



Maintaining Your Home: Lead-Based Paint Hazards

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What is lead poisoning?

"Childhood lead poisoning is one of the most common pediatric health problems in the United States today," according to the Centers for Disease Control and Prevention.

In the United States, 1 out of 11 children under age 6 has lead poisoning. Lead is a poison that is harmful to young children's nervous systems. Low-level lead poisoning can reduce intelligence, motor control, hearing and emotional development.

Children with blood levels as low as 10 micrograms of lead per deciliter of blood can have health problems. This level is equivalent to just over 1 part in a million, like one drop in 16 gallons (a bath-size amount).

Adults exposed to lead can become irritable, and can have reduced muscle coordination and damage to kidneys, sperm cells, developing fetuses and nerves associated with the senses.

Lead's effects on young children are worse, for several reasons:

- Children are involved in more hand-to-mouth activities, and lead tastes sweet.
- Young bodies absorb lead more readily.
- A child's developing central nervous system (brain) is more easily harmed by lead.

A blood test is the best way to detect lead poisoning. Low-level lead poisoning is invisible. It causes no immediate symptoms such as a fever to alert you to the problem.

What causes lead poisoning?

Lead-based paint in bad condition in the home is the major source of lead poisoning. The term **lead-based paint** refers to paint or varnish that contains at least 0.06 percent by weight of lead (600 parts per million). Most homes in Wisconsin have some lead-based paint.

Selling lead-based paint for interior or exterior residential use was banned in 1978. Therefore, lead-based paint hazards are primarily a problem for homes built before 1980. Ninety percent of the housing units built before 1940 have lead-based paint on interior or exterior surfaces, according to a national survey. The percentage drops to 80 percent for houses built between 1940 and 1959, and to 62 percent for houses built between 1960 and 1979. *

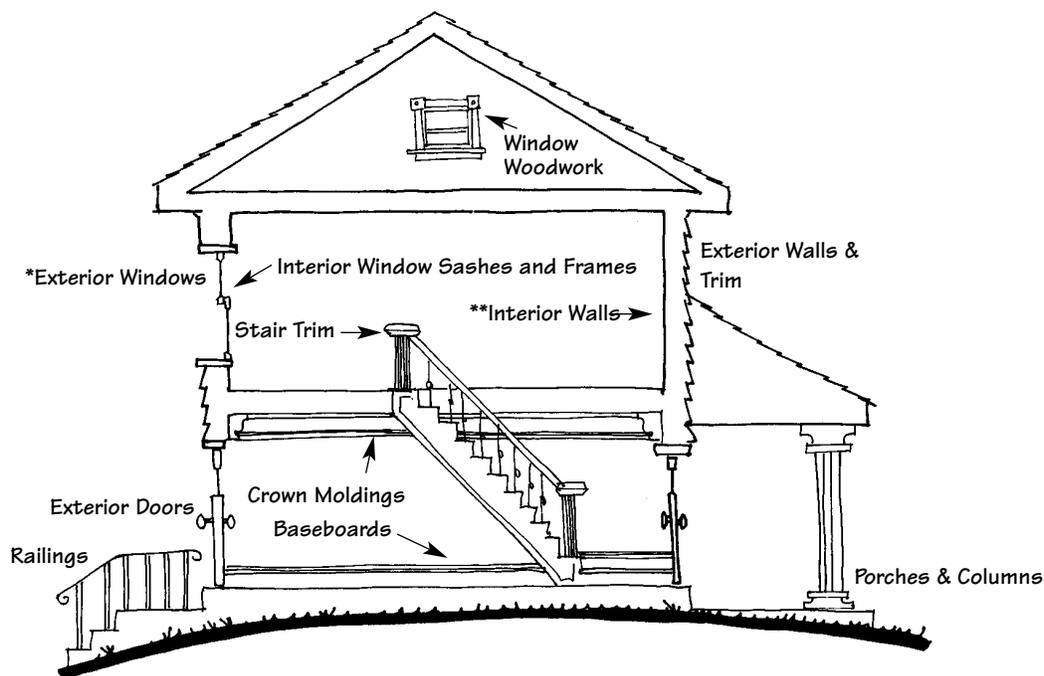
Houses with lead-based paints are likely to have them on both interior and exterior surfaces. Based on an estimate of the percent of all such surfaces covered with lead-based paint, only 6 percent of interior wall surfaces are coated with lead-based paint. The most likely interior surfaces coated with lead-based paint include:

