

Lead Paint: Vermont's Inspection, Repair & Cleaning Practices



Course Manual

Revised October 2022

Acknowledgments
Inspection, Repair & Cleaning Practices Course Manual
October 2022 Revision

This manual presents the Inspection, Repair and Cleaning (IRC) Practices training curriculum and reflects the most recent changes to the Vermont lead regulations. This manual was prepared by the Vermont Department of Health and is a revision of the Essential Maintenance Practices (EMP) manual that was developed by the Vermont Housing & Conservation Board in collaboration with the Department of Health. It incorporates additional materials from the U.S. Environmental Protection Agency's (EPA) Lead-Safe Renovation course and up-to-date information from the U.S. Department of Housing & Urban Development (HUD), the U.S. Centers for Disease Control and Prevention (CDC), and other sources.

The new [Vermont Regulations for Lead Control](#) (effective date 10/1/2022) require the Vermont Repair, Renovation, Painting and Maintenance (RRPM) license to perform work that disturbs more than one square foot of lead-based paint on pre-1978 rental housing and child care facilities. Those with an EMP certificate can no longer perform this repair work. To signal this change, the name Essential Maintenance Practices has been changed to [Inspection, Repair and Cleaning \(IRC\) Practices](#).

The Vermont Department of Health developed the original course curriculum in 1996, with assistance provided by:

- Alliance for Healthy Homes
- Allstate Home Inspections
- ATC Environmental, Inc.
- Burlington Housing Authority
- Community College of Vermont
- Lafayette Painting
- Minnesota Department of Health and Advisory Group
- National Center for Healthy Homes
- National Institute of Building Sciences
- Vermont Department of Education
- Vermont Housing & Conservation Board
- White Lung Association of NY/ NJ

This manual can be found online at healthvermont.gov/irc.

Contents

Intro to Inspection, Repair & Cleaning (IRC) Practices & certificate 1

Health Effects & Sources of Lead

Health effects of lead	7
Sources of lead	10

The IRC Practices

Interior Visual Inspection	19
Exterior Visual Inspection	23
Performing repairs using Renovation, Repair, Painting & Maintenance (RRPM) requirements	28
Prohibited work practices.....	29
Removal of visible paint chips	30
Lead hazards in soil	32
Window well liners and inserts	35
Installing window well liners and inserts.....	36
Cleaning	51
Cleaning child care facilities	57
Disposal of lead-containing paint waste and debris	61

Recordkeeping & Real Estate

Recordkeeping, compliance statements and notification	65
Real estate transactions and the Vermont Lead Law.....	68



White Lead Wins Against Time

When Charles Carroll, who had just signed the Declaration of Independence, was told that though others might come to grief for that day's doings, he stood a chance of going free because there were so many other Charles Carrolls in Maryland, he at once added to his signature the words "of Carrollton."

The picture shows his home, built by his grandfather in 1717. This finely preserved old mansion is protected by weather-defying coats of

Dutch Boy White Lead

and pure linseed oil. Your house, too, is worth preserving and beautifying. Direct your painter to use Dutch Boy White Lead and Dutch Boy Linseed Oil. They can be mixed to suit the kind of wood in your house and can be tinted any color you desire. They wear long, cost little, and protect against decay.

Would you like to make a simple test which will help make you paint wise? We will send you materials and directions for such a test, together with booklet of practical suggestions and color schemes. Address our nearest office. Ask for Painting Helps No. 66.

NATIONAL LEAD COMPANY

New York	Boston	Cincinnati	Cleveland
Buffalo	Chicago	San Francisco	St. Louis
(John T. Lewis & Bros. Co., Philadelphia)		(National Lead & Oil Co., Pittsburgh)	



When you are in New York make it a point to visit the Home Builders' Permanent Exposition in the Craftsman Building, 6 East 39th Street. National Lead Company's exhibit is in charge of an experienced decorator whom you may consult free of charge.

Intro to Inspection, Repair and Cleaning (IRC) Practices & certificate

History, purpose & changes

The Vermont State Legislature passed the Lead Poisoning Prevention Law in 1996. The purpose of the law, among other lead poisoning prevention measures, is to prevent young children from getting lead poisoned in rental housing and child care facilities. It requires the use of lead-safe work practices when renovating or maintaining pre-1978 properties, to reduce the likelihood of creating lead-contaminated dust and debris. The law creates a 'standard of care' with respect to lead paint and provides some liability protection to property owners who comply with its provisions.

