

# Real Estate Transactions and the Vermont Lead Law

## Lead as a Hazard in Houses Built Before 1978

Lead paint and dust from lead paint are potential sources of lead exposure for persons of all ages. Children, pregnant women and anyone using unsafe work practices are at particular risk. In 1978, lead was banned in house paint. Most homes built before that year still contain lead.

The Vermont Lead Law was passed in 1996 and updated in 2008 (18 VSA Chapter 38). New provisions of the law, 18 V.S.A. § 1767, effective July 1, 2008, require sellers to provide lead disclosure information and educational materials approved by the Vermont Department of Health during real estate transactions for all pre-1978 housing, whether owner-occupied or rental.

## Seller Responsibilities: All Pre-1978 Residential Properties

For rental and owner-occupied pre-1978 housing, the seller must provide the buyer with specific materials approved by the Department of Health on two occasions:

1. Prior to executing a purchase and sale agreement, the seller must provide a lead paint hazard brochure and other lead hazard materials as follows:
  - *Protect Your Family From Lead in Your Home*
  - *Lead Hazards in Housing*
  - *Vermont Lead Law Real Estate Transaction Disclosure Form Part I*
  - *Real Estate Transactions and the Vermont Lead Law*
2. At the time of sale, the seller must provide information about lead-safe renovation practices as follows:
  - *Don't Spread Lead*
  - *Vermont Lead Law Real Estate Transaction Disclosure Form Part II*

## Additional Seller Responsibilities: Pre-1978 Residential Rental Properties

For rental properties built before 1978, in addition to the documents for all pre-1978 residential properties listed above, the seller must provide the following materials and information:

1. Prior to executing a purchase and sale agreement, the seller must verify that Essential Maintenance Practices (EMP) have been completed and that an EMP Compliance Statement has been filed with the Department of Health.

\*\*\*OVER\*\*\*



**DEPARTMENT  
OF HEALTH**

108 Cherry Street  
PO Box 70  
Burlington, VT  
05402-0070  
healthvermont.gov

2. Prior to executing a purchase and sale agreement and again at the time of sale, the seller must disclose any court order, including any assurance of discontinuance or administrative order that applies to the property, unless all the terms of the order have been fully completed. Prior to sale, the seller must either fully complete all the obligations under any court order, or the order must be amended in writing to transfer all remaining obligations to the buyer.
3. Prior to sale, the seller must provide the buyer with a copy of the Department of Health information sheet: *Essential Maintenance Practices & the Vermont Lead Law*.

### **Buyer Responsibilities: Pre-1978 Residential Rental Properties**

For rental properties built before 1978, if the property is not in compliance with the Vermont Lead Law at the time of sale:

- The buyer must bring the property into full EMP compliance within 60 days of closing, unless an extension of time is granted by the Commissioner of Health. A request for an extension may be filed in writing with the Commissioner of Health, PO Box 70, Burlington, VT 05402-0070 and must be submitted at least 10 days before the due date. The Commissioner may grant the request only for good cause.
- Failure to comply with this requirement carries a mandatory civil penalty.

All materials required to be provided and listed above are available for download from the Department of Health website at: [www.healthvermont.gov/enviro/lead/lead.aspx](http://www.healthvermont.gov/enviro/lead/lead.aspx) and go to "Real Estate Transactions."

June 2008

## What are the dangers of lead?

Lead is a highly toxic metal. Too much lead in the body, or lead poisoning, can cause serious and permanent health problems for anyone, but children and pregnant women are at special risk. The Health Department recommends testing all children at ages 1 and 2. Talk to your health care provider about testing.

## Where does lead come from?

In 1978, lead was banned in house paint. About 70% of Vermont homes were built before 1978 and likely contain lead-based paint. Over time, lead paint on surfaces crumbles into invisible dust that contaminates homes and soil. Dust or soil clings to hands, toys, and objects that children put in their mouths. Young children are at highest risk because their developing bodies absorb lead more easily. Children can also be exposed to lead by eating, chewing or sucking on lead-painted objects such as windowsills or furniture.

Children, pregnant women and adults can be exposed to lead during renovation projects or whenever lead-based paint is improperly sanded, scraped or burned. Lead exposure can occur from breathing in lead dust, or from swallowing the lead dust if it gets onto hands and then into mouths. This commonly occurs through eating, drinking or smoking.

## What is the Vermont Lead Law?

The Vermont Lead Law—passed in 1996 and updated in 2008—requires landlords of older buildings and child care facility owners to help

prevent children from being exposed to lead. If a residential rental property or child care facility was built before 1978, the owner of the property or the property management company is required to:

- Provide tenants with “Protect Your Family from Lead in Your Home” booklet (available at: [healthvermont.gov/emp](http://healthvermont.gov/emp))
- Post an approved notice asking people to report chipping or damaged paint (available at: [healthvermont.gov/emp](http://healthvermont.gov/emp))
- Attend a training program approved by the Health Department and or ensure that anyone who performs Essential Maintenance Practices (EMPs) on the property has completed the training program
- Complete EMPs annually
- Sign a compliance statement certifying that EMPs have been done and provide a copy to their tenants, insurance carrier and the Health Department at least every 365 days

## What are Essential Maintenance Practices?

EMPs, which must be completed annually, include:

- Inspecting the property inside and outside
- Identifying areas where paint is in poor condition and promptly fixing it in a lead-safe way
- Verifying the installation of low-cost inserts in window wells in all wooden windows
- Removing any visible paint chips on the ground outside the building
- Performing a specialized cleaning in common areas



- Taking precautions when remodeling to prevent the spread of lead dust

## What are safe work practices under the Lead Law?

The Vermont Lead Law (18 VSA Chapter 38) prohibits unsafe work practices that increase the risk of lead exposure, including removing lead-based paint by burning, using a heat gun, water or sand blasting, dry scraping, power sanding, and chemical stripping.

The law requires using lead-safe work practices including limiting access to work areas, using plastic dust barriers, wearing protective clothing, and using water to dampen painted surfaces or debris before disturbing them.

## What are the Lead Law's benefits?

**Protects children:** Simple ongoing maintenance practices prevent children from being exposed to lead.

**Protects property owners:** Property owners who follow the law receive increased liability protection.

**Protects workers:** Using lead-safe work practices reduces workers' exposure to lead.

**Saves money:** By reducing children's exposure to lead, property owners may avoid the high cost of abatement that could be required in the case of a lead-poisoned child.

## What will I learn in an EMP class?

The EMP class is offered around the state by trained instructors. The class, which is four hours long and usually free, helps participants to:

- Comply with the Vermont Lead Law
- Understand the health effects of lead exposure
- Learn ways to protect children from exposure to lead
- Know how to perform EMPs safely
- Identify work practices that increase the risk of lead poisoning

A schedule of classes is online at [leadsafevermont.org](http://leadsafevermont.org). For a full description of the Lead Law requirements, visit: [legislature.vermont.gov/statutes/chapter/18/038](http://legislature.vermont.gov/statutes/chapter/18/038).

