



Lead Renovator

4 Hour Refresher Training

Instructor

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Lead Inspector

Asbestos Building Inspector

Certified Indoor Environmental Consultant



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Course Overview

Introduction

Current Laws and Regulations.

Getting Started, Set-Up, and Safe Work Practices.

Clean-up Methods/Tools/Cleaning Verification.

On the Job Training

Record Keeping

Hands On

Certification in Iowa

Review and Test



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Symptoms of Childhood Lead Exposure

- Fatigue
- Stomachache / cramps
- Irritability, Headaches, Vomiting
- Constipation
- Poor appetite
- Behavior and learning problems
- Attention deficit
- Damage to brain, nervous system, and kidneys
- Slowed growth
- Hearing problems
- Anemia



It is difficult to diagnose lead poisoning based on these symptoms.



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Symptoms of Adult Lead Exposure

- Numbness in hands and feet
- Muscle and joint pain
- “Wrist drop”
- Weakness in arms and legs
- Loss of sex drive
- Kidney problems
- High blood pressure



It is difficult to diagnose lead poisoning based on these symptoms.



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Target Housing

Housing constructed prior to 1978 with the exception of housing for the elderly, disabled, or any zero bedroom dwelling, unless a child under the age of six resides there

- Housing for the elderly and disabled must be designated as such by a specific federal housing assistance program. (A building is not housing for the elderly just because an elderly person lives there.)
- Also, Public/Commercial buildings built before 1978 that are being converted to residential buildings are considered target housing.



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Child Occupied Facility

A building or portion of a building constructed prior to 1978 that is visited on a regular basis by the same child less than 6 years of age on at least two different days within any week.

- This includes daycare homes, daycare centers, preschools, and kindergarten classrooms, as well as common areas in these buildings where children under the age of 6 years have access.



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Laws & Regulations

Iowa Dept of Public Health (IDPH)

- Regulates the Property
 - Chapter 70 – Lead Professional Rules

U.S. Occupational Safety and Health Administration (OSHA)

- Regulates Worker Protection
 - Lead In Construction 29 CFR 1926.62



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Federal Real Estate Disclosure

In sales & rental of target housing, the seller/landlord must:

1. Fill out a standard form indicating whether they have specific knowledge of lead-based paint or lead-based paint hazards in the dwelling and provide this form to the buyer.
2. Provide copies of any inspection reports to the buyer.
3. Provide a copy of the EPA or a state-approved pamphlet to the buyer.
4. (Purchase only) Allow the buyer 10 days to get a lead inspection if the buyer wants an inspection.



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RRP / LSR Rule

- Effective on April 22, 2010.
- EPA may authorize states, territories and tribes to enforce this rule. Iowa is an authorized state.
- Addresses activities that disturb lead-based paint in target housing and child-occupied facilities.
- It requires:
 - Training providers must be approved.
 - Renovators and firms must be Certified/Licensed.
 - Lead-safe work practices must be used during renovations.



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Definitions: Renovation

Iowa Administrative Code 641, Chapter 70.2(135) Definitions

“Renovation”

“Renovation” means the modification of any existing structure, or portion thereof, that results in the disturbance of **painted surfaces**, unless that activity is performed as part of lead abatement as defined by this chapter.

The term “renovation” includes, but is not limited to, the removal, modification, or repair of painted surfaces or painted components such as modification of painted doors, surface restoration, and window repair; surface preparation activity such as sanding, scraping, or other such activities that may generate paint dust; the partial or complete removal of building components such as walls, ceilings, and windows; weatherization projects such as cutting holes in painted surfaces to install blown-in insulation or to gain access to attics and planing thresholds to install weather-stripping; and interim controls that disturb painted surfaces. “Renovation” does not include minor repair and maintenance activities.



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RRP Rule Exclusions

- Renovation activities where affected components do not contain lead-based paint.
- Emergency renovations (requires still cleanup and cleaning verification or dust lead clearance).
- Minor repair and maintenance activities.
- Renovations performed by homeowners in homes that they own and where they or immediate relatives live.



