

It is recommended that volunteers read the Housing and Urban Development (HUD) "Lead Paint Safety" field guide. This guide is available by calling 1-800-424-5323 and is on the HUD web site at www.hud.gov/lead. Volunteers should also read the Environmental Protection Agency (EPA) booklet, "Reducing Lead Hazards When Remodeling Your Home." This booklet is available by calling 1-800-424-5323 or on the EPA web site at www.epa.gov/lead.

For more information about children exposed to lead-based paint hazards, or to find a certified lead paint inspector or risk assessor, contact your local health department or:

Health Hazards Control Unit (HHCU)

NC Department of Health and Human Services (DHHS) 1-919-707-5950





NC Department of Health and Human Services • Division of Public Health • Occupational & Environmental Epidemiology Branch • Health Hazard Control Unit (HHCU) • https://epi.dph.ncdhhs.gov/lead/lhmp.html • NCDHHS is an equal opportunity employer and provider. • 3/2019



What Volunteers Should Know about Lead-Based Paint and Health

North Carolina Guidelines for Volunteers Who May Be Exposed to Lead While Conducting Renovation, Repair and Painting Activities



What is Lead and What Are Its Health Effects?

A home built before 1978 is likely to be painted with paint containing lead, which was used in a variety of paints, varnishes, and shellacs. Lead is toxic and can cause health problems if not handled correctly. Unless you have had your home tested for lead-based paint, it is best to assume that a home built before 1978 contains lead.

Lead is a naturally occurring, bluish-gray metal that was added to residential paint before 1978, to increase its durability and resistance to weather. The health effects associated with lead have been known for many years. For adults, exposure to lead can cause symptoms as common as headaches or muscle and joint pain, to more severe health effects like reproductive problems and loss of memory. For children, especially those under the age of six, exposure to lead can cause damage to the central nervous system, as well as learning and behavioral problems. If you believe that you or your child has been exposed to lead, contact your personal physician to determine if medical testing and perhaps treatment are needed.



Protecting Volunteers from Lead

To reduce exposure to lead and lead dust, follow these guidelines:

 Expectant mothers and young children, especially children under six years of age, should not be allowed in areas



- where lead paint is being disturbed. Keep pets out of the work area too.
- Volunteers should thoroughly wash their hands and face with soap and water before each break, before lunch, and at the end of the workday.
- Volunteers should not eat, drink, or smoke in the work area.
- Volunteers disturbing lead-based paint should change into clean clothes and shoes before leaving the work site each day. Disposable booties can help protect shoes.
- Volunteers should keep their hair clean.
 A painter's hat or other suitable covering is recommended.
- Clothing or hats potentially contaminated with lead or lead dust should be laundered separately from the rest of the laundry. Dirty clothing and shoes can be stored in a plastic container until laundered or reused.
- Volunteers should keep vehicles free from lead dust by cleaning their tools or placing tools contaminated with lead into a sealed container until used again.

Prohibited Methods of Paint Removal

In order to prevent excessive exposure of volunteers and occupants to lead, and to avoid contaminating the occupant's property, the following paint-removal methods are **NOT** allowed, according to HUD and EPA:

- Open-flame burning or torching of building components containing lead-based paint;
- Machine sanding or grinding lead-based paint (including using a belt sander) without a high efficiency particulate air (HEPA) local exhaust control and containment;
- Hydro-blasting or power-blasting with the intent of removing lead-based paint from the substrate without a method to collect the water; (Note: Power washing to remove dirt from a painted surface that is in good condition is an acceptable work practice.)
- Abrasive blasting or sandblasting lead-based paint without a HEPA local exhaust control; (Note: Abrasive blasting or sandblasting the interior of a home is not recommended. If you will be abrasive blasting or sandblasting the exterior of the home, make sure all doors and windows are properly closed and sealed from the inside. Also make sure the HVAC [heating, ventilation and air conditioning] system is turned off during the blasting operation.)
- Heat guns exceeding 1100 degrees
 Fahrenheit or charring the paint;
- Dry sanding or dry scraping, except when dry sanding, dry scraping, or using a heat gun within one foot of an electrical outlet;
- Paint stripping in a poorly ventilated place. (Note: It is recommended that you NOT use methylene chloride products. Methylene chloride is a known carcinogen.)

Lead-Safe Work Practices

Following these practices will reduce exposure to toxic lead and lead dust:

- Use at least 6-mil plastic on the floor or outside ground to collect paint chips and paint dust. Use painter's tape, duct tape, or equivalent to secure plastic to the appropriate surface. At the end of each work day, wet and roll the plastic into itself and properly dispose of the plastic and paint chips. Care must be taken to prevent slips, trips and fall hazards.
- If using a drop cloth, replace the drop cloth often and do not take lead-contaminated drop cloths to another residence.
- All lead-painted surfaces should be misted with water, using a spray bottle or garden sprayer, before and during sanding or scraping painted surfaces.
- When power-washing the exterior of a home, do NOT allow the paint dust and chips to run off onto the ground. Collect the paint dust and chips onto a disposable ground cover and dispose of properly.
- When disturbing lead-painted surfaces inside a home, make sure that the HVAC system is off and the vents/registers are sealed, to prevent the spread of lead dust to other areas. Do not use fans.
- Move furniture and other personal belongings out of the work area or to the center of the room and cover with at least 4-mil plastic and tape completely to the floor.
- Protect or remove carpets and rugs prior to any renovation activity.

Specialized Cleaning Methods

- Use only a true High Efficiency Particulate Air (HEPA) vacuum cleaner, designed specifically for lead, to clean all floors and other horizontal surfaces. Do NOT use the occupant's personal vacuum cleaner or a commercial-grade vacuum cleaner to remove lead dust from the home.
- Most of the large paint chips and lead dust should have already been collected onto plastic sheets or drop cloths and disposed of. Use wet paper towels or disposable rags to remove any remaining paint chips or lead dust from floors and horizontal surfaces.
- Clean floors and other horizontal surfaces in the work area. You will need to use a spray bottle, disposable rags or cloth mops. Use a mopping method that keeps the wash water separate from the rinse water (eg. two buckets) and an all-purpose cleanser. Using the spray bottle, spray the detergent on the horizontal surface. Wet the rag or mop with water from one bucket and scrub the area to be cleaned. Rinse often and use the empty bucket to collect the dirty water from the rag or mop. Replace rags and rinse water for every room. Replace cloth mop heads often. Hand sponges or mop sponges are not recommended for use during specialized cleaning. Use disposable wet cleaning materials. HEPA/Wet Clean/HEPA.
- For additional information on receiving free lead-safe training and how to conduct specialized cleaning, contact the NC Children's Environmental Health Branch toll free in North Carolina at 1-888-774-0071.

Disposal of Lead-Paint Waste

Volunteers should dispose of lead-based paint as household waste. The following is a summary of the clarification. For the complete clarification go to the EPA web site, www.epa.gov/lead.

- Collect paint chips, dust, dirt, and rubble in plastic trash bags for disposal as household waste.
- Collect paper towels, rags, mop heads, etc. in plastic bags for disposal as household waste.
- Dispose of dirty water into the toilet.
 Do NOT dispose of dirty water into any other drain or onto the ground.

Clearance After Completion

After completing the surface preparation, cleaning, and repainting, clearance testing to determine the presence of hazardous levels of lead is recommended, but not required unless required by HUD or the NC Children's Environmental Health Branch. In North Carolina, if you have a lead-dust clearance performed, you will need to use a certified lead inspector or risk assessor. For a list of individuals who can conduct paint testing or clearance sampling in North Carolina, please contact the NC Health Hazards Control Unit at: 1-919-707-5950 and ask for a Consultant.

Commercially available chemical test kits are not recommended for determining the presence or absence of lead-based paint.