To file or search for a compliance statement on a property, visit: [secure.vermont.gov/VDH/emp](http://secure.vermont.gov/VDH/emp).

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## For More Information

Vermont Asbestos & Lead Regulatory Program

- Call: 802-863-7220 or 800-439-8550 (toll-free in Vermont)
- Visit: [www.healthvermont.gov/environment/asbestos-lead](http://www.healthvermont.gov/environment/asbestos-lead)

Vermont Housing & Conservation Board

- Call: 802-828-5064 or 800-290-0527 (toll-free in Vermont)
- Visit: [www.vhcb.org/Lead-Paint](http://www.vhcb.org/Lead-Paint)

Burlington Lead Program (serves the Burlington and Winooski areas only)

- Call: 802-865-5323
- Visit: [burlingtonleadprogram.org](http://burlingtonleadprogram.org)





Lead poisoning is a serious but *preventable* health problem. Lead is a highly toxic metal that can harm anyone, but young children and pregnant women are at special risk.

Too much lead in the body, or lead poisoning, in children can:

- Hurt the brain, kidneys, and nervous system
- Slow down growth and development
- Make it hard to learn
- Damage hearing and speech
- Cause behavior problems

In pregnant women, lead can increase the risk of miscarriage and cause babies to be born too early, too small, or with learning or behavior problems. In adults, lead can cause high blood pressure and result in decreased fertility in men.

## Lead Paint in Housing

In Vermont, children are most often lead poisoned from lead dust, either by eating it when they put their hands or objects in their mouths or by breathing it in. Adults can be exposed to lead during renovation projects or whenever lead paint is improperly sanded, scraped or burned.

The most common source of lead dust is in houses built before 1978, the year lead was banned from house paint. Most homes built before that year still

contain lead. Even if the home has been repainted, the action of opening and closing doors and windows can release lead dust from the original paint into the home.

## Lead in Soil and Water

Soil may be contaminated with lead along the side of older homes from lead-based paint flaking off and near roadways or driveways from car exhaust when leaded gasoline was widely used. Small amounts of lead may occur naturally in soil. Some lead contamination comes from industrial sources such as lead battery manufacturing plants or brass foundries. This soil can be tracked into the house on shoes. It is very easy for a child to swallow some of this contaminated dirt while playing outside. To prevent lead poisoning, children should never play in bare soil.

Drinking water may contain lead from old lead pipes, plumbing fixtures, or solder. Always run the water until it is cold to use for cooking, drinking, and making baby formula. Lead pipes should be replaced.

## Lead-Safe Work Practices

The Vermont Lead Law – passed in 1996 and updated in 2008 (18 VSA Chapter 38) – is designed to protect children and families from lead hazards.



The law assumes all paint in pre-1978 housing is lead-based, unless a licensed lead inspector or lead risk assessor has determined that it is lead-free. The law prohibits certain unsafe work practices that increase the risk of lead exposure and requires lead-safe work practices when disturbing more than 1 square foot of paint in pre-1978 housing.

**Prohibited** work practices include removing paint by:

- Open flame burning or torching
- Use of heat guns operated above 1,100 degrees Fahrenheit
- Dry scraping
- Machine sanding or grinding
- Uncontained hydro-blasting or high-pressure washing
- Abrasive blasting or sandblasting without containment and high-efficiency particulate exhaust controls

**Required** safe work practices include:

- Limiting access to interior and exterior work areas
- Enclosing interior work areas with plastic sheeting or other effective lead dust barrier
- Using protective clothing
- Misting painted surfaces with water before disturbing paint
- Wet-mopping during cleanup to limit the creation of dust

## Other Sources of Lead

Jobs that can expose workers to lead:

- Construction and renovation work
- Auto repair and work with batteries
- Plumbing
- Welding or soldering

Dishware that can contain lead:

- Glazed pottery, like bean pots
- Metal pots with lead solder (samovars)
- Antique or vintage dishware

Products that can contain lead:

- Toy jewelry made in other countries
- Toys made in other countries
- Imported candy, especially from Mexico
- Imported make-up and home remedies

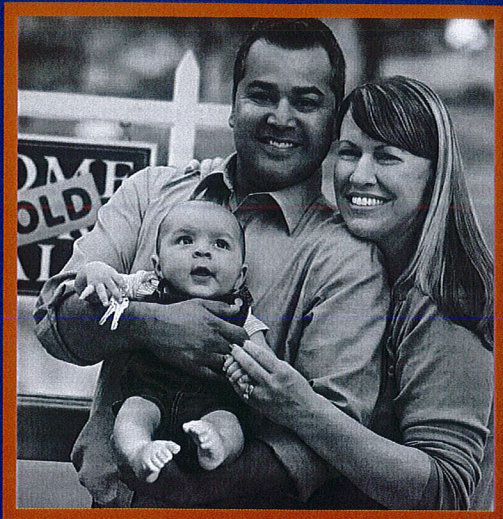
Hobbies that can expose you to lead:

- Stained glass
- Bullets
- Fishing sinkers

Check with the Consumer Product Safety Commission regularly for recalled products that are lead hazards: [www.cpsc.gov](http://www.cpsc.gov)

For more information call the Healthy Homes Lead Poisoning Prevention Program at (802) 863-7220 or (800) 439-8550 (toll-free in Vermont) or visit [healthvermont.gov](http://healthvermont.gov)

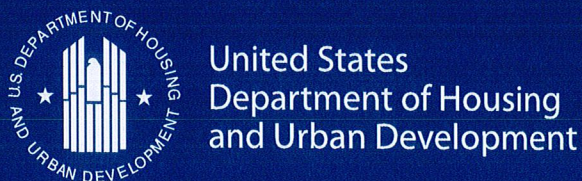
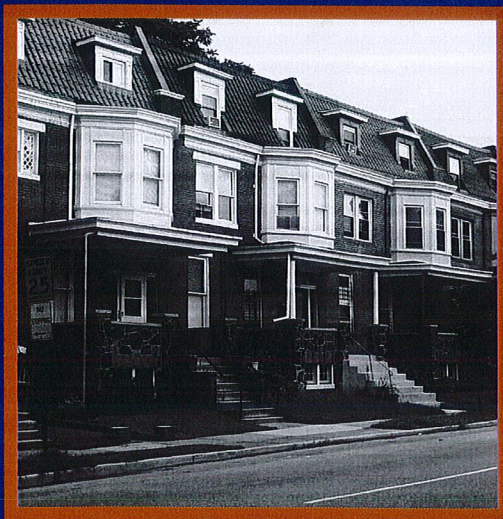
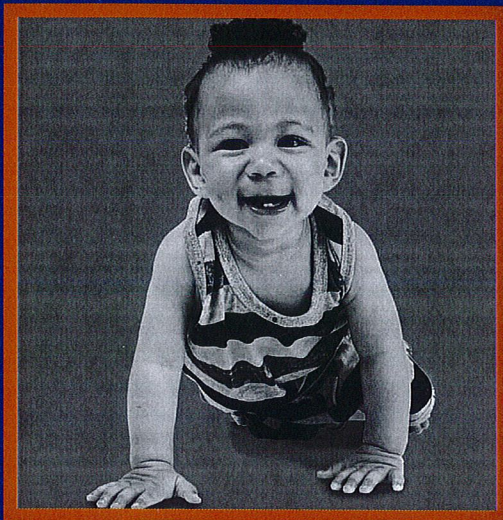




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# Protect Your Family From Lead in Your Home

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## Are You Planning to Buy or Rent a Home Built Before 1978?