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Definitions: Minor Repair & Maintenance

Iowa Administrative Code 641, Chapter 70.2(135) Definitions

New Definition of "Minor Repair and Maintenance"

Implementation date of 1-16-2013

"Minor repair and maintenance activities" means activities, including minor heating, ventilation or air-conditioning work, electrical work, and plumbing, that disrupt less than the minimum areas of a painted surface established in this definition where **none of the work practices prohibited or restricted by this chapter are used and where the work does not involve window replacement or demolition of painted surface areas.** When painted components or portions of painted components are removed, the entire surface area removed is the amount of painted surface disturbed. Projects, other than emergency renovation, performed in the same room within the same 30 days must be considered the same project for the purpose of determining whether the project is a minor repair and maintenance activity. Renovations performed in response to an elevated blood lead (EBL) inspection are not considered minor repair and maintenance activities.

(definition continues on next slide)



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Definitions: Minor Repair & Maintenance

Iowa Administrative Code 641, Chapter 70.2(135) Definitions

New Definition of "Minor Repair and Maintenance" continued

Implementation date of 1-16-2013

The minimum area for minor repair and maintenance activities is:

1. Less than 1.0 square foot of an interior painted or finished wood surface per renovation;
2. Less than 6.0 square feet of a painted or finished drywall or plaster surface per room; or
3. Less than 20.0 square feet of an exterior painted or finished surface per renovation.

Projects performed pursuant to (HUD) 24 CFR Part 35 shall comply with the de minimis levels in 24 CFR 35.1350 if these de minimis levels are more restrictive than the minimum areas of a painted surface established in this definition.



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Definitions: Emergency Renovation

"Emergency renovation" means renovation, remodeling, or repainting activities necessitated by:

Nonroutine failures of equipment or of a structure that were not planned but resulted from a sudden, unexpected event that if not immediately attended to:

Presents a safety or public health hazard or threatens equipment or property with significant damage.

"Emergency renovation" includes interim controls, renovation, remodeling, or repainting activities that are conducted in response to an elevated blood lead (EBL) inspection.



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RRP Rule: Firm Responsibilities

- Ensure overall compliance with the RRP Rule.
- Ensure that all renovation personnel are certified lead-safe renovators or have been trained on-the-job by a certified lead-safe renovator.
- Assign a certified lead-safe renovator to each job.
- Meet pre-renovation education requirements.
- Meet recordkeeping requirements.



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RRP Rule: Individual Certified Lead Renovator Responsibilities

- Perform work and direct lead-safe work practices.
- Provide on-the-job training to non-certified workers.
- Keep a copy of the initial and/or refresher training certificates onsite.
- Use EPA-recognized test kits to identify lead-based paint.
- The certified lead-safe renovator **MUST** be on site during all preparation work and clean up activities.
- At all other times during renovation, the certified lead-safe renovator must be available by telephone, pager, or answering service and be able to be onsite within 2 hours.
- Maintain the containment to keep dust and debris within the work area.
- Implement the cleaning verification procedure.
- Prepare and maintain required records.



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Pre-Renovation Notification

Notify owners and occupants no more than 60 days before starting work.

Keep all records for at least 3 years.



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Iowa and HUD Rules



Iowa Administrative Code 641 Ch 69

Iowa Administrative Code 641 Ch 70



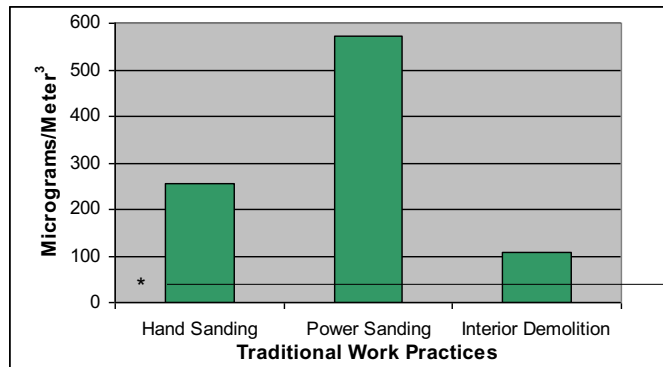
HUD Lead Base Paint recommendations



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Getting Started

Traditional Renovations Create Airborne Lead Dust



OSHA Permissible Exposure Limit (PEL) = 50 $\mu\text{g}/\text{m}^3$
(Micrograms per cubic liter of air)



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Lead Based Paint

You must assume that all surfaces are painted with lead-based paint,

OR

Prove that the paint that you are working on is NOT lead-based paint.