[The law was updated in 2018](#) to allow for the adoption of the Renovation, Repair, and Painting (RRP) authority from the U.S. Environmental Protection Agency (EPA). The [Vermont Regulations for Lead Control](#) (effective date 10/1/2022) were updated to reflect the new law and require the Vermont Repair, Renovation, Painting and Maintenance (RRPM) Lead-Safe Supervisor and Firm licenses to perform work that previously required the U.S. EPA RRP Firm License, prior to Vermont adoption.

In addition, those with an EMP certificate can no longer perform repair work over one square foot per interior room or exterior surface on pre-1978 rental housing and child care facilities. This work must now be done by someone with Vermont Lead-Safe RRPM Supervisor and Firm licenses.

To signal this change, the name Essential Maintenance Practices has been changed to Inspection, Repair and Cleaning Practices, or IRC Practices. The IRC Practices Certificate is valid for five years. Every five years, the IRC Practices training course must be taken again, to renew the certificate.

Dutch Boy Paint National Lead Company ad, circa 1917

What do Vermont lead regulations require for pre-1978 rental housing owners and child care facility operators?

- Complete an IRC Practices training course approved by the Vermont Department of Health, or have a representative of the owner's maintenance staff complete the course.
- Provide written information on lead hazards to tenants.
- Post a notice in the building asking occupants to report deteriorated paint to the owner or agent.
- Perform Inspection, Repair and Cleaning (IRC) Practices.
- Sign a compliance statement indicating that the IRC Practices have been completed. Compliance statements are filed electronically with Vermont Department of Health. Find more information on [IRC Practices and filing compliance statements](#).
- File a copy of the compliance statement every 365 days with their insurance carrier, and tenants. Child care providers must also file a copy with the Vermont Department for Children and Families.

What are Vermont's IRC Practices?

- Perform a visual on-site inspection of interior and exterior surfaces to identify deteriorated paint.
- Install window well inserts in all pre-1978 wooden windows.
- Ensure that a licensed Lead-Safe RRPM Supervisor and Firm individual(s):
 - stabilizes paint if more than one square foot of deteriorated paint is found on any interior surface within 30 days of identification or report by the tenant.
 - stabilizes paint or restrict access if more than one square foot of deteriorated paint is found on any exterior surface within 30 days of identification or report by tenant.
 - utilizes lead-safe work practices when disturbing paint as described by the Vermont Department of Health, which includes not using prohibited practices.

- Remove all visible paint chips from the ground on the property.
- Perform specialized cleaning annually in common areas, and when the unit turns over.

IRC Practices are required for:

- all residential rental housing units and child care facilities in buildings built before 1978.
- all pre-1978 residential rental properties whether or not children live there.

IRC Practices are not required for:

- units in hotels, motels, or other lodging — including condominiums — rented for transient occupancy for 30 days or less.
- a rented single room within a dwelling in which the owner of the dwelling resides, unless a child 6 years of age or younger resides in or is expected to reside in that dwelling.
- any property or component of a property that has been tested by a Vermont-licensed lead-based paint inspector or inspector-risk assessor who conducts an inspection according to the HUD Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing using an XRF analyzer and determines it to be lead free. To qualify for an exemption, all surfaces of the property or component for which an exemption is desired must be found to be free of lead-based paint. To receive this exemption, the owner of the rental housing or child care facility, or owner's representative, must provide a copy of the inspector's written report to the Vermont Department of Health for review and determination of exempt status.
- efficiency or studio (zero bedroom) apartments, unless a child 6 years of age or younger resides in or is expected to reside in that dwelling.
- housing intended solely for the elderly or the disabled, unless a child 6 years of age or younger resides in or is expected to reside in that dwelling.

Why should property owners comply with the IRC Practices and RRPM?

- Compliance is required by Vermont law — just like providing water, heat, lighting, and other essential services in rental properties.
- Completing IRC Practices substantially reduces the chance that children will become lead poisoned.
- Compliance with the law may reduce the risk of the property owner losing insurance coverage.
- Compliance substantially reduces the risk of the property owner being sued for damages (compensatory and possibly punitive) by the family of a lead-poisoned child.

