Don’t Spread Lead

A Do-It-Yourselfer’s Guide to Preventing Lead Poisoning by Working Lead-Safe

Thanks to the University of Connecticut Cooperative Extension System’s Healthy Environments for Children Initiative, the Connecticut Department of Public Health, and the U.S. Environmental Protection Agency, Region 1, for the use of their materials and support.

Welcome

- Please introduce yourself
- Mention a do-it-yourself project that you're working on or considering
- If possible, tell us when the house you're working on was built

Why is this course important?

- Homes built before 1978 may contain lead-based paint.
  - Fix-up jobs can create dust and paint chips that contain lead.
  - Lead is a poison.
- If your home contains lead paint, you must work lead-safe to protect yourself and others from lead poisoning.
- This course will show you how to work lead-safe.

What does working lead-safe have to do with your project?

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- Homes built before 1978 might contain lead paint
  - Homes built before 1960 probably do contain lead paint.
- Sanding, scraping, or otherwise disturbing paint will create dust that contains lead.
- You, your family, and your neighbors can be exposed to dangerous lead dust.
- You can work safely around lead paint if you follow the simple precautions outlined in this course.

Who is at risk from lead?

- Most vulnerable
  - Babies
  - Young children
  - Pregnant women and their unborn babies
- But lead can harm everyone

How does lead affect health?

- **Children**
  - Brain damage
  - Decreased IQ
  - Lifelong learning and behavior problems
  - Slowed growth
  - Hearing loss
- **Adults**
  - High blood pressure
  - Fatigue
  - Reproductive problems
  - Loss of sex drive

How do you know if the house you're working on contains lead?

Have your house tested by a certified lead paint inspector or risk assessor.

Testing with a dust wipe

Testing with an XRF (x-ray fluorescence) device

If testing isn't possible or practical, follow this rule:

For any house built before 1978:
Assume that lead paint is present.
Use lead-safe work practices.

Do it yourself or hire a contractor?

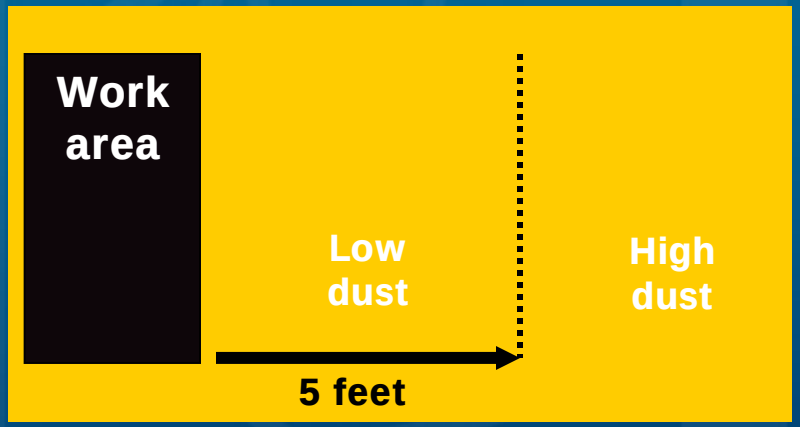
This course will teach you how to complete small jobs safely.

If you are doing big jobs that may create a lot of dust, consider

- Taking a HUD-approved course or
- Hiring a contractor who has been trained in lead-safe work practices

Do it yourself or hire a contractor?
Low-dust and high-dust jobs

- **Low-dust job**
  - Dust and debris will **not** spread beyond five feet from the work area.



- **High-dust jobs**
  - Dust and debris will spread beyond five feet from the work area.
- If you think you will have a high-dust job, hire a contractor who is trained in lead-safe work practices.

Factors that make jobs high in dust

Factor	Why
Job size	Jobs that involve a large work area usually create more dust.
Work practices	Some activities (such as sanding) create more dust than other activities (such as painting).
Equipment	Power tools usually create more dust than hand tools do.

What does working lead-safe have to do with your project?

Exercise 1

How lead dust spreads

Selecting a lead-safe contractor

1. The contractor must know about complying with federal notification rules
   - Before renovations begin on a house built before 1978, the contractor must give the owner an educational booklet about lead.
2. The job supervisor (and preferably the entire crew) must have passed an approved course in lead-safe work practices.
3. The contractor's proposal must state that he or she will use lead-safe work practices.
4. The contractor must agree to have a lead dust test conducted after the project is completed.

Contractors and lead-safe work practices

- A new EPA rule will require contractors to follow lead-safe work practices.
  - The rule will take effect in April 2010
- Until then, most renovation work is not covered by rules that protect people from lead poisoning.
- Unless you insist, many contractors may not use lead-safe work practices
- To protect your health and the health of your family, insist that contractors work lead-safe in your home.

Step 1: Protect your family, your neighbors, and your tenants

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1. What would you say to your family, neighbors, and tenants about staying away from the work area?
2. What good practices do you see in the pictures below?

Make sure you:

- Put up signs and barriers.
- Have signs in the appropriate language.
- Ask the neighbors to close their windows and doors.

Step 2: Prepare the work area

Note: Vacuum before you put down the plastic.