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EPA Recognized Test Kits

- ONLY EPA approved test kit is D-Lead Paint Test Kit
- Recognized test kit changes color when lead is present. All paint layers must be tested when using test kits.
- If there is no color change on the paint film tested, lead-based paint is not present and lead-safe work practices are not required on that surface.
- You must fill out a test kit documentation every time you use a test kit.



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Protect Yourself

Recommended Worker Protection

- Disposable coveralls and shoe covers.
- Disposable N-100, R-100 or P-100 respirator.

Wash face and hands frequently and at the end of each shift.

No smoking, eating, or drinking in the work area.

OSHA may require more protection depending on what work is done.

1. Respiratory equipment.
2. Protective clothing.
3. Other protective equipment (earplugs, eye goggles, face shields, etc.)



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Containment

“Containment” is a system of temporary barriers used to isolate a work area so that no dust or debris escapes while the renovation is being performed.

- Containment is required.
- Benefits of containment.
 - Protects residents and workers.
 - Prevents spread of dust to rest of house/building or neighboring properties.
 - Easier cleaning at the end of the job.



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Exterior Containment

Establish The Work Area

Cover the ground with protective sheeting.

If space permits, extend a minimum of 10 feet from the work area.

Limit access, place signs.

Establish a 20 foot perimeter around the work area if space permits.

Close Windows and Doors

Close all doors and windows that are within 20 feet of the work area.



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Interior Containment

Limit Access and Post Signs

WARNING

RENOVATION WORK
LEAD WORK AREA/POISON
DO NOT ENTER WORK AREA
UNLESS AUTHORIZED
NO SMOKING, EATING, OR DRINKING

- Notify residents to stay away from the work area.
- Do not allow eating, drinking, or smoking in the work area.



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Interior Containment

Remove or Cover Belongings

- Remove belongings.
- Cover immovable objects in protective sheeting, including:
 - Furniture
 - Carpet



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Interior Containment

Cover Floors

- Cover all work area floors with plastic sheeting.
- Cover floors a minimum of 6 feet in all directions around the paint being disturbed.



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Interior Containment

Close Windows, Doors, HVAC

Depending on the amount of work that is to be done:

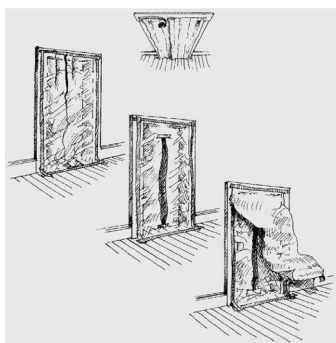
- Close all windows in the work area.
- Close all doors in the work area.
- Close and seal all HVAC vents in the work area.



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Interior Containment

Work Area Entry Doorway



- Cover work area entry doors with two layers of protective sheeting.



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PROHIBITED Practices

Prohibited Paint Removal or Surface Preparation Practices

- Abrasive blasting without HEPA recovery.
- Uncontained water blasting.
- Heat guns > 1,100 degrees F
- Machine sanding / grinding without HEPA recovery
- Open flame burning
- Methylene chloride paint strippers in unventilated areas.
- Dry scraping, except around electrical outlets and fixtures.



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Recommended Methods

Work Wet

- Mist work area with water and keep it wet.
- Do this when scraping, sanding, sawing, planing, and prying painted surfaces and when removing them.



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Cleaning During the Job

A clean work site reduces the spread of dust and paint chips.