Limitations of this course

- **Taking this course does not allow you to perform lead abatement.** Lead abatement is the permanent removal of lead-based paint or its components (requires special training, licensing, refresher courses, special insurance, etc.).
- **Taking this course will not qualify you to be a lead inspector who is licensed to test and identify lead-based paint.** The IRC Practices visual inspection requirement is not a lead inspection but a visual examination to identify if there is deteriorated paint.
- **By itself, this course does not qualify you to perform repair work that disturbs paint in amounts greater than one square foot on pre-1978 rental housing and child care facilities.** Workers must have either RRPM Firm and Supervisor licenses or an Uncompensated Child Care Operator (UCCO) certificate to do that work. To learn more, visit healthvermont.gov/rrpm.

Health Effects & Sources of Lead

Health effects of lead

What is lead?

Lead is a metallic element with a chemical symbol of Pb which comes from the Latin word Plumbum (lead poisoning is also referred to as plumbism). Because lead is an element, it does not break down or decay over time. Once lead ore has been mined and refined and lead is put into the environment, it can be a potential problem forever. To this day, sites of ancient Roman lead smelters are still heavily contaminated. Lead has been used for thousands of years, but widespread use of lead and lead products did not become prevalent until the mid-1800s. Lead was widely used as an additive to paints in the U.S. and was not banned from residential paints until 1978. Commercial paints, including those used on bridges, ships, and vehicles may still legally contain lead.

What is blood lead level?

The blood lead level is the amount of lead in a person's blood, usually measured as micrograms of lead per deciliter of whole blood ($\mu\text{g}/\text{dl}$). The Centers for Disease Control and Prevention (CDC) uses a blood lead reference value of 3.5 micrograms per deciliter ($\mu\text{g}/\text{dL}$) to identify children with blood lead levels that are higher than most children's levels. CDC's blood lead reference value is a screening tool to identify children who have higher levels of lead in their blood compared with most children. The reference value is not health-based and is not a regulatory standard. States independently determine action thresholds based on state laws, regulations, and resource availability.

In 2020, Vermont lowered its definition of an elevated blood lead result from 5 $\mu\text{g}/\text{dL}$ to any reported (or detected) level. Lead is not naturally occurring in the body, and there is no safe level. Therefore, any level of lead in the blood is considered elevated.

Who is most affected by lead?

Anyone can become poisoned by lead, but children are more sensitive than adults to the health effects of lead. Children age 6 and younger are at a higher risk of lead exposure, because their bodies are rapidly developing and more susceptible to taking in lead if they are exposed. Young children also tend to put their hands or other objects into their mouths. This is why most children get poisoned by ingesting lead dust from their hands, toys, and other things they put in their mouths.

Lead poisoning is preventable! Vermont law requires that all children are tested for lead at ages 1 and 2. Learn more about [lead poisoning in children](#).

What are the symptoms of lead poisoning in children?

Most children with lead poisoning do not look or act sick. They may have no symptoms or have symptoms that are easily mistaken for other illnesses. This is why testing children's blood lead level is so important. In general, the higher the blood lead level, the more likely a child will show symptoms. These symptoms may include irritability, lack of appetite, low energy, constipation, abdominal pain, and vomiting. Symptoms usually do not appear until dangerous amounts have accumulated.

What are the health effects of lead exposure in children?

Lead quickly enters the blood and can harm a child's health. Once a child swallows lead, their blood lead level rises. Once a child's exposure to lead stops, the amount of lead in the blood decreases gradually. The child's body releases some of the lead through urine, sweat, and feces. Lead is also stored in bones. It can take decades for lead stored in the bones to decrease.

Too much lead in children's bodies, or lead poisoning, can:

- hurt the brain, kidneys and nervous system
- slow down growth and development

- make it hard to learn
- damage hearing and speech
- cause behavior problems

Many things affect how a child's body handles exposure to lead, including:

- age
- nutritional status
- source of lead exposure
- length of exposure time
- underlying health conditions

What are the symptoms of adult lead poisoning?

As with children, adults may not have symptoms of lead poisoning until their blood lead levels are quite high. Because these symptoms may occur slowly or may be caused by other things, lead poisoning can be easily overlooked.

