



# ELIMINATING LEAD HAZARDS

## Information and Instructions

IOWA DEPARTMENT OF PUBLIC HEALTH  
Childhood Lead Poisoning Prevention Program  
1 - (800) - 972-2026

**Lead-based paint hazards can cause lead poisoning in children.** These hazards must be eliminated from homes to prevent lead poisoning and to help lead-poisoned children get better. However, the presence of lead-based paint does not always mean that there are lead-based paint hazards in the home.

An inspector determines whether a surface has lead-based paint on it by using a machine called an x-ray fluorescence monitor (XRF) or by sending a sample of paint to a laboratory. If your property has not been inspected, you can use the publication, *Lead Poisoning: How to Protect Iowa Families*, to look for lead hazards in your home. You can get a copy of this online at <http://idph.iowa.gov/lpp>.

Since 2010, Iowa law has required property owners and landlords to be certified as lead-safe renovators and use specific work practices when making repairs in residential rental property and child occupied facilities. **Failure to comply with this law may result in a fine of up to \$5,000 per incident.**

### **Lead-based Paint Is a Hazard under the Following Five Conditions:**

1. The paint is on a surface that is **CHEWABLE**. This means that the surface is the right height and angle for children to chew on it. This paint is a hazard even if the paint is in good condition. (Example: window sills.)
2. The paint is on an **IMPACT** surface. Impact surfaces are in locations where people moving furniture or other objects, children playing with toys, etc. often run into the surface. The impact is often hard enough to knock paint off the surface. The paint on this surface is a hazard if you see any paint chipped from the surface. (Ex: Edge of door frame below the four foot level.)
3. The paint is on a surface that is subject to **FRICITION**. Friction occurs when there is up and down, back and forth, or rubbing movement. This friction creates lead dust that can cause lead poisoning in children. This paint is a hazard if you see any worn paint. (Example: track where window goes up and down or a floor.)
4. The paint is **peeling, chipping, chalking, cracked**, or otherwise **deteriorating**.
5. **Bare soil** around buildings that have been painted with lead-based paint contains lead. This is a hazard to children who play in these areas. The bare soil is a hazard within 3 feet of the building. The top 6 to 8 inches of the soil will contain lead. This soil contains lead because the lead-based paint on the building ended up in the soil when it was scraped off or fell off in the past. This bare soil is a hazard even if you cannot see paint chips. The paint chips break down into very small pieces, but the lead is still there. Areas that have a good grass cover or landscaping to cover the soil are not a hazard.

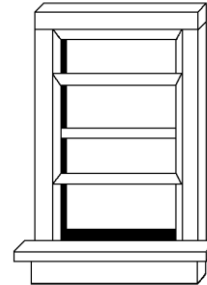
**You must understand what Type of Surface is covered with lead-based paint.  
The type of surface determines how much paint removal or other work  
is needed to eliminate the hazard.**

## **TYPES OF SURFACES**

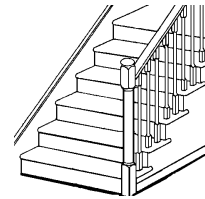


### **CHEWABLE surfaces are:**

**Windows:** Interior and exterior.  
Window sills below four foot level.  
Inside the windows.



**Stairs:** Stair railings.  
Stair rail spindles.  
Stair treads from four inches from lip on top of tread  
and from lip to riser on the bottom side.



**Porch:** Railings and spindles.



**Other Surfaces:** Anything that  
the investigator decides a child can chew on.



### **IMPACT surfaces are:**

#### **Walls**

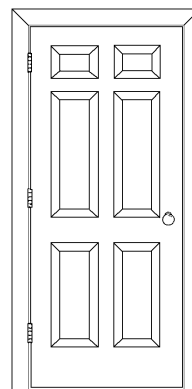
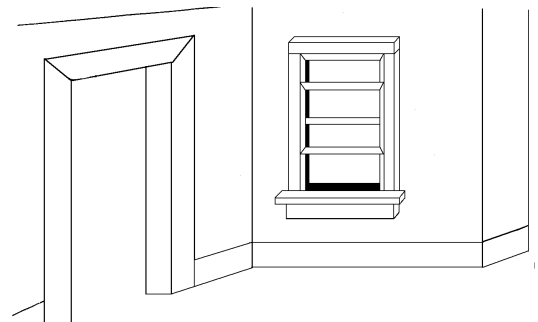
Corners that stick out into the room one inch from the edge on  
both sides below the four foot level.

#### **Baseboards**

Corners that stick out into the room. One inch from the edge on  
both sides.

#### **Doors, door frames, and door stops (interior and exterior)**

Doors, door frames, and door stops below the four foot level  
and one inch from all edges that are subject to impact.





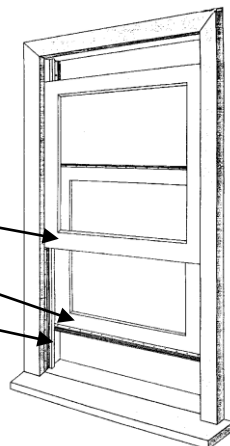
# TYPES OF SURFACES

## FRICTION surfaces are:

Floors

Window sashes

Window tracks



## Eliminating Lead Hazards on Chewable, Impact, and Friction Surfaces

There are three ways to eliminate lead hazards on these surfaces:

- 1. Remove ALL paint to the base material.**
  - Repaint or refinish the surfaces with a lead-free finish.
  - You need to remove ALL paint ONLY on the part that is a chewable, impact, or friction surface.
  - On a window sill, this would be the area one inch from the edge of the window sill on the top and bottom of the sill. You do NOT need to do anything to the rest of the window IF the paint is in good condition. If the paint on the rest of the window is not in good condition, remove only the deteriorated paint.
- 2. If doors or other wood surfaces are in poor condition, you can also replace them with new ones.**
  - Spray all surfaces to be replaced with a light water mist before removing them from the home. This will reduce the amount of lead dust produced.
- 3. Cover surfaces such as corners and floors.**
  - Plastic corner protectors or other materials will protect painted surfaces from hard impacts.
  - Carpet or linoleum will keep you from walking directly on the lead-based paint. Apply coverings tightly enough to keep children from removing them.
  - If applied to a chewable surface, the covering must be sturdy enough so that children cannot chew through it.



*Paint alone is NOT sturdy enough  
to cover chewable, impact, and friction surfaces.*



## Eliminating Lead Hazards on Chewable, Impact, and Friction Surfaces

There are also three ways to eliminate lead hazards on OTHER surfaces:

- Carefully remove all loose, peeling, chipping, flaking, or otherwise deteriorating paint from the surface.**
  - All remaining paint must stick tightly to the surface.
  - You do **NOT** have to remove paint that is in good condition.
  - Wet sand the surface and remaining paint to smooth it and prime. This will help the new paint stick to the surface so it will not start to peel again.
- If windows are leaking, you can remove them and install new windows. If doors or other wood surfaces are in poor condition, you can also replace them with new ones.**
  - Spray all surfaces with a light water mist before removing them from the home. This will reduce the amount of lead dust produced.
- If walls are in poor condition, you can cover them with wallboard or paneling.** If exterior siding is deteriorated and will not hold paint, you can cover it with new siding.

## ELIMINATING BARE SOIL HAZARDS

To eliminate lead hazards from bare soil:

- Cover the soil with 6 inches of rock, mulch, or similar materials.
- Plant bushes or shrubs that keep children from playing near them. (Shrubs with small thorns work well.)
- Use a fence to keep children from playing in the soil.

It is not practical to remove the soil because this is very expensive.

## WINDOWS

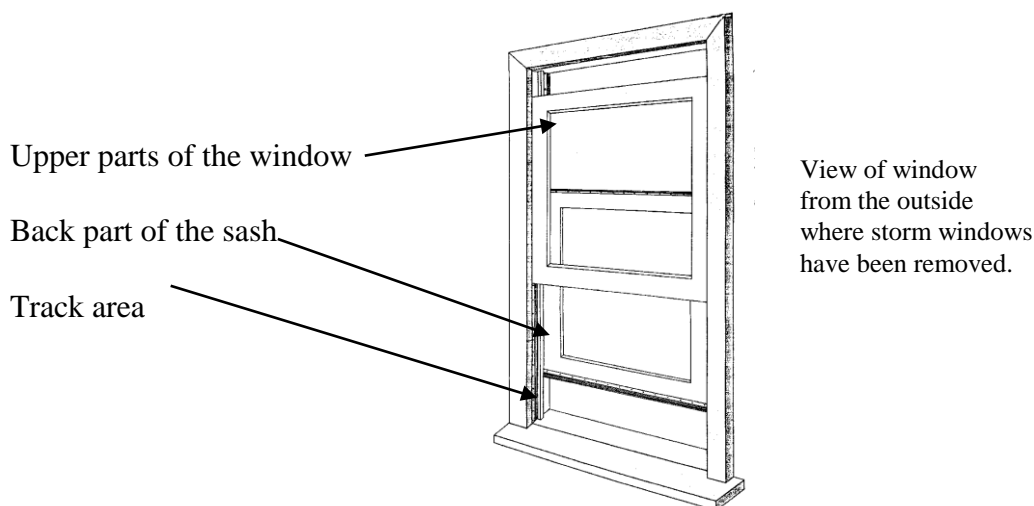
Window sashes, tracks, and the space between the interior window and the screen/storm window are the most common hazard areas. **Almost every home built before 1960 has peeling or chipping lead-based paint in these areas.** Children like to look out or play in open windows. They may put the paint chips in their mouths. Or, they can get paint chips or dust on their hands and toys. They then put these toys and hands in their mouths.

To remove the hazards between the windows:

1. Remove the storm windows/screens.
2. Work on the surfaces only from the OUTSIDE of the house while keeping the inside window shut. This will keep the dust and paint chips from getting inside the house.

## WINDOWS

Make sure you remove the chipping and peeling paint from:



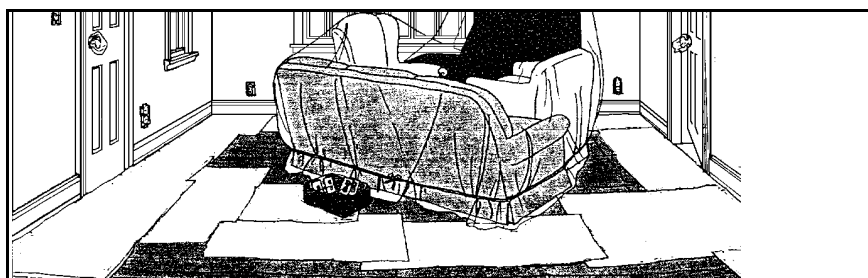
If paint is left in these areas, it can peel or rub away. Then, it falls to the sill where children can find it.

### FOLLOW THESE GUIDELINES

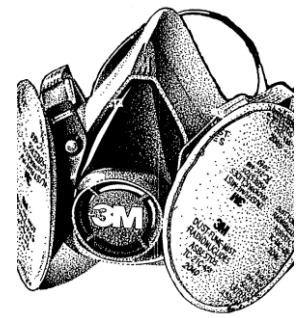
1. Remove lead-based paint carefully! You should **NEVER** dry scrape or dry sand lead-based paint on the inside or outside of your home. **Always mist surfaces with water** before scraping or sanding them. Use a tarp or piece of plastic to catch paint chips when you are working on the outside of your house. This will keep paint chips from falling on the soil. If you are working outside, close windows to prevent lead dust from entering the home.



2. **DO NOT** sandblast or waterblast lead-based paint on the outside of your home. You do not want the paint chips to end up all over your yard or the neighbor's yard. Sandblasting and waterblasting is safe **ONLY** if you have a special machine that will catch the paint chips.
3. Remove furniture, drapes, and if possible, carpet from the room you will work in before starting work. Cover the floor and furniture that cannot be removed from the room with a sheet of 6 mil plastic. Seal each room from the rest of the house with plastic while working in it. Be careful not to track dust and paint chips into other areas of the home.



4. Wear a negative pressure, half-mask respirator with a magenta (purple) HEPA filtration canister. You can buy these respirators at auto parts stores (used for brake and clutch work). The respirator will say “HEPA Filters - Asbestos Approved.” Be sure to read the instructions for positive and negative facefit tests and for cleaning the respirator. If the respirator does not fit properly, it will not protect you. It will also not protect you if it is dirty. These masks do not protect against organic vapors from heat guns or paint strippers. So, use heat guns and paint strippers only where there is good ventilation. This will help disperse any organic vapors from the strippers or from heating the paint.



5. Replace the filters on the respirator if they are damaged. You should also replace them if it gets hard to breathe. This means that the filters are plugging. Wash the facepiece (without the filters) with mild soap. Store the respirator in a bag outside of the work area.

6. If you have asthma, emphysema, or heart problems, do **not** try to wear a respirator. Take off the respirator **immediately** if you feel short of breath. If you have a perforated eardrum that has not been repaired, this respirator will not protect you from inhaling lead dust.

7. If you will be using a heat gun, make sure it is a low-temperature heat gun that operates below 1100° F.

8. Do not eat, drink, or smoke until you have left the work area and thoroughly washed your hands and face. Take a shower, wash your hair, and change clothes before coming in contact with others.

9. Keep pregnant women and children out of the room if you are working on a small project. A small project would be working on only a few surfaces in one room at a time. For larger projects, keep pregnant women and children out of the home until you complete the job.

10. After you complete the job, wash all surfaces thoroughly with any household detergent. Vacuum with a HEPA vacuum or a regular vacuum with microfilter bags. Shampoo carpets using a machine that pumps liquid into the carpet and pulls it back out.



11. Place paint chips, dust, and pieces of wood in a plastic bag at the end of each day. Put this with your garbage that will go to the landfill.

**After you complete work to eliminate lead-based paint hazards, you must** maintain the remaining lead-based paint in good condition. You should also frequently clean the house. Wash floors, window sills, areas between the windows, and other places where dust and dirt accumulate at least once a week. Check the condition of lead-based paint frequently. You need to repair paint when it begins to deteriorate.