- Clean as you work.
 - HEPA vacuum horizontal surfaces.
 - Remove debris frequently.
 - Remove paint chips as they are created.
 - As building components are removed, wrap and dispose of them immediately.



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Interior Cleaning Requirements

- HEPA vacuum or wet wipe walls from high to low, then HEPA vacuum remaining surfaces and wipe with a damp cloth.
- Clean 2 feet beyond the contained work area.
- For carpet or rug, use HEPA vacuum with beater bar.
- HEPA vacuum and wet mop uncarpeted floors – wet mopping system.



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Visual Inspection Procedure

- Conducted by certified lead-safe renovator.
- Once you have carefully looked at all of the surfaces and found no dust or debris, proceed to the cleaning verification procedure or clearance.
- Verify:
Window Sills, Window Troughs, Counter Tops and Bare Non-Carpeted floors are clean



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Post Renovation Cleaning Verification (CV)

Post Renovation CV for Windows

- Certified lead-safe renovator MUST perform verification testing.
- Wipe each window sill and window trough within the work area.
- Use a single wet disposable cleaning cloth per window sill.
- Use a single wet disposable cleaning cloth per window trough.
- Compare each cloth to the verification card.
- If the cloth is lighter than the verification card the area has been adequately cleaned.
- If it does not match or is darker than the verification card then reclean the area. Then recheck with either a new cloth or a new area of the same cloth and compare to the verification card.
- If it fails again, reclean and wait 1 hour or until surface is completely dry and repeat verification this time using a dry disposable cleaning cloth.
- This completes the cleaning verification.



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Post Renovation Cleaning Verification

Post Renovation CV for Floors and Countertops

- Wipe uncarpeted floors and all countertops with wet disposable cleaning cloths.
- Floors must be wiped using an application device with a long handle and a head to which the cloth is attached.
- Wipe up to a maximum of 40 ft² per cloth.
- Compare each wipe to the CV card.
- If the cloth matches or is lighter than the CV card, the surface has passed cleaning verification and no further action is required.
- If the cloth is darker than the CV card, re-clean and repeat the CV process.
- If the second wet cloth fails, wait 1 hour or until surfaces are dry, and then wipe with a new disposable cleaning cloth designed to be used for cleaning hard surfaces.
- This completes the cleaning verification.



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Post Renovation EXTERIOR Cleaning Verification

- Certified lead-safe renovator MUST perform visual inspections.
- Certified lead-safe renovator MUST ensure there is no dust, debris, or residue on windowsills or the ground.
- When exterior passes visual exam it is considered adequately cleaned.



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Clearance Testing

- Clearance testing MUST be performed instead of post-renovation cleaning verification on all HUD-assisted project.
- Clearance testing MUST be performed on all projects where there is a contract between the renovation firm and the contract holder that requires it.
- Clearance testing must be performed if the work was done in response to an EBL inspection.
- The dust samples for clearance testing MUST be collected by a certified sampling technician and or a certified lead inspector/risk assessor.
 - The dust samples MUST be tested by an accredited laboratory.



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Training Non-Certified Workers

Certified Renovators are responsible for teaching lead-safe work practices to non-certified renovation workers.



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Seven Steps of On The Job Training

1. Recognize lead based paint.
2. Set it up safely.
3. Protect yourself.
4. Control the spread of lead dust.
5. Work clean and safe.
6. Control the waste.
7. Education regarding cleaning verification or clearance testing.



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Seven Steps of On The Job Training

Step 1: Recognize Lead Based Paint

- Renovation, repair or painting that disturbs lead-based paint can create significant lead-based paint hazards in homes.
- Just a little lead-based paint dust can poison kids, their parents and pets, and can cause problems for pregnant women and their unborn children.
- The certified lead-safe renovator will determine if lead-based paint is present on work surfaces.
- If information about lead-based paint is not available for a pre-1978 homes or a child-occupied facility, assume that lead-based paint is present and use lead-safe work practices.



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Seven Steps of On The Job Training

Step 2: Setting it up safely

- Containment is used to keep dust IN the work area and non-workers OUT!
- Signs and barriers are used to limit access.
- Inside versus outside jobs.
 - Review all procedures and differences in setup.