The symptoms of adult lead poisoning may include:

- abdominal discomfort
- constipation
- excessive tiredness
- headache
- high blood pressure
- irritability or anxiety
- loss of appetite
- muscle and joint pain
- weakness

Lead can cross the placental barrier, which means pregnant people who are exposed to lead also expose their unborn child. Lead can damage a developing baby's nervous system. Even low-level lead exposures in developing babies have been found to affect behavior and intelligence. Lead exposure can cause miscarriage, stillbirths, and infertility (in both men and women).

Sources of lead

Lead in dust

Lead dust is the largest cause of childhood lead poisoning. Lead dust is easily ingested by children because dust clings to fingers and toys and it is normal for children to put things in their mouths. Lead dust in housing is usually a result of:

- deteriorated lead paint
- friction or impact of painted surfaces
- dust that is tracked in from contaminated soil

Lead in paint

Lead was widely used as a paint and varnish additive in the U.S. until 1978 when the Consumer Product Safety Commission set the maximum amount of lead in paint at 0.06% or 600 parts per million. The same year HUD established the definition of lead-based paint as any coating containing more than one milligram of lead per square centimeter (1.0 mg/cm²). Beginning in 2008, new lower standards were phased in for lead in children's products and paint coatings. The amount of lead permissible in paint is now 0.009% or 90 parts per million and no children's products may contain lead in accessible parts higher than 100 parts per million.

Lead was primarily used in paints to make the paint more weather resistant and to inhibit the growth of mold and mildew. Lead was also added to varnish to make it dry faster. Lead paint can be found on any painted surface — inside or outside. Due to its resistance to mold and mildew, lead paint was often used in places where moisture is found, like kitchens, bathrooms, windows, and doors. Lead paint is considered hazardous when it is chipping, peeling, chalking, or flaking. Any home built before 1978 may contain lead-based paint.

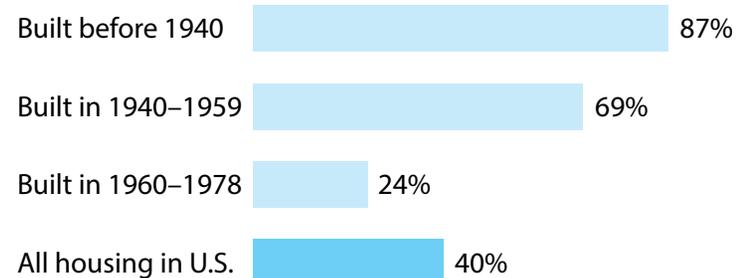
Important safety reminder:

All paint in pre-1978 housing and child care facilities in Vermont is presumed to be lead-based paint unless a licensed lead inspector or risk assessor determines otherwise.

How widespread is lead paint in housing in Vermont?

By the 1940s, paint manufacturers voluntarily began to reduce the amount of lead they added to their paints. As a result, painted surfaces in homes built before 1940 are likely to have higher levels of lead. Because of the age of our housing, the majority of homes in Vermont contain lead-based paint.

Percentage of houses with lead paint



Lead in soil

Traces of lead can be found in most soils. High levels of lead in soil can come from deteriorated lead paint around homes, leaded gas exhaust, and industrial releases. Soil can become quickly contaminated if lead paint on pre-1978 homes is scraped and the chips and dust are allowed to fall on ground that has not been covered with plastic. Pressure washing also can spread contamination, chips, and particles of paint into the soil. Children who play in these areas have an increased risk of exposure to lead.

Occupational exposure

Occupational lead poisoning has been a health hazard for more than 2,000 years. In fact, the first described cases of lead poisoning were by Hippocrates (460–370 BC) where he accurately described the characteristic features of lead toxicity, including anemia, colic, neuropathy, and many other currently recognized symptoms of lead poisoning. OSHA estimates that over three million workers are occupationally exposed to lead in the workplace.

Some of the major trades and occupations associated with exposure to lead are:

Construction

- bridge repair/maintenance
- construction workers
- demolition workers
- HVAC repair
- painters
- plumbers and pipe fitters
- remodelers
- welders

General industry

- battery manufacturing
- chemical industry
- firing-range instructors
- foundry workers
- jewelers
- lead miners
- lead smelters
- pigment manufacturing
- plastics industry
- printers
- radiator repair
- rubber industry
- stained-glass makers

Inhalation

The mere presence of lead in the workplace does not necessarily pose a risk for poisoning. Lead becomes a hazard in the workplace if breathable lead dust is generated or lead is ingested. Inhalation of small particles, dusts, or fumes containing lead can occur because of abrasive or heating action on lead or lead containing compounds.

