

# PROTECTING YOUR HOME FROM MOLD

## JUNE 2002

Mold growth problems can adversely affect many homeowners in Texas. Homeowners who act quickly and appropriately can prevent or correct conditions that may cause mold growth. The Texas Department of Health (TDH) and Texas Department of Insurance (TDI) prepared this publication to help you understand the concerns related to mold growth and to provide some effective steps you can take to help prevent mold growth. The following information will help protect your investment in your home and may prevent the possibility of health risks due to mold exposure.

*If you are a renter, you should contact your landlord or property manager immediately when you have a maintenance need related to water damage.*

### WHAT ARE MOLDS?

Molds are microscopic organisms commonly found both indoors and outdoors. Molds, along with mushrooms and yeast, are known scientifically as fungi. Their purpose in nature is to break down dead material and recycle nutrients in the environment. For molds to grow and reproduce, they need a food source -any organic material, such as leaves, wood, paper, or dirt -and moisture. Since molds grow by "eating" the organic material, they gradually destroy whatever they are feeding on. Mold growth on surfaces can often be seen as a colored spot, frequently green, gray, brown, black or white. It commonly appears as a powdery, fuzzy, or hair-like material. Actively growing molds typically produce odors, sometimes described as earthy or moldy, or like mildew, old dirty socks, or ammonia. Molds release thousands of microscopic spores, which are lightweight, easily airborne and carried by air currents to surrounding areas. The spores must have both food and moisture to actually start growing, similar to plant seeds.

### WHAT DO I DO IF A LEAK OCCURS?

Whether or not the water damage may be covered by your insurance policy, it is important to act quickly to prevent further damage to your home.

- Immediately stop the source of leak or flooding.
- Remove excess water with mops or a wet vacuum. If the damage is significant, consider contacting a water extraction company for immediate action.
- Whenever possible, move wet items to a secure, dry and well-ventilated area or outside to expedite drying.
- Protect repairable and undamaged items from further damage.
- Move rugs and pull up areas of wet carpet as soon as possible.
- Increase circulation in and around wet areas by opening closet and cabinet doors, moving furniture away from walls and running fans.
- If necessary, remove wallboard and flooring materials to dry out those areas.
- Don't throw away removed or damaged materials until instructed by your insurance company.
- Dry any damp or wet building materials and furnishings within 24- 48 hours.
- Keep all receipts, photos and other relevant documents.
- Contact your insurance company, if applicable.

**NOTE:** The sooner the affected areas dry out and the source of the leak is repaired, the better your chances of minimizing damage to your property. If the water cannot be removed and the area dried promptly and efficiently, consider contacting a water extraction company for immediate action.

### RESOURCES

For additional information, consult the mold and/or indoor air quality resources at the following:

**Texas Department of Health**  
[www.tdh.state.tx.us/beh/iaq/](http://www.tdh.state.tx.us/beh/iaq/)  
1-800-572-5548

**U.S. Environmental Protection Agency**  
[www.epa.gov/iaq/](http://www.epa.gov/iaq/)  
1-800-438-4318

**Texas Department of Insurance**  
[www.tdi.state.tx.us/commish/mold.html](http://www.tdi.state.tx.us/commish/mold.html)  
1-800-252-3439

### WHY ARE MOLDS A CONCERN?

#### Damage to the Home

It is common to find mold spores in the air inside homes, and on most surfaces including clothes, walls, and furniture. Most of the time mold spores found indoors come from outdoor sources. Routine cleaning of your home and furnishings helps keep these levels low. Cleaning small areas of visible mold, such as mold that may occur around your shower, is necessary to prevent unsanitary conditions.

The level of concern greatly increases when there are large amounts of active mold growth in your home. Large-scale mold problems are most likely to occur when there has been an on-going water leak, a flood, or very high levels of humidity in the home. Indoor mold growth may cause very high levels of airborne mold spores, which, in turn, may cause the spread of mold growth from the original source to other areas of the home where high moisture levels exist. Extensive mold growth can damage your home and belongings, such as carpets, sofas and cabinets. In time, unchecked mold growth can cause damage to the structural elements in your home. While there is no practical way to eliminate all mold and mold spores in the indoor environment, keeping your home clean and dry can prevent extensive mold growth and its related damage.

#### Health Effects

The vast majority of people are exposed to small amounts of mold or their spores on a daily basis without evident harm. However, mold growing inside a home is an unsanitary condition that may present potential health risks to occupants. Therefore, it is always best to identify and correct high moisture conditions quickly before mold grows and possible health problems develop.

Potential health effects produced by molds may include allergic, irritating, or toxigenic effects, and rarely, infection. Allergic reactions are generally the most common health effect. Typical symptoms (alone or in combination) reported by people living in moldy homes include:

- respiratory problems, such as wheezing, difficulty breathing, and shortness of breath
- sneezing and/or nasal congestion
- eye irritation (itching, burning, watery, or reddened eyes)
- coughing or throat irritation
- skin rashes or irritation
- headaches
- fatigue

The potential health effects depend on the amounts and types of mold present, the length and frequency of exposure, and the sensitivity and health condition of exposed individuals. While many people seldom experience ill effects from mold exposures, some may develop very serious illnesses. Some persons exposed to mold or mold spores may become sensitized and develop allergies to the mold or other health problems. Even "dead" mold (including spores and pieces of mold) may still cause allergy, irritation, or toxigenic reactions. Thus, killing mold without removing the residue may still be a health concern. Complete removal and thorough cleanup of mold is the safest solution.

Individuals at greater risk who may experience more severe symptoms or become ill more rapidly than others include:

- individuals with existing respiratory conditions, such as allergies, asthma, or chemical sensitivities
- individuals with weakened immune systems due to conditions such as HIV infection or cancer treatment
- infants and young children
- the elderly

*Anyone with a health problem they believe may be due to mold exposure should consult a medical professional.*

Since you cannot remove all food sources for molds, it is important as a homeowner to take sensible precautions to prevent moisture from creating a breeding ground for mold.

### MOISTURE CONTROL

- Maintain levels of humidity below 60% (preferably between 30% and 50%) by
  - venting bathrooms, dryers and other moisture-generating sources to the outside
  - avoiding blockage of air conditioning vents
  - using air conditioners and de-humidifiers
  - increasing ventilation by installing additional crawlspace and attic vents, opening windows or installing an air-to-air heat exchanger
  - using exhaust fans when cooking, dishwashing and cleaning
  - avoiding the use of unvented heaters or high heat in confined areas
  - setting the air conditioning thermostat to "auto" to prevent circulation of humid air.
- Add insulation to reduce the potential for condensation on cold surfaces (windows, piping, exterior walls, roof or floors).
- Consider using moisture sensors that sound an audible alarm when a leak occurs.

### OTHER PRECAUTIONS

- **Water Valve**-Make sure everyone in the household knows where the main valve is located and how to turn the water off.
- **Rain Gutters and Downspouts**-Direct rainwater away from your home. Keep gutters clear and make sure downspouts are long enough to effectively carry water away from your foundation. Gutters that are filled with leaves and other debris allow water to back up on the roof, which can result in water damage to eaves and roofing material.
- **Insulate Pipes and Outside Faucets**-Minimize the potential for water damage from frozen, broken pipes by insulating supply lines (in attic, crawlspaces and exterior walls), protecting exposed outdoor faucets, sealing gaps in exterior walls and maintaining adequate heat in your home.
- **Sump Pump**-The sump pump is the first line of defense in preventing water seepage into basements. Periodically check the sump and remove any debris that could clog the pump. Consider installing a battery-powered backup to protect your basement during power outages.
- **Don't block weep holes**-Weep holes are openings at the foundation level of a brick wall that allow moisture to escape from behind the wall. Do not close or block these openings.
- **Monitor Utility Bills**-An abnormally high water bill could signal a water leak.
- **Before You Travel**-Turn the water off at the main valve or at major appliances. While you are away, consider leaving a house key and contact information with a neighbor or trusted friend and ask the person to check the inside and outside of your home periodically while you are away.

### PREVENTION

- Purchase paint with EPA approved mold inhibitors
- Clean bathrooms often with mold killing products and keep surfaces dry
- Do not carpet bathrooms, basements, kitchens or other areas prone to collect moisture
- Repair damages that could lead to water intrusion promptly and properly
- Ensure that the home has adequate ventilation, including exhaust fans in the kitchen and bathrooms

### INSPECTION

Inspect your home regularly for the indications and sources of indoor moisture. Establish a maintenance schedule to check the following sources of water leaks on a regular basis. Contact a maintenance or service company with any questions or concerns.

- **Hot Water Heaters**- Over time, these appliances may rust or develop cracks, and the resulting leaks can be very costly. Check your water heater for rust and deterioration every year. Check the drain pan for water and ensure that the drain line for the overflow pan is not clogged. Drain and clean the water heater as recommended by the manufacturer.
- **A/C Drain Lines**-Damage can occur when the line that drains condensation from the evaporator coils becomes clogged and water overflows from the drip pan. To prevent this, periodically check the drip pan for water and consider an annual inspection or service call to reduce the buildup of algae and mold in the drain line.
- **Appliance Hoses**-Broken hoses are among the most common causes of water damage. Regularly inspect hoses and hose fittings on washing machines, icemakers and dishwashers for kinks, cracks, bulges or evidence of deterioration. Replace standard rubber washing machine hoses every two to five years, or more frequently if they are showing signs of water. Consider using steel-reinforced hoses for longer life.
- **Showers, Tubs, Sinks and Toilets**-Water that leaks from around bathtubs, showers, sinks and toilets can cause extensive damage because the leak is often hidden from view. To prevent leaks, make sure you have a continuous watertight seal of caulk around the edges of sinks, toilets, tubs and shower stalls. Cracks or mold on the caulk or on the grout at tiles on walls or shower floors may indicate that you do not have a watertight seal. Remove all caulk or grout, clean and dry the surface thoroughly, and apply fresh caulk. Do not apply new caulk or grout on top of the old materials.
- **Visible Piping**-Routinely check piping under cabinets and sinks for leaks, rust and evidence of deterioration.
- **Waste/Garbage Disposal System**-Routinely check for cracking or other sources of leaks in the waste disposal system.
- **Caulking around Windows, Doors, Penetrations and Cracks**-Windows and doors should have a continuous bead of caulk sealing them to the exterior surface of the home. Penetrations of the exterior walls by pipes, electrical conduit, phone or cable lines, and exhaust ducts should also be caulked. Cracks or mold on the caulk may indicate that you do not have a watertight seal. Remove all caulk, clean and dry the surface thoroughly, and apply fresh caulk. Do not apply new caulk on top of the old caulk.
- **Attic and Ceilings**-Routinely check for wet insulation and water stains.
- **Wallpaper**-Routinely check for bubbling and/or peeling, as well as pink or black stains.
- **Roofs**-Keep roofs free of debris that can damage roofing material and allow water to seep in. Trim tree branches to prevent them from rubbing and damaging the roof. Promptly repair missing or damaged shingles. Properly seal any cracks around chimneys, skylights and vents. Check metal flashing for holes, cracks or other damage. Replace flashing or use silicon caulk to seal any openings.
- **Landscape**-Yards should slope away from the house to prevent puddling near the foundation or under pier and beam houses.
- **Sprinklers and Irrigation System**-Do not allow sprinklers or sprinkler heads to soak the exterior of the home.
- **Check for evidence of water stains or odors, particularly after rains, on areas that could get wet.**

### POTENTIAL SIGNS OF MOLD GROWTH

- Unexplained discoloration on any surface
- Musty odor
- Dark spots on or around vents
- Water stains anywhere
- Peeling or curling of vinyl floors or wallpaper



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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
- About health effects of lead
- 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](http://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 avoid fatty (or high fat) foods and eat nutritious meals high in iron and calcium.
- 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.



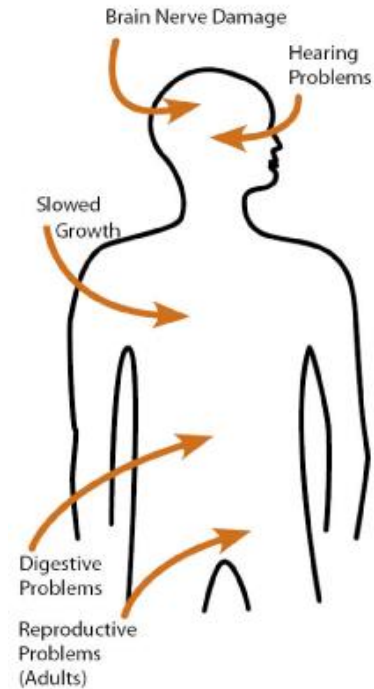
# Health Effects of Lead

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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](http://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](http://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 1-800-877-8399.

# 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 avoid fatty (or high fat) foods and eat nutritious meals high in iron and calcium. 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](http://epa.gov/lead), or call 1-800-424-LEAD.



# Renovating, Remodeling, or Repairing (RRP) 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 and
  - 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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**While paint, dust, and soil are the most common sources of lead, other lead sources also exist:**

- **Drinking water.** Your home might have plumbing with lead or lead solder. You cannot see, smell, or taste lead, and boiling your water will not get rid of lead. If you think your plumbing might contain lead:
  - Use only cold water for drinking and cooking.
  - Run water for 15 to 30 seconds before drinking it, especially if you have not used your water for a few hours.

Call your local health department or water supplier to find out about testing your water, or visit [epa.gov/lead](http://epa.gov/lead) for EPA's lead in drinking water information.

- **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 (16 CFR 1303). 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 (76 FR 44463).

## 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/lead](http://epa.gov/lead) 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 or 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/

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

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# 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).