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Seven Steps of On The Job Training

Step 3: Personal Protective Equipment

- Without the right personal protective equipment (PPE) workers can swallow and inhale lead from the job, and can carry lead on their skin and work clothes home to their families.
- Advise workers to:
 - Protect eyes.
 - Keep clothes clean or use disposable clothing.
 - Wear a respirator. The appropriate respirator keeps lead out of the lungs and stomach.
 - Wash-up each time they leave the work area and especially at the end of the day.



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Seven Steps of On The Job Training

Step 4: Control the spread of dust

- The goal is to control the spread of dust that is created.
- Use the right tools.
- Disposable plastic drop cloths control the spread of dust and debris.
- Avoid prohibited practices.



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Seven Steps of On The Job Training

Step 5: Cleaning

- The goal should be to leave the work area completely free of dust and debris.
- Discuss daily cleaning procedures.
- Discuss end of job cleaning procedures.



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Seven Steps of On The Job Training

Step 6: Waste

- Discuss the waste bagging procedure.
- Demonstrate folding a small section of plastic with the dirty side turned in.
- Discuss temporary storage of waste.



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Seven Steps of On The Job Training

Step 7: Cleaning Verification

- Cleaning verification will be performed by a Certified Renovator after most renovations.
- A clearance examination may be requested in place of cleaning verification by the owner, and in some cases with contracts.
- Discuss what happens when cleaning verification and/or clearance is not passed.



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Training Documentation

The Certified Renovator assigned to the job must maintain at the job site the following records for on-the-job training :

- Written certification of worker training:
 - Must show which workers have had training;
 - Must be signed by the Certified Renovator who did the training.
- All training documentation must be kept for 3 years following completion of the renovation.



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Recordkeeping

Lead Safe Renovation Report

- 2 page report that **MUST** be completely filled out for each job
 - A blank copy of this report is online, IowaLeadSafety.com

LEAD-SAFE RENOVATION REPORT

Page 1/2

THIS FORM MUST BE FULLY COMPLETED, including additional information or attachments as needed.
 Contractor is ultimately responsible for compliance with 641-70.6 (1.1)g (record keeping)

A. Date report issued ____/____/____

B. Important information

As of April 22, 2010 renovations* that take place in pre-1978 residential housing and child occupied facilities are regulated and certification is required. This renovation report is required to be completed within 30-days following a renovation. This report is required to be kept for 3 years by the Iowa certified firm and certified individual conducting the renovation.

This renovation report is always required to be issued to the property owner(s) of the address where the renovation occurred. **This report may also be required to go to other parties if the renovation occurred in a unit that is not owner occupied, or in a child occupied facility.**

Check all that apply.

☐ An adult occupant of a renovated unit, that is not owner occupied.

Name(s): _____

☐ The person who requested the renovation, if different from the property owner or adult occupant.

Name(s): _____

☐ The adult representative of a child occupied facility.

Name(s): _____

☐ Renovations in a child occupied facility or in the common area(s) of multi-family housing. A notice that is likely to be seen shall be posted. The notice shall include instructions on how the report can be obtained free of charge.

*Simply stated, renovation is the modification of any existing structure, or portion thereof that results in the disturbance of painted surfaces.

C. Address renovated

Street: _____ City: _____ IA Zip: _____ Apt #: _____ Year Built: _____

Property owner(s) name: _____ Owner telephone: _____

owner address: Street: _____ City: _____ ST Zip: _____

D. Certification information

Name of certified firm: _____ Certification number: _____ Firm Phone: _____

Name of certified renovator: _____ Certification number: _____ Phone: _____

E. Renovation information

Date(s) renovation occurred: _____ Brief description of renovation work: _____



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Hands-On

Skill Set	Description
#1	Using EPA-Recognized Test Kits
#2	Setting Up Barriers, Signs, and Flapped Entry Doors
#3	Cover or Remove Furniture
#4	Establish Interior Containment
#5	Establish Exterior Containment
#6	Personal Protective Equipment
#7	Interior Final Cleaning
#8	Exterior Final Cleaning
#9	Bagging Waste
#10	Visual Inspection
#11	Cleaning Verification Procedure



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Hands-On

- Joe, Dan and Bob all work for Construction 123 Company.
- Only Joe is licensed as a Lead Renovator.
- They have been hired to install vinyl siding and replace 2 of the home's original windows with new vinyl windows.
- The home was built in 1976, with an addition built in 1979.

The new vinyl siding will be installed over the existing Masonite siding on the entire house.

One replacement window will be installed on the original home.

One replacement window will be installed on the addition.

Following lead-safe renovation rules, what skill sets apply to the job and would you complete them?



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Hands-On

- Joe, Dan and Bob all work for ABC Painting Company.
- Only Joe and Dan are licensed Lead Renovators.
- They have been hired to paint a home that was built in 1976, with an addition to the home that was built in 1979.

Following lead-safe renovation rules, what skill sets apply to the job and would you complete them?



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Enforcement

Spot checks are done to confirm compliance.

Penalties are assessed.

- Up to \$5000 for certification and pre-renovation notification (State of Iowa)
- Up to \$11,000 for real estate disclosure (EPA)



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Maintaining Your Certification

Firm Certification

- Valid for 3 years.
- To maintain, you must renew by going online and submitting renewal form to DIAL. There is no fee for firm certification.

Individual Certification/Licensing

- Valid for 3 years.
- To maintain, you must renew by going online and completing your renewal form and pay a licensing fee of \$180.00 to DIAL.

Refresher course is required within the next 3 years

<https://dphregprograms.iowa.gov/PublicPortal/Iowa/IDPH/common/index.jsp>



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Training & Licensing



COMPLETION OF YOUR REFRESHER TRAINING

COURSE DOES NOT AUTOMATICALLY CERTIFY



OR RENEW YOUR LICENSE.

It is your responsibility to apply for your license renewal with Iowa Health & Human Services, Department of Inspections, Appeals & Licensing (DIAL)

Instructions for licensing will be emailed to you along with your training certificate.

- Iowa Lead Safety does NOT submit your renewal application.
- Our office does not have access to the licensing system and will not be able to assist you. If you have questions about licensing, please call April at DIAL, 515-201-5369 or email her, April.Rhine@dia.iowa.gov



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Class Documents

Danger Lead Work Area sign

Iowa Renovation Report

EPA Renovate Right Book

IDPH Lead Book – English

IDPH Lead Book – Spanish

Signature Page

These documents are available on our website for you to download. They will also be emailed to you after class.



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Test Review

- Background of Lead
- Sources of exposure
- Health Effects
- Current Laws
- Methods to Identify Lead
- Set Up
- Safe work Practices
- Prohibited Practices
- Waste Disposal
- On-the job Training Requirements
- What Records to Keep
- Certification Process



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How To Take The Test

ACCESS TO THE TEST

- An email containing a link to the test and a test access code has been sent to the email address we have on file for you.
- The test access code provided to you in that email is unique to you. It can only be used once and will not work for multiple people or multiple login attempts.
- If you have any trouble accessing the test, please call our office immediately.
515.331.1690



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How To Take The Test

IMPORTANT!!!

Testing is conducted online under the same regulations as in a classroom. When class ends, you take the test and then you're done.

You have 1 hour IMMEDIATELY after class to take your test.

You can't "wait until later" to start your test.

You can't start your test and try to finish later.

As soon as class ends, the 1 hour timer starts.

When 1 hour is up the test closes automatically.

If you do not complete your test within the hour after class, you will not receive a training certificate and will not be able to renew your license.

- When you've completed your test, your score will display automatically. 80% or higher is the passing score.
- If you do not achieve 100%, your results will display the questions you answered incorrectly, and will show you the correct answer.
- After you receive your test results you are done. You can close out of the test.
- Your training certificate will be emailed to you after class, by the end of the day along with the instructions to renew your license.