Examples of tasks that cause inhalation exposure:

- grinding
- sanding
- burning or torching
- pressure washing
- welding
- sand blasting
- soldering
- using a heat gun

Ingestion

Adults may ingest lead by eating, drinking, or smoking in a contaminated area or by not exercising good hygiene practices when working with lead. Eating in a non-contaminated area away from the work area is not any safer if you still have lead dust on your hands and face. It is always important to wash your hands and face if you have been working anywhere you could be exposed to lead.

Spreading lead contamination

Because small particles of lead dust can cling to clothes, skin, and hair, it is especially important to practice good personal hygiene to reduce the risk of contaminating other areas or to unknowingly expose children to lead. Medical journals have documented many cases of workers unknowingly bringing lead dust home from workplaces and poisoning their children.

To avoid cross contamination, workers that are occupationally exposed to lead should follow these basic safety guidelines:

- Keep and use separate street clothes and work clothes, including hats.
- Do not eat, drink, chew gum, or use tobacco products in any work area.
- Before leaving the work area, remove as much visible contamination from clothing as possible.
- Any surface dust on clothing should be removed with a HEPA vacuum.
- Thoroughly wash hands, face, forearms, and any other exposed skin surfaces, or shower onsite (if available).
- Change into street clothes.
- Shower and change clothes as soon as you arrive home.
- Wash work clothes as a separate load of laundry.
- If your work vehicle is also the family vehicle, take steps to avoid contamination of the vehicle.

Important safety reminder:

Failure to follow the procedures [on page 13](#) may spread lead contamination and expose workers and their families to lead.

Hobbies

Hobbies involving lead may also create lead dust particles or fumes. These can include making or using fishing sinkers and weights, reloading ammunition and shooting at firing ranges, and working with stained glass and ceramics. To reduce the risk to children, find a work area with good ventilation that is away from major traffic areas of the home. Special cleaning of the work area, together with good personal hygiene, is essential to prevent the spread of contamination.

Industrial processes

Industries that release lead into the air are not much of a problem in Vermont but in other states, there are huge smelting operations that release massive amounts of lead into the air. Waste incinerators can be another source of airborne industrial release.

Gasoline

Lead started being put into gasoline around the 1920s in the U.S. and was not phased out until the mid-1980s. Prior to the phase-out of lead in gasoline in the 1980s, an estimated 5.5 million metric tons of lead used in gasoline was emitted by cars, and remains in dust and soil around inner cities and near busy highways.

Food

Historically, the biggest source of lead in food has been from lead solder used in tin cans. Lead solder was banned from use in food storage containers in the U.S. in 1991. Today, lead solder is still sometimes found on imported canned food. Another source of lead in food can be pewter ware, lead crystal, lead glazes in ceramics, and in paints used on some porcelain.

As a general rule, the more acidic the food or the longer it is in contact with the surface that contains lead, the more likely lead will leach into the food. The FDA requires high-lead-leaching decorative ceramic ware to be permanently labeled to state that it's not for food use and may poison food. Items bought outside the U.S. may not contain this warning label, potentially posing serious risk if used for food. The FDA also banned the use of lead foil on wine bottle tops in 1996 after it was found that wine could be contaminated by lead in bottles where lead foil was used. Pre-1996 vintages may still contain lead foil.

Water

Certain drinking water systems can also pose a lead risk. Under EPA rules, if lead exceeds 15 parts per billion (ppb) in more than 10% of public water taps sampled, the system must undergo a series of corrosion control treatments. of steps necessary to assess the quality of water and potential cause for the corrosion. If there are repeated action level exceedances, the end result would be installation of corrosion control treatment. The main sources of lead in water are corroded lead plumbing, lead solder on copper plumbing, and brass faucets and fittings. Until around the 1950s, some drinking water systems utilized lead pipes were used for some service lines and connections that carry water from street mains to buildings. Lead-based solder containing as much as 50% lead was used to join standard copper water pipes until it was outlawed in 1988. