths in heavy-duty garbage bags along with the other lead-paint debris.
- Never pour wash or rinse water into gutters, street drains, or on the ground. Filter out solid debris and dispose of in the trash. Dispose of the water in the toilet or utility sink.  
*Remember, healthy waterways and fish in Oregon depend on clean water.*
- If possible, wait one hour and repeat the cleaning process in order to get any lead dust that may have settled.
- Tape a tack pad on the floor at the exit of the work area to remove dust and debris and discard it when the job is over.
- Call your garbage service to find out how to dispose of large pieces of wall, woodwork, etc.

#### *Leave it at the job*

- Remove work clothes before leaving the worksite. Shower promptly.
- Don't eat, smoke, drink, or apply cosmetics in the work area.
- Place work clothes in a heavy-duty plastic bag and wash separately.

## The right contractor

The DHS Lead-Based Paint Program can also provide you with a list of questions to ask professionals to help you find a lead-safe remodeler. Any professional who removes or stabilizes paint on housing or child care settings built before 1978 is required to obtain a Lead-Based Paint Permit from the DHS Lead-Based Paint Program. It is important to note that if you need to have a lead hazard permanently removed, your contractor must have special certification to do lead abatement. Anyone who is paid to do construction, repairs, or remodeling must be registered with the Oregon Construction Contractors Board (CCB). You can contact CCB to verify a professional's registration and to check on claims made against them. You can also ask CCB if the business has an endorsement to do lead-based paint work and if the individual performing the work is licensed to do so (see Important Contacts). Here are a few tips to remember:



- Get referrals from family, friends, and neighbors. If possible, personally inspect some of the contractor's previous work.
- Get several written bids. Don't automatically accept the lowest bid, a higher price may include better materials, workmanship and reliability.
- Always use a written contract and put all the terms and any changes in writing.
- Pay in installments. Consider partial payments upon completion of portions of the work.



*Federal law requires contractors to provide lead information to residents before they start renovation on homes built before 1978. Residents should receive a pamphlet called "Protect Your Family from Lead in Your Home," available from the Environmental Protection Agency (see Important Contacts).*

## Lead-safe checklist



### DO

- Do assume that houses built before 1978 have lead-based paint or have it tested.
- Do remove or cover carpets, furniture, toys, or other belongings in or near the work area.
- Do seal off the work area.
- Do work wet.
- Do work with proper protective equipment and clothing, including a properly fitted respirator.
- Do use a HEPA vacuum to clean up lead-paint debris.
- Do use separate wash and rinse buckets, sponges, and mops for cleanup.
- Do clean up daily.
- Do dispose of wastewater properly.
- Do wash work clothes separately .
- Do hire a lead-safe contractor who is registered with the Construction Contractor's Board and use a written contract that describes the work to be performed and addresses lead-safe work practices.

### DO NOT

- Do not dry scrape.
- Do not dry sand.
- Do not use open flame burning or torching.
- Do not use power sanders or grinders without dust controls or HEPA vacuum attachments.
- Do not use paper dust masks.
- Do not use paint strippers with methylene chloride.
- Do not use high-pressure power washers without a protective enclosure.
- Do not use power blowers to disperse exterior paint debris.
- Do not eat, drink, smoke or apply cosmetics in the work area.
- Do not allow children or women of childbearing age in the work area.

## Other sources of lead

In addition to lead-based paint, there are many other sources of lead in the environment. Some are well known, but others are often overlooked:

- Jobs that involve lead such as remodeling, demolition, painting prep, radiator shops, battery recyclers, and pipe fitters – workers who don't shower or leave work clothes at the job can bring home lead and contaminate the family car and home.
- Sports that involve lead such as fishing, shooting and hunting, especially when lead shot or sinkers are being made.
- Hobbies where lead is used include pottery, stained glass and furniture refinishing.
- Lead-glazed pottery or porcelain, or lead crystal can contaminate foods and liquids stored in them.
- Old, painted toys and furniture.
- Some imported plastic mini-blinds and porcelain bathtubs.
- Folk remedies and Pay-loo-ah, Rueda, Surma, Greta, or Kohl.
- Drinking water: Homes with lead pipes, lead solder or brass fixtures can be a source of lead for home drinking water, especially where the water is 'soft' (slightly acid). If you think that your plumbing might have lead in it, you can do the following:
  - You can have your water tested for lead.
  - Use only **cold** water for drinking, food preparation, and making baby formula.
  - If you have not used your water for two hours or more, run the water for 30 seconds or until noticeably colder before using it.

## Good housekeeping can reduce risk

Children can swallow lead or breathe lead contaminated dust if they play in dust or dirt and then put their fingers or toys in their mouths, or if they eat without first washing their hands. Good lead poisoning prevention starts with good housekeeping.

Here are some tips:

- Keep areas where your children play dust-free and clean and pay special attention to areas around friction or impact surfaces such as windows, doors and stairs.
- Wash pacifiers and bottles if they touch the floor and keep extras handy.
- Mop floors and wipe window ledges with an all-purpose cleaner twice a week and rinse mop heads, sponges and cleaning cloths well.
- Wash toys and stuffed animals regularly.
- Make sure your children wash their hands, especially before meals, naptime and bedtime.
- Clean or remove shoes upon entering your home to avoid tracking in lead from outside.
- A good diet is important because children who eat regular meals and snacks that include nutritious foods - especially ones rich in calcium and iron - absorb less lead.



In addition to good housekeeping, the best defense against a lead-based paint problem is regular maintenance of painted areas, careful surface preparation using lead-safe techniques and repainting with a high quality house paint. If paint is in bad shape, make sure any underlying problems are fixed before repainting.

*If your child is at risk for lead poisoning have their blood lead level tested at a public clinic or private health care provider. For more information about testing contact the LeadLine (see Important Contacts).*

## Important contacts

DHS Lead-Based Paint Program,

(971) 673-0440 or call

the LeadLine at (503) 988-4000 (Portland)

or 1-800-368-5060 (statewide)

[www.oregon.gov/DHS/ph/leadpaint](http://www.oregon.gov/DHS/ph/leadpaint)

-Information about training and certification for professionals who work with lead-based paint

-Enforcement of lead paint regulations

-Information about lead-safe work practices, certified lead paint professionals, and state regulations

Oregon Construction Contractors Board

(503) 378-4621, ext. 4900

-Confirm a professional's registration and check for complaints on file against that contractor

Portland Bureau of Environmental Services

(503) 823-7180

-Information about power-washing and about disposing of lead-contaminated waste water

U.S. Department of Housing and Urban Development

Oregon Field Office

(503) 326-2561

[www.hud.gov/offices/lead](http://www.hud.gov/offices/lead)

-Information about lead poisoning prevention in federally assisted housing

U.S. Environmental Protection Agency

1-800-424-LEAD (publications), Region 10 (206) 553-1985

[www.epa.gov/lead/](http://www.epa.gov/lead/)

-Information about lead hazards and their prevention

U.S. Consumer Product Safety Commission

1-800-638-2772.

[www.cpsc.gov](http://www.cpsc.gov)

-Information about lead in consumer products

Oregon Department of Human Services  
Lead-Based Paint Program  
800 NE Oregon St., Suite 608  
Portland, OR 97232

*If you would like this information provided in an alternative format, please phone (971) 673-0440*

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