- stair trim
- door trim
- crown moldings and baseboards
- window sashes and frames
- walls in bathrooms and kitchens

Since 1996, federal law requires property owners to give information about lead hazards to people who buy or rent property built before 1978. For more information, call (800) 424-LEAD.

* Information about the extent and locations of lead-based paint in housing is from a national survey conducted for the U.S. Department of Housing and Urban Development between December 1989 and March 1990, reported in *Comprehensive and Workable Plan for Abatement of Lead-Based Paint in Privately Owned Houses, 1990*, U.S. Department of Housing and Urban Development.

Where is the lead?



About 40 percent of exterior walls have lead-based paint on them. Outside, the most likely surfaces coated with lead-based paint include:

- porch components
- windows *
- walls and trim
- doors
- railings

Evaluating the hazard

If there are young children in your household, look carefully at the paint in your house. Lead-based paint is hazardous under several conditions described in the Residential Lead-Based Paint Hazard Reduction Act of 1992.

Look inside and outside the home for:

- **Paint that is deteriorating** — chipping, cracking or chalking. You can check for chalking by wiping a damp cloth over the surface. If the cloth picks up color from the wall, then the paint is chalking.

- **Paint on a friction surface** such as a floor or the moving parts of a window. Paint is likely to be turned into dust by the friction of shoes scuffing the floor, or by a painted window sliding up and down in its frame.
- **Paint on an impact surface** such as a door frame. This can be damaged by being hit repeatedly by the door.
- **Paint within reach of a young child** to mouth or chew, such as on a window sill.
- **Paint that has become part of surface dust** because of damage or remodeling, and can get on children's hands.
- **Dust or debris from water damage or weathering** of lead-based paint, or from paint removal, that contaminates surfaces or bare soil around the house where children play.

Deciding if you have a lead paint problem

- ✓ Was your home built before 1980?
- ✓ Does your home have painted surfaces or conditions described above?
- ✓ Do you have young children?

*Exterior window sills typically have the highest levels of lead contamination.

**Paint on walls in kitchens and bathrooms is most likely to contain lead.

If so, here are some actions to take immediately:

- **Have your children tested for lead poisoning.** Consult your physician or local health department on how to do this. If they don't know, contact:
State Laboratory of Hygiene
(608) 262-1146
- **Test suspected surfaces for lead content.** Do-it-yourself test kits are available at hardware stores. Some local health departments will test for lead. For more information, call:
Wisconsin Bureau of Public Health
(608) 266-5817
- **Take a sample of dust, paint or varnish you suspect may contain lead, and send it to a lab to be tested.** For instructions, call your local health department or the Wisconsin Bureau of Public Health for a list of laboratories.
- **Clean up damaged paint with wet paper towels.**

Controlling lead-based paint hazards

Short-term controls

1. **Cleaning solutions.** To keep dust levels down, wash painted surfaces twice a month. Buy a cleaner specifically recommended for lead paint, or use an automatic dishwasher detergent. Use one gallon hot water with ¼ cup of detergent. Rinse the surface with clear water after washing.
Note: These cleaners may cause skin irritations and dissolve painted surfaces. Wear gloves.
2. **HEPA vacuums.** Use a HEPA vacuum (high efficiency particulate air filter) to clean up lead dust or debris. Call your local or county health department to find out the location of the nearest HEPA vacuum available for loan.
3. **Painting.** Keep painted surfaces in good repair. Intact lead paint does not present as much risk to a child as does damaged or deteriorated lead paint. Be extremely cautious when preparing surfaces for painting. In preparing the surface for repairing, try to create as little dust as possible. **DO NOT** use heat guns, power sanders or open flame torches to remove old paint. Clean up debris

continually, and prevent children from entering the work area until all surfaces have been cleaned.