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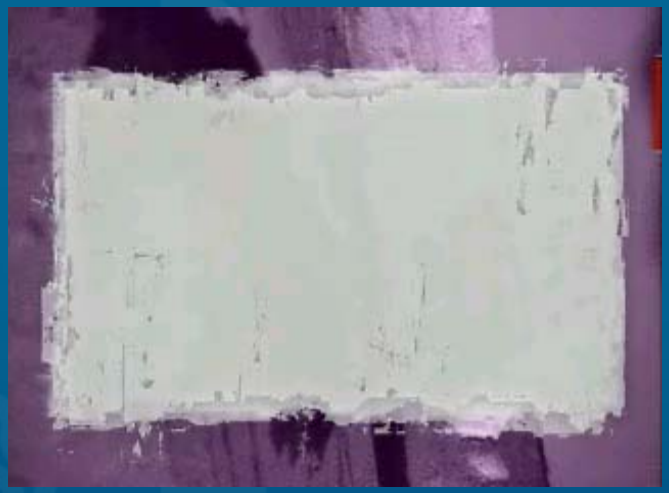
What good practices do these pictures show?

- Working inside or outside: seal off the work area.
- Protect belongings

Step 3: Protect yourself from dust and debris



Step 3: Protect yourself from dust and debris

Scenario: You are going to sand and repaint the trim on a window.

- **What supplies do you need to protect yourself?**
  - Eye protection (safety glasses or goggles)
  - Disposable gloves
  - A disposable hat
  - Disposable shoe covers or disposable wipes
  - Disposable coveralls (optional)
  - A HEPA vacuum to vacuum clothing (if available)

Respiratory protection?

- N-100 rated dust masks (respirators) filter out dangerous lead particles in the air.
- N-95 respirators (more common) don't protect against tiny lead particles.
- Large, high-dust jobs need a different kind of respirator.

Steps 2 and 3: Prepare the work area and protect yourself

Exercise 2:

Set up interior work area and protect yourself

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Assume that you are going to paint this room.

Also assume that this project is a low-dust job.

Step 4: Work wet

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1. Why work wet?
2. What good practices are shown in this picture?

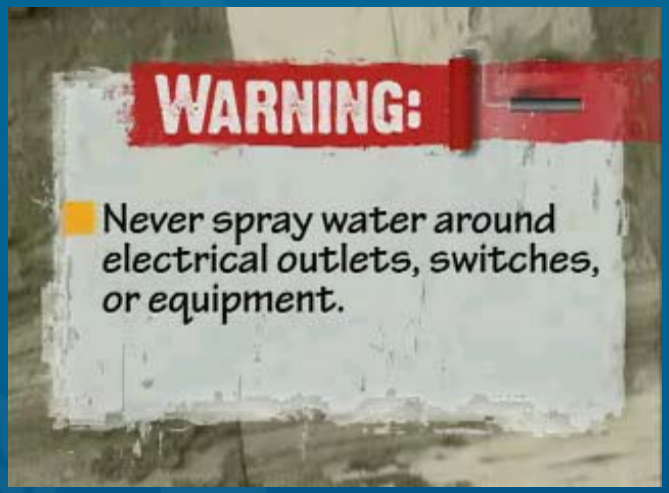
Guidelines for misting

- Mist surfaces very lightly.
- Mist frequently to keep surface damp.
- Make sure area where you are standing is dry (to avoid slipping).

NOTE

NEVER spray water around electrical outlets, switches, or on tools.

Step 5: Work clean



Step 5: Work clean General rules

- Make as little dust as possible.
- Keep paint dust and chips in the work area.
- Clean up as you work.
  - Use a damp rag, paper towel, or tack cloth
  - Put dirty rags, paper towels, or tack cloths into a plastic bag

What's wrong with this picture?

What work practices should you avoid?

Unsafe

1. Dry scraping or sanding
2. Power sanding or grinding **without** a HEPA dust-collection system
3. Using a high-temperature heat gun or an open-flame torch
4. Cleaning with a broom
5. Chemical paint strippers with methylene chloride

Safer

1. **Wet scraping or sanding**
2. **Power sanding or grinding WITH a HEPA dust collection system**
3. **Heat gun with a temperature no greater than 1100 degrees F**
4. **Clean up with a HEPA vacuum**
5. **Paint strippers without methylene chloride**

Clean up safely

Begin by picking up debris and plastic sheeting

Three-step clean up

Step 1
Vacuum

Step 2
Wash and Rinse

Step 3
Vacuum again

Dispose of waste safely

- Check federal, state, and local regulations for the proper disposal of waste.
- Decide where to put the waste that you create as you work and as you clean up.

Checking your work

- Look for paint chips, dust, and debris.
  - If you find any, clean the area again.
- If possible, have a licensed lead professional take dust-wipe samples and send to an approved lab for testing.
  - If you can't hire a professional, you can buy a lead dust-wipe kit and take the sample yourself.
- If lab tests show too much lead, clean again and test again.