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Did you know that many homes built before 1978 have **lead-based paint**? Lead from paint, chips, and dust can pose serious health hazards.

### Read this entire brochure to learn:

- How lead gets into the body
- How lead affects health
- What you can do to protect your family
- Where to go for more information

### Before renting or buying a pre-1978 home or apartment, federal law requires:

- Sellers must disclose known information on lead-based paint or lead-based paint hazards before selling a house.
- Real estate sales contracts must include a specific warning statement about lead-based paint. Buyers have up to 10 days to check for lead.
- Landlords must disclose known information on lead-based paint and lead-based paint hazards before leases take effect. Leases must include a specific warning statement about lead-based paint.

### If undertaking renovations, repairs, or painting (RRP) projects in your pre-1978 home or apartment:

- Read EPA's pamphlet, *The Lead-Safe Certified Guide to Renovate Right*, to learn about the lead-safe work practices that contractors are required to follow when working in your home (see page 12).





## Simple Steps to Protect Your Family from Lead Hazards

### If you think your home has lead-based paint:

- Don't try to remove lead-based paint yourself.
- Always keep painted surfaces in good condition to minimize deterioration.
- Get your home checked for lead hazards. Find a certified inspector or risk assessor at [epa.gov/lead](https://www.epa.gov/lead).
- Talk to your landlord about fixing surfaces with peeling or chipping paint.
- Regularly clean floors, window sills, and other surfaces.
- Take precautions to avoid exposure to lead dust when remodeling.
- When renovating, repairing, or painting, hire only EPA- or state-approved Lead-Safe certified renovation firms.
- Before buying, renting, or renovating your home, have it checked for lead-based paint.
- Consult your health care provider about testing your children for lead. Your pediatrician can check for lead with a simple blood test.
- Wash children's hands, bottles, pacifiers, and toys often.
- Make sure children eat healthy, low-fat foods high in iron, calcium, and vitamin C.
- Remove shoes or wipe soil off shoes before entering your house.

## Lead Gets into the Body in Many Ways

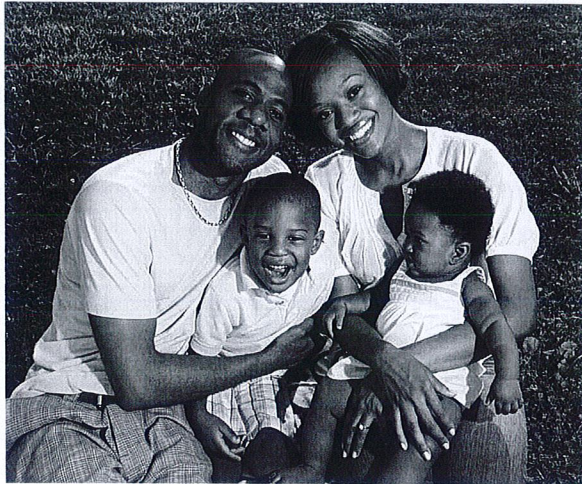
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### Adults and children can get lead into their bodies if they:

- Breathe in lead dust (especially during activities such as renovations, repairs, or painting that disturb painted surfaces).
- Swallow lead dust that has settled on food, food preparation surfaces, and other places.
- Eat paint chips or soil that contains lead.

### Lead is especially dangerous to children under the age of 6.

- At this age, 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.



### Women of childbearing age should know that lead is dangerous to a developing fetus.

- Women with a high lead level in their system before or during pregnancy risk exposing the fetus to lead through the placenta during fetal development.



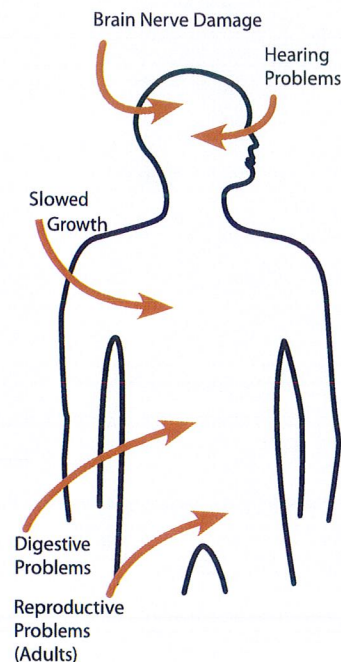
## Health Effects of Lead

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**Lead affects the body in many ways.** It is important to know that even exposure to low levels of lead can severely harm children.

### **In children, exposure to 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-lead exposure is most common, exposure to high amounts of lead can have devastating effects on children, including seizures, unconsciousness, and in some cases, death.

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

### **In adults, exposure to lead can cause:**

- Harm to a developing fetus
- Increased chance of high blood pressure during pregnancy
- Fertility problems (in men and women)
- High blood pressure
- Digestive problems
- Nerve disorders
- Memory and concentration problems
- Muscle and joint pain

## Check Your Family for Lead

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**Get your children and home tested if you think your home has lead.**

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 lead. Blood lead 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.**



## Where Lead-Based Paint Is Found

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In general, the older your home or childcare facility, the more likely it has lead-based paint.<sup>1</sup>

**Many homes, including private, federally-assisted, federally-owned housing, and childcare facilities built before 1978 have lead-based paint.** In 1978, the federal government banned consumer uses of lead-containing paint.<sup>2</sup>

Learn how to determine if paint is lead-based paint on page 7.

### **Lead can be found:**

- In homes and childcare facilities in the city, country, or suburbs,
- In private and public single-family homes and apartments,
- On surfaces inside and outside of the house, and
- 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.)

Learn more about where lead is found at [epa.gov/lead](https://www.epa.gov/lead).

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<sup>1</sup> "Lead-based paint" is currently defined by the federal government as paint with lead levels greater than or equal to 1.0 milligram per square centimeter (mg/cm), or more than 0.5% by weight.

<sup>2</sup> "Lead-containing paint" is currently defined by the federal government as lead in new dried paint in excess of 90 parts per million (ppm) by weight.

## Identifying Lead-Based Paint and Lead-Based Paint Hazards

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

- On windows and window sills
- Doors and door frames
- Stairs, railings, banisters, and porches

**Lead-based paint is usually not a hazard if it is in good condition** and if it is not on an impact or friction surface like a window.

**Lead dust** can form when lead-based paint is scraped, sanded, or heated. Lead dust also forms when painted surfaces containing lead bump or rub together. Lead paint chips and dust can get on surfaces and objects that people touch. Settled lead dust can reenter the air when the home is vacuumed or swept, or when people walk through it. EPA currently defines the following levels of lead in dust as hazardous:

- 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. EPA currently defines the following levels of lead in soil as hazardous:

- 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

**Remember, lead from paint chips—which you can see—and lead dust—which you may not be able to see—both can be hazards.**

The only way to find out if paint, dust, or soil lead hazards exist is to test for them. The next page describes how to do this.



## Checking Your Home for Lead

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You can get your home tested for lead in several different ways:

- A lead-based paint **inspection** tells you if your home has lead-based paint and where it is located. It won't tell you whether your home currently has lead hazards. A trained and certified testing professional, called a lead-based paint inspector, will conduct a paint inspection using methods, such as:
  - Portable x-ray fluorescence (XRF) machine
  - Lab tests of paint samples
- A **risk assessment** tells you if your home currently has any lead hazards from lead in paint, dust, or soil. It also tells you what actions to take to address any hazards. A trained and certified testing professional, called a risk assessor, will:
  - Sample paint that is deteriorated on doors, windows, floors, stairs, and walls
  - Sample dust near painted surfaces and sample bare soil in the yard
  - Get lab tests of paint, dust, and soil samples
- A combination inspection and risk assessment tells you if your home has any lead-based paint and if your home has any lead hazards, and where both are located.



Be sure to read the report provided to you after your inspection or risk assessment is completed, and ask questions about anything you do not understand.

## Checking Your Home for Lead, continued

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In preparing for renovation, repair, or painting work in a pre-1978 home, Lead-Safe Certified renovators (see page 12) may:

- Take paint chip samples to determine if lead-based paint is present in the area planned for renovation and send them to an EPA-recognized lead lab for analysis. In housing receiving federal assistance, the person collecting these samples must be a certified lead-based paint inspector or risk assessor
- Use EPA-recognized tests kits to determine if lead-based paint is absent (but not in housing receiving federal assistance)
- Presume that lead-based paint is present and use lead-safe work practices

There are state and federal programs in place to ensure that testing is done safely, reliably, and effectively. Contact your state or local agency for more information, visit [epa.gov/lead](https://www.epa.gov/lead), or call **1-800-424-LEAD (5323)** for a list of contacts in your area.<sup>3</sup>

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<sup>3</sup> Hearing- or speech-challenged individuals may access this number through TTY by calling the Federal Relay Service at 1-800-877-8339.



## What You Can Do Now to Protect Your Family

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

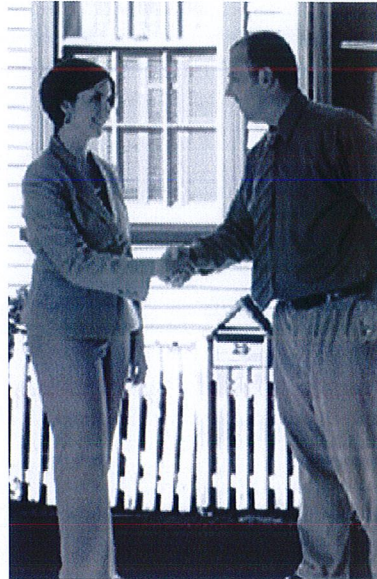
- If you rent, notify your landlord of peeling or chipping paint.
- Keep painted surfaces clean and free of dust. Clean floors, window frames, window sills, and other surfaces weekly. Use a mop or sponge with warm water and a general all-purpose cleaner. (Remember: never mix ammonia and bleach products together because they can form a dangerous gas.)
- Carefully clean up paint chips immediately without creating dust.
- Thoroughly rinse sponges and mop heads often during cleaning of dirty or dusty areas, and again afterward.
- Wash your hands and your 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, or eating soil.
- When renovating, repairing, or painting, hire only EPA- or state-approved Lead-Safe Certified renovation firms (see page 12).
- 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.

## Reducing Lead Hazards

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**Disturbing lead-based paint or removing lead improperly can increase the hazard to your family by spreading even more lead dust around the house.**

- In addition to day-to-day cleaning and good nutrition, you can **temporarily** reduce lead-based paint hazards by taking actions, such as repairing damaged painted surfaces and planting grass to cover lead-contaminated soil. These actions are not permanent solutions and will need ongoing attention.
- You can minimize exposure to lead when renovating, repairing, or painting by hiring an EPA- or state-certified renovator who is trained in the use of lead-safe work practices. If you are a do-it-yourselfer, learn how to use lead-safe work practices in your home.
- To remove lead hazards permanently, 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 control.



**Always use a certified contractor who is trained to address lead hazards safely.**

- Hire a Lead-Safe Certified firm (see page 12) to perform renovation, repair, or painting (RRP) projects that disturb painted surfaces.
- To correct lead hazards permanently, hire a certified lead abatement professional. This will ensure your contractor knows how to 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.



## Reducing Lead Hazards, continued

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**If your home has had lead abatement work done** or if the housing is receiving federal assistance, once the work is completed, dust cleanup activities must be conducted until clearance testing indicates that lead dust levels are below the following levels:

- 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 windows sills
- 400  $\mu\text{g}/\text{ft}^2$  for window troughs

For help in locating certified lead abatement professionals in your area, call your state or local agency (see pages 14 and 15), or visit [epa.gov/lead](https://www.epa.gov/lead), or call 1-800-424-LEAD.

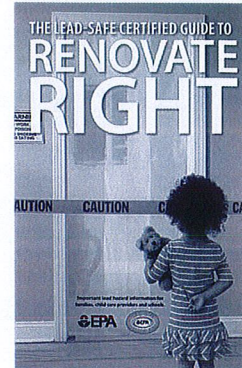


## Renovating, Repairing or Painting a Home with Lead-Based Paint

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**If you hire a contractor to conduct renovation, repair, or painting (RRP) projects in your pre-1978 home or childcare facility (such as pre-school and kindergarten), your contractor must:**

- Be a Lead-Safe Certified firm approved by EPA or an EPA-authorized state program
- Use qualified trained individuals (Lead-Safe Certified renovators) who follow specific lead-safe work practices to prevent lead contamination
- Provide a copy of EPA's lead hazard information document, *The Lead-Safe Certified Guide to Renovate Right*



**RRP contractors working in pre-1978 homes and childcare facilities must follow lead-safe work practices that:**

- **Contain the work area.** The area must be contained so that dust and debris do not escape from the work area. Warning signs must be put up, and plastic or other impermeable material and tape must be used.
- **Avoid renovation methods that generate large amounts of lead-contaminated dust.** Some methods generate so much lead-contaminated dust that their use is prohibited. They are:
  - Open-flame burning or torching
  - Sanding, grinding, planing, needle gunning, or blasting with power tools and equipment not equipped with a shroud and HEPA vacuum attachment
  - Using a heat gun at temperatures greater than 1100°F
- **Clean up thoroughly.** The work area should be cleaned up daily. When all the work is done, the area must be cleaned up using special cleaning methods.
- **Dispose of waste properly.** Collect and seal waste in a heavy duty bag or sheeting. When transported, ensure that waste is contained to prevent release of dust and debris.

To learn more about EPA's requirements for RRP projects, visit [epa.gov/getleadsafe](http://epa.gov/getleadsafe), or read *The Lead-Safe Certified Guide to Renovate Right*.



## Other Sources of Lead

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### Lead in Drinking Water

The most common sources of lead in drinking water are lead pipes, faucets, and fixtures.

Lead pipes are more likely to be found in older cities and homes built before 1986.

You can't smell or taste lead in drinking water.

To find out for certain if you have lead in drinking water, have your water tested.

Remember older homes with a private well can also have plumbing materials that contain lead.

### Important Steps You Can Take to Reduce Lead in Drinking Water

- Use only cold water for drinking, cooking and making baby formula. Remember, boiling water does not remove lead from water.
- Before drinking, flush your home's pipes by running the tap, taking a shower, doing laundry, or doing a load of dishes.
- Regularly clean your faucet's screen (also known as an aerator).
- If you use a filter certified to remove lead, don't forget to read the directions to learn when to change the cartridge. Using a filter after it has expired can make it less effective at removing lead.

Contact your water company to determine if the pipe that connects your home to the water main (called a service line) is made from lead. Your area's water company can also provide information about the lead levels in your system's drinking water.

For more information about lead in drinking water, please contact EPA's Safe Drinking Water Hotline at 1-800-426-4791. If you have other questions about lead poisoning prevention, call 1-800 424-LEAD.\*

Call your local health department or water company to find out about testing your water, or visit [epa.gov/safewater](http://epa.gov/safewater) for EPA's lead in drinking water information. Some states or utilities offer programs to pay for water testing for residents. Contact your state or local water company to learn more.

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\* Hearing- or speech-challenged individuals may access this number through TTY by calling the Federal Relay Service at 1-800-877-8339.



## Other Sources of Lead, continued

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- **Lead smelters** or other industries that release lead into the air.
- **Your job.** If you work with lead, you could bring it home on your body or clothes. Shower and change clothes before coming home. Launder your work clothes separately from the rest of your family's clothes.
- **Hobbies** that use lead, such as making pottery or stained glass, or refinishing furniture. Call your local health department for information about hobbies that may use lead.
- Old **toys** and **furniture** may have been painted with lead-containing paint. Older toys and other children's products may have parts that contain lead.<sup>4</sup>
- Food and liquids cooked or stored in **lead crystal** or **lead-glazed pottery or porcelain** may contain lead.
- Folk remedies, such as "**greta**" and "**azarcon,**" used to treat an upset stomach.

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<sup>4</sup> In 1978, the federal government banned toys, other children's products, and furniture with lead-containing paint. In 2008, the federal government banned lead in most children's products. The federal government currently bans lead in excess of 100 ppm by weight in most children's products.

## For More Information

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### **The National Lead Information Center**

Learn how to protect children from lead poisoning and get other information about lead hazards on the Web at [epa.gov/lead](http://epa.gov/lead) and [hud.gov/lead](http://hud.gov/lead), or call **1-800-424-LEAD (5323)**.

### **EPA's Safe Drinking Water Hotline**

For information about lead in drinking water, call **1-800-426-4791**, or visit [epa.gov/safewater](http://epa.gov/safewater) for information about lead in drinking water.

### **Consumer Product Safety Commission (CPSC) Hotline**

For information on lead in toys and other 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 [cpsc.gov](http://cpsc.gov) or [saferproducts.gov](http://saferproducts.gov).

### **State and Local Health and Environmental Agencies**

Some states, tribes, and cities have their own rules related to lead-based paint. 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 state or local contacts on the Web at [epa.gov/lead](http://epa.gov/lead), or contact the National Lead Information Center at **1-800-424-LEAD**.

Hearing- or speech-challenged individuals may access any of the phone numbers in this brochure through TTY by calling the toll-free Federal Relay Service at **1-800-877-8339**.



## U. S. Environmental Protection Agency (EPA) Regional Offices

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The mission of EPA is to protect human health and the environment. Your Regional EPA Office can provide further information regarding regulations and lead protection programs.

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

Regional Lead Contact  
U.S. EPA Region 1  
5 Post Office Square, Suite 100, OES 05-4  
Boston, MA 02109-3912  
(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 205, Mail Stop 225  
Edison, NJ 08837-3679  
(732) 321-6671

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

Regional Lead Contact  
U.S. EPA Region 3  
1650 Arch Street  
Philadelphia, PA 19103  
(215) 814-2088

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

Regional Lead Contact  
U.S. EPA Region 4  
AFC Tower, 12th Floor, Air, Pesticides & Toxics  
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) 886-7836

**Region 6** (Arkansas, Louisiana, New Mexico, Oklahoma, Texas, and 66 Tribes)

Regional Lead Contact  
U.S. EPA Region 6  
1445 Ross Avenue, 12th Floor  
Dallas, TX 75202-2733  
(214) 665-2704

**Region 7** (Iowa, Kansas, Missouri, Nebraska)

Regional Lead Contact  
U.S. EPA Region 7  
11201 Renner Blvd.  
WWPD/TOPE  
Lenexa, KS 66219  
(800) 223-0425

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

Regional Lead Contact  
U.S. EPA Region 8  
1595 Wynkoop St.  
Denver, CO 80202  
(303) 312-6966

**Region 9** (Arizona, California, Hawaii, Nevada)

Regional Lead Contact  
U.S. EPA Region 9 (CMD-4-2)  
75 Hawthorne Street  
San Francisco, CA 94105  
(415) 947-4280

**Region 10** (Alaska, Idaho, Oregon, Washington)

Regional Lead Contact  
U.S. EPA Region 10  
Solid Waste & Toxics Unit (WCM-128)  
1200 Sixth Avenue, Suite 900  
Seattle, WA 98101  
(206) 553-1200

## Consumer Product Safety Commission (CPSC)

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The CPSC protects the public against unreasonable risk of injury from consumer products through education, safety standards activities, and enforcement. Contact CPSC for further information regarding consumer product safety and regulations.

### CPSC

4330 East West Highway  
Bethesda, MD 20814-4421  
1-800-638-2772  
[cpsc.gov](http://cpsc.gov) or [saferproducts.gov](http://saferproducts.gov)

## U. S. Department of Housing and Urban Development (HUD)

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HUD's mission is to create strong, sustainable, inclusive communities and quality affordable homes for all. Contact HUD's Office of Healthy Homes and Lead Hazard Control for further information regarding the Lead Safe Housing Rule, which protects families in pre-1978 assisted housing, and for the lead hazard control and research grant programs.