Repairing damaged lead-based paint by cleaning and painting over it has been shown to reduce lead levels in children's blood by at least 25 percent in the short term. However, painting is **not** a permanent solution. A **good** paint job may last 4 to 10 years.

Permanent controls

Two permanent ways to control lead-based paint hazards are to:

1. **cover them, or**
2. **remove them.**

For walls, a durable covering such as sheet rock or siding is often a good choice. Removing and replacing windows, doors or woodwork is safer than stripping off the paint.

Most experts recommend hiring professionals to abate lead-based paint hazards. Professionals are trained to work safely, and they have access to safer tools and effective materials.

The Wisconsin Division of Health regulates workers and contractors engaged in reducing lead-based paint hazards in residences with young children. For the names of contractors certified to control lead-based paint hazards, contact the Wisconsin Bureau of Public Health at (608) 267-0928.

If you choose to do the work yourself, be extremely cautious to create the least amount of lead dust possible and clean up as you go. **DO NOT** use an ordinary vacuum cleaner to clean up the work area. Instead, use a damp mop and disposable paper towels, or rent a HEPA vacuum. Change your clothes before leaving the work area. Protect your family during the process by sealing off the work area, and leaving clothes you use there. When you are finished, double-laundry work clothes. Wash them separately from children's clothes.

When repainting or remodeling, clean up carefully as you work. Anything that disturbs old paint can be dangerous. A survey of 6,500 Wisconsin families found that compared to those not doing this work, those doing remodeling or repainting had a 30 percent greater chance that a child would be lead poisoned.

Resources

Alliance to End Childhood Lead Poisoning
For information about federal initiatives, call
(202) 543-1147.

Centers for Disease Control and Prevention,
U.S. Department of Health and Human
Services
Preventing Lead Poisoning in Young Children
(1991). Call (770) 488-7330.

EPA — U.S. Environmental Protection Agency
Two EPA pamphlets are *Reducing Lead
Hazards When Remodeling Your Home*
(1994) and *Protect Your Family from Lead in
Your Home* (1995). For publications on lead
hazards and how to control them, call
(800) LEAD-FYI.

For a list of laboratories proficient in lead
analyses of paint chips and dust wipes, call:
(800) 35-NIOSH or (800) 424-LEAD

HUD — U.S. Department of Housing and Urban
Development
*Comprehensive and Workable Plan for the
Abatement of Lead-Based Paint in Privately
Owned Housing* (1990), *Guidelines for the
Evaluation and Control of Lead-Based Paint
Hazards in Housing* (1996), and *Title X Task
Force Report: Putting the Pieces Together*
(1995). For a copy, call:
(800) 245-2691 — HUD user



*Maintaining a Lead Safe Home: A Do-It-Yourself
Manual for Homeowners, Property Managers
& Contractors* by Dennis Livingston
(Baltimore, Md.: Community Resources),
1997. Available from: Community
Resources, 28 E. Ostend St., Baltimore, MD
21230; (410) 727-7837.
E-mail: dlresource@aol.com

National Center for Lead Safe Housing
*Does Residential Lead-Based Paint Hazard
Control Work?* (1995); *Recognizing,
Evaluating and Controlling Lead-Based Paint
Hazards: A Practical Step-by-Step Approach
for Nonprofit Housing Organizations*. Call
(410) 992-0712.

Public Health Department (listed under city or
county government in your phone book).
Provides health screening and information,
and can provide you with the location of the
nearest HEPA vacuum available for loan.

Residential Lead-Based Paint Hazard Reduction
Act of 1992, Title X of the Housing and
Community Development Act of 1992.

Wisconsin Childhood Lead Poisoning
Prevention Program
(608) 266-5817

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