Personal clean up

- Remove work clothes
- Shower and wash hair
- Wash work clothes separately from the rest of your laundry

Wrap up

What you should be able to do now that you have taken this training

1. Explain why lead-safe work practices are important.
2. Identify the groups most affected by lead poisoning.
3. List the five steps to working lead-safe.
4. Identify ways to protect people from lead exposure. (Step 1)
5. Describe how to prepare an indoor or outdoor work area for working lead-safe. (Step 2)
6. Identify activities that protect workers from lead exposure. (Step 3)
7. Identify activities that prevent lead from getting into the air and spreading. (Step 4)
8. Identify steps to clean up and dispose of lead-contaminated waste. (Step 5)

Course review

- Lead poisoning is a serious but preventable problem.
- You can work lead-safe by following five steps:
  1. Protect your family, neighbors, and tenants
  2. Prepare the work area
  3. Protect yourself from dust and debris
  4. Work wet
  5. Work clean

Course review

- Don’t make dust.
- If you do make dust, clean it up.
  - Even if you’ve been careful, clean up as if you’ve made dust.
  - Dust is hard to clean up with water.
    - The best way to clean up is by using a HEPA vacuum.

Other sources of lead

- Toys
- Jewelry
- Folk remedies
- Imported pottery
- Water from old pipes

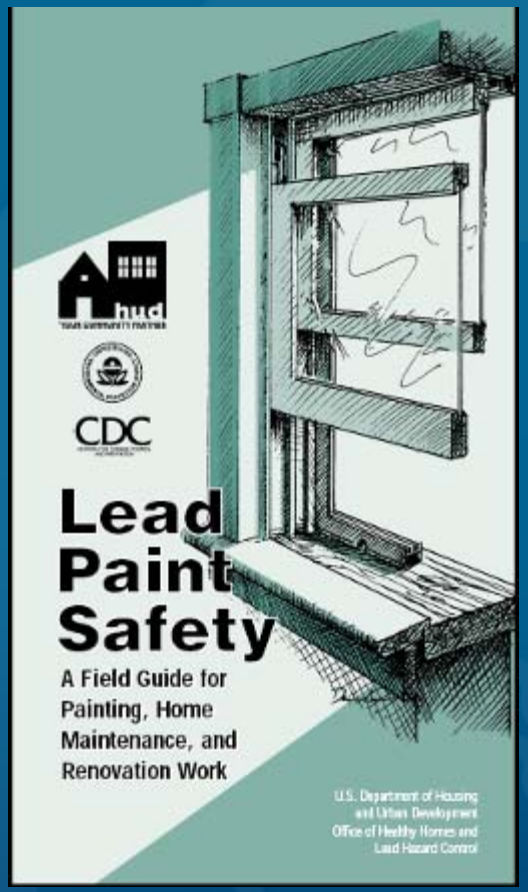
True or false?

1. Pregnant women, young children, and pets can stay in the work area when you work around lead-based paint. **FALSE**
2. Do not eat, drink, or smoke while in the work area. **TRUE**
3. Move belongings out of the work area, or cover them with heavy plastic before starting work. **TRUE**
4. Leave windows and heating/air conditioning vents open. **FALSE**
5. Before you leave the work area, wipe off your clothes and shoes. **TRUE**
6. Do not mist surfaces before scraping or sanding lead-based paint. **FALSE**
7. Use lead safety only for work on lead-based paint inside the house. **FALSE**
8. Do not wear eye protection, gloves, or N-100 respirators on jobs that make lots of lead dust, such as demolition. **FALSE**

True or false?

11.	Never spray water around electric outlets or switches.	**TRUE**
12.	Make as little dust as possible, and clean up as you go.	**TRUE**
13.	If you do not know if a house built before 1978 has lead-based paint, work lead-safe on all painted surfaces.	**TRUE**
14.	Use a broom to clean lead dust and debris from the work area.	**FALSE**
15.	Vacuum, wash, and rinse all surfaces, and then vacuum again when cleaning for lead dust. Use a High Efficiency Particulate Air (HEPA) vacuum if possible.	**TRUE**
16.	You and your family can get lead-poisoning if you do not follow the steps to lead safety on the job.	**TRUE**
17.	Mist all plastic that contains lead dust and debris, then fold it dirty side inward. Put the plastic in a heavy duty trash bag and seal the bag with tape.	**TRUE**
18.	Throw waste into the resident's trash.	**FALSE**

For more information



For examples of how to use lead-safe practices in common home-improvement activities, see

Lead Paint Safety: A Field Guide for Painting, Home Maintenance, and Renovation Work.

What will you do differently as a result of this training?

- For more information contact the

Kansas Department of Health & Environment

Healthy Homes Program

1-866-865-3233

www.kshealthyhomes.org

For information on sources of lead other than paint

National Center for Healthy Housing fact sheet

Testing for Lead in Consumer Items for Children

www.centerforhealthyhousing.org/factsheet-leadtestconprod.pdf

U.S. Centers for Disease Control and Prevention website

Toys and Childhood Lead Exposure

www.cdc.gov/nceh/lead/faq/toys.htm

U.S. Environmental Protection Agency

Protect Your Family from Lead in Your Home

www.epa.gov/lead/pubs/leadpdfe.pdf