### HUD

451 Seventh Street, SW, Room 8236  
Washington, DC 20410-3000  
(202) 402-7698  
[hud.gov/offices/lead/](http://hud.gov/offices/lead/)

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U. S. EPA Washington DC 20460  
U. S. CPSC Bethesda MD 20814  
U. S. HUD Washington DC 20410

EPA-747-K-12-001  
June 2017



# IMPORTANT!

## **Lead From Paint, Dust, and Soil in and Around Your Home Can Be Dangerous if Not Managed Properly**

- Children under 6 years old are most at risk for lead poisoning in your home.
- Lead exposure can harm young children and babies even before they are born.
- Homes, schools, and child care facilities built before 1978 are likely to contain lead-based paint.
- Even children who seem healthy may have dangerous levels of lead in their bodies.
- Disturbing surfaces with lead-based paint or removing lead-based paint improperly can increase the danger to your family.
- People can get lead into their bodies by breathing or swallowing lead dust, or by eating soil or paint chips containing lead.
- People have many options for reducing lead hazards. Generally, lead-based paint that is in good condition is not a hazard (see page 10).



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# Don't Spread Lead

A Do-It-Yourself Guide to Lead-Safe  
Painting, Repair, and Home Improvement

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Are you working on an older house?  
If you are working on a house built before 1978,  
read this booklet before you start. It will help you to  
protect your family from lead poisoning.



“Working lead-safe isn't hard. It's worth the effort to protect our family from lead poisoning.”

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This booklet has been written for do-it-yourselfers. It is not intended for paid contractors, renovators, maintenance workers, painters, and other tradespeople.

Paid contractors who are renovating, repairing, or painting homes, child-care facilities, and many schools that were built before 1978 must comply with a new rule issued by the U.S. Environmental Protection Agency. The Renovation, Repair and Painting Rule of 2008 requires these contractors to use specific lead-safe work practices. The practices are similar to the ones described in this booklet for do-it-yourselfers but have more detailed requirements.

If you are hiring a contractor, make sure that the contractor knows about this EPA rule and will follow its requirements.

For more information about the rule, see [www.epa.gov/lead/pubs/renovation.htm](http://www.epa.gov/lead/pubs/renovation.htm).

# You've decided to do some work on your older home.

Maybe you are painting a room for a new baby.

Or maybe you are repairing a door that sticks.

These and similar small projects can be great do-it-yourself jobs. But if you are working in a home that was built before 1978, you have to work lead-safe.

- This booklet explains how to handle small repairs or renovations safely.
- If you are doing major repairs or renovations that may create a lot of dust – jobs like replacing windows – consider taking a training course in lead-safe work practices. Or consider hiring a qualified contractor who has been trained in lead-safe practices.
- Ask the agencies listed in the back of this booklet for information about these courses.





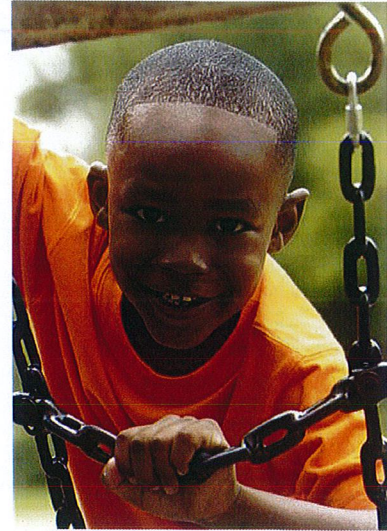
## Why should you work lead-safe?

If the house you are fixing up was built before 1978, it may contain lead paint. Common fix-up jobs (such as painting a room or repairing a door that sticks) can create dust or paint chips that contain lead. Lead is a poison that is dangerous to you and your family.

When people swallow or breathe in lead dust, they can become lead poisoned. It takes only a very small amount of lead to poison someone.

Lead is especially dangerous for children. It can cause serious learning and behavior problems. It is very dangerous for pregnant women and their unborn babies. Lead can also make adults sick.

This booklet tells you how you can protect yourself and your family from lead poisoning and work lead-safe while you fix up your house.



“My parents are working lead-safe to protect our family.”

## How can you work lead-safe?

There are five important steps to working lead-safe:

1. Protect your family and your neighbors.
2. Prepare your work area.
3. Protect yourself from lead dust.
4. Work wet.
5. Work clean.

Following these five steps will help keep you and your family safe from lead poisoning.



## Step 1. Protect your family and neighbors.

Keep your family and your neighbors away from paint dust and chips.

- Keep everyone, except for people doing the work, out of the room. Do not let anyone else in the room until the job is finished and the area is completely clean.
- Keep pets out of the room too. Pets can track lead dust or chips into other areas.
- Close all doors and windows to keep dust and paint chips away from your family and your neighbors.



“My baby and I are staying away from the room that my husband is fixing up.”



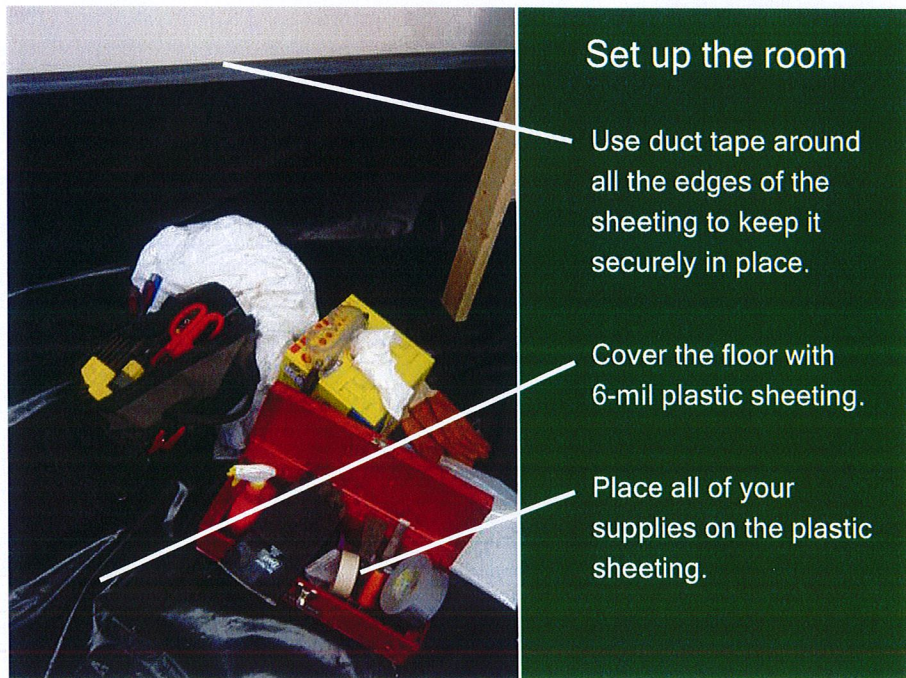
## Step 2. Prepare your work area.

If you are working inside the house, it's best to work on only one room at a time.

First, set up the room.

- Move furniture, rugs, curtains, clothing, toys, food, and all other movable items out of the room.
- Items that you cannot move, such as counter tops or heavy furniture, should be covered with 6-mil plastic sheeting. Use duct tape around all the edges of the sheeting to keep it securely in place.
- Close all doors, windows, and other openings in the room and cover them with 6-mil plastic sheeting. Use duct tape around all the edges of the sheeting to keep it securely in place.
- Turn off forced-air heating and air conditioning systems. Cover the air vents with 6-mil plastic sheeting and tape the sheeting securely in place with duct tape.
- Cover the floor with 6-mil plastic sheeting. Use duct tape around all the edges of the sheeting to keep it securely in place.
- Place a sticky (or tacky) pad just outside the room to trap small bits of dust and paint chips as you leave the room.

Next, put all of your supplies in the room. If you have to leave the room for supplies, you may spread lead dust outside the work area.





# Supplies for working lead-safe.

Use this checklist to make sure that you have all the supplies you need to work lead-safe. You can buy these supplies at most paint, hardware, or home improvement stores.

As you put each item in the room, you can place a checkmark on the list below.

To keep lead dust from spreading, you will need:

- One or more spray bottles filled with water
- Heavy-duty (6-mil thick) plastic sheeting
- Duct tape
- Sticky or tacky pads for the floor to trap dust and paint chips

To protect yourself, you will need some safety gear:

- Safety glasses
- Disposable gloves
- Disposable hats
- Disposable shoe covers
- Disposable coveralls

To clean up, you will need:

- Two mops (with disposable mop heads) and two buckets
- An all-purpose cleaner
- Disposable rags, sponges, or paper towels
- Heavy-duty plastic bags
- A HEPA vacuum cleaner (a special vacuum cleaner that traps tiny bits of lead dust). To locate a HEPA vacuum cleaner call your state agency listed in the back of this booklet.
- Baby wipes

If you are working outside the house:

- Move outside furniture, playground equipment, toys, and other items at least 20 feet from the work area.
- Cover any items that cannot be moved with 6-mil plastic sheeting.
- Cover the ground with 6-mil plastic sheeting or weed-block cloth (if using a ladder, cut slits in the plastic or cloth to secure the feet of the ladder to the ground).
- Ask your neighbors to close their doors and windows to keep out any lead dust.
- Don't work on windy or rainy days.



## Step 3. Protect yourself from lead dust.

Before you begin work, put on your safety equipment:

- Safety glasses
- Disposable gloves
- Disposable hat
- Disposable shoe covers
- Disposable coveralls
- If your work will create a lot of dust, you may need to use a respirator. Check with your doctor before you use a respirator, if your doctor approves it, use a respirator labeled N100. Follow the manufacturer's instructions.

While you are in the work area, do not eat, drink, or smoke. Do not apply cosmetics or lip balm.

Whenever you leave the work area, wash your hands and face right away.



"I put on safety equipment to protect myself from lead dust while I'm working."



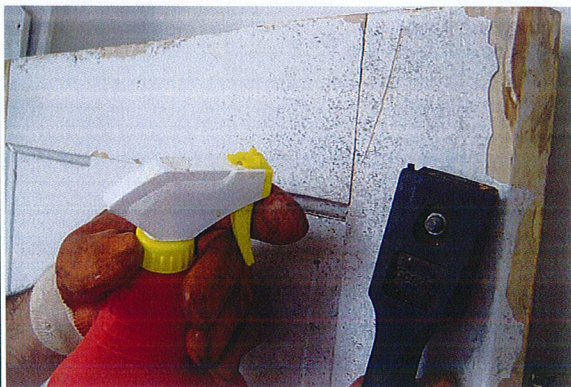
## Step 4. Work wet.

Many common repair activities can create dangerous lead dust. To avoid creating lead dust, you can work wet.

### When you are working on a painted surface

| Do  | Don't  |
|---|--|
| <p>Do fill a spray bottle with water. Use it to lightly mist the painted surface before you sand, scrape, pry, saw, or drill it.</p> <p>Do keep spraying lightly as you continue to work.</p> <p>Do spray everywhere <b>except</b> near electrical outlets or switches. Use a damp (not dripping) sponge or rag in these areas instead.</p> | <p>Do not <u>dry</u> sand, scrape, pry, saw, or drill a painted surface. These activities can create a lot of lead dust.</p> <p>Do not spray water near electricity.</p> |
| <p>After you spray the painted surface, sand or scrape it by hand.</p>  | <p>Do not use power sanders or grinders.</p> <p>Do not sandblast.</p>  |
| <p>If you use a chemical stripper, use one that is safe for people and for the environment.</p>   | <p>Do not use methylene chloride. It is poisonous.</p>   |
| <p>If you use a heat gun, use a low or medium setting (700 degrees Fahrenheit or lower).</p>  | <p>Do not use a heat gun over 700 degrees Fahrenheit.</p> <p>Do not use an open flame or torch to burn off paint.</p>  |

After you spray the painted surface, sand or scrape it by hand.





## Step 5. Work clean.

While you are working:

Keep dust and paint chips inside the work area.

### Keep dust inside the work area

- Wipe your feet carefully before you leave the work area. Take off your disposable shoe covers and wipe your feet on a sticky pad.
- Wash your hands and face right after you leave the work area.
- Change your work clothes and shoes right after you finish for the day.
- Shower and wash your hair as soon as possible after you finish working.
- Wash your work clothes separately from other family laundry.

Clean up as you work.

### Clean often

- If you create any dust or paint chips as you work, clean up right away.
- Use a damp rag or paper towel, and scrub hard.
- Put the dirty rag or paper towel into a plastic bag.
- When you are working outside, clean up carefully at the end of each work day, even if the project is not finished.



## Step 5. Work clean (continued).

When you finish your **indoor** fix-up project:

First, pick up and HEPA vacuum.

- Pick up any big pieces of trash and put them in a plastic bag. Seal the bag with duct tape.
- Spray your plastic sheeting and carefully fold it inward. Put the sheeting in a plastic bag, and seal the bag with duct tape.
- Vacuum the entire room with a HEPA vacuum. (DO NOT use regular vacuums or brooms because they can spread lead dust. If you do not have a HEPA vacuum, go to the next step.)

Pick up  
and HEPA  
vacuum



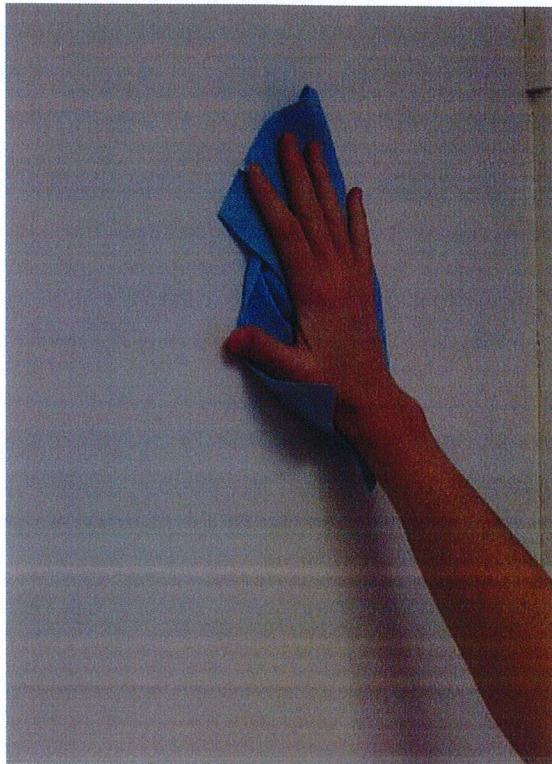


## Step 5. Work clean (continued).

Next, wash all of the surfaces in the room (even if you did not work on those surfaces).

- Fill two buckets: one with an all-purpose cleaner mixed with water, and the other with clean rinse water.
- Use disposable rags, sponges, or paper towels.
- Wash a small area, then rinse. Continue until you have cleaned the whole room. Change the water in both buckets often.
- Start with the walls. Wash from the top down. As you work downward, wash any other hard surfaces, such as counter tops.
- When you reach the floor, use two mops: one mop for washing and the other for rinsing.
- Scrub hard – do not just wipe lightly.
- Vacuum again with a HEPA vacuum cleaner. Never clean up with a regular vacuum cleaner or broom because these tools can spread lead dust.

Wash  
and rinse





## Step 5. Work clean (continued).

When you finish your **outdoor** fix-up project:

- Pick up any big pieces of trash and put them in a plastic bag. Seal the bag with duct tape.
- Spray your plastic sheeting or weed-block cloth and carefully fold it inward. Place the sheeting or cloth in a plastic bag, and seal the bag with duct tape.

Get rid of all of your trash:

Dispose  
of trash  
safely

- Put all of your dirty rags, paper towels, sponges, and mop heads into plastic bags.
- Follow your local regulations for disposal.
- Do not burn any trash that contains dust or chips.
- Dump the waste water from your cleanup activities down a toilet. Never pour waste water on the ground or into a storm drain.

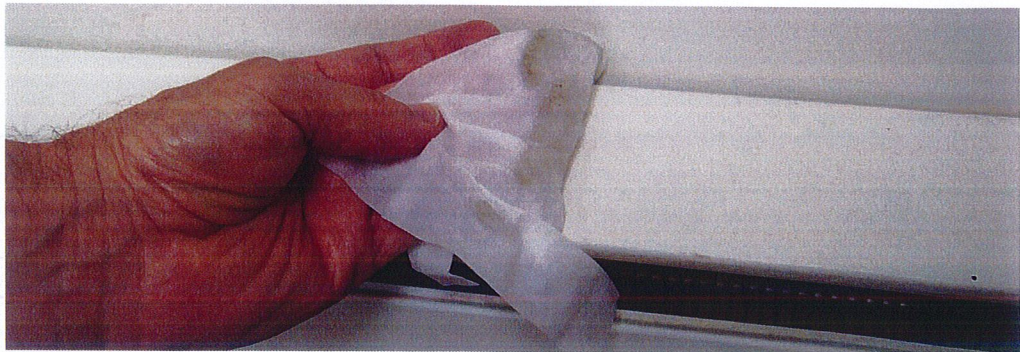
## How can you check your work?

When your work is finished, look carefully to see whether you have cleaned up all the dust and paint chips in the work area. If you see any dust or chips, clean the area again.

When you have finished cleaning an area, rub the surface with a baby wipe. If you see any dust on the baby wipe, clean the area again.

For a more complete check, you can take dust wipe samples and send them to a lab. The lab can tell whether you still have lead dust in your home. Contact your state agency listed on the back of this booklet to learn how to take lead dust wipe samples.

If you see  
any dust  
or chips,  
clean  
the area  
again.





## How can you get more information?

If you have any questions about working lead-safe, contact your state's public health agency or the other agencies listed below.

|  |   |   |
|--|---|---|
| Connecticut<br>Department of Public Health   | (860) 509-7299  | <a href="http://www.ct.gov/dph">www.ct.gov/dph</a><br>On the DPH menu, click Environmental Health. Then click Lead. |
| Maine<br>Department of Environmental Protection  | (800) 452-1942<br>(from within Maine) or<br>(207) 287-2651                        | <a href="http://www.maine.gov/dep/rwm/lead/index.htm">www.maine.gov/dep/rwm/lead/index.htm</a>                      |
| Childhood Lead<br>Poisoning Prevention Program   | (207) 287-4311<br>(866) 292-3474  | <a href="http://www.maine.gov/dhhs/eohp/lead/">www.maine.gov/dhhs/eohp/lead/</a>                                    |
| Massachusetts<br>Childhood Lead Poisoning<br>Prevention Program                                      | (800) 532-9571<br>(from within<br>Massachusetts) or<br>(617) 624-5757             | <a href="http://www.mass.gov/dph/clppp/clppp.htm">www.mass.gov/dph/clppp/clppp.htm</a>                              |
| Division of Occupational Safety  | (800) 425-0004<br>(from within<br>Massachusetts) or<br>(617) 727-3982             | <a href="http://www.state.ma.us/dos">www.state.ma.us/dos</a>  |
| New Hampshire<br>Childhood Lead Poisoning<br>Prevention Program                                      | (800) 897-5323 or<br>(603) 271-4507   | <a href="http://www.dhhs.nh.gov/DHHS/CLPPP/">www.dhhs.nh.gov/DHHS/CLPPP/</a>  |
| Rhode Island<br>Childhood Lead Poisoning<br>Prevention Program                                       | (800) 942-7434<br>(from within<br>Rhode Island) or<br>(401) 222-5960              | <a href="http://www.health.ri.gov/lead">www.health.ri.gov/lead</a>  |
| Vermont<br>Department of Health  | (800) 439-8550 (from<br>within Vermont) or<br>(802) 652-0358                      | <a href="http://healthvermont.gov/enviro/lead/lead.aspx">http://healthvermont.gov/enviro/lead/lead.aspx</a>         |
| Tribal Based Environmental Protection  |   | <a href="http://www.tbep.net">www.tbep.net</a>  |
| New England<br>Lead Coordinating Committee   | (860) 570-9068  | <a href="http://www.nelcc.uconn.edu">www.nelcc.uconn.edu</a>  |
| U.S. Environmental Protection Agency (EPA) New England Regional Lead Coordinator<br>EPA Lead Hotline | (888) 372-7341 or<br>(617) 918-1111<br>(617) 918-1524<br>(800) 424-LEAD<br>(5323) | <a href="http://www.epa.gov/ne/eco/ne_lead">www.epa.gov/ne/eco/ne_lead</a>  |
| New England Lead and Asbestos Resources  |   | <a href="http://nelar.net">http://nelar.net</a>   |
| U.S. Department of Housing and Urban Development (HUD)   |   | <a href="http://www.hud.gov/offices/lead">www.hud.gov/offices/lead</a>  |
| U.S. Centers for Disease Control and Prevention (CDC)  |   | <a href="http://www.cdc.gov/nceh/lead/lead.htm">www.cdc.gov/nceh/lead/lead.htm</a>                                  |







This booklet was developed by the  
New England Lead Coordinating Committee  
[www.nelcc.uconn.edu](http://www.nelcc.uconn.edu) 2006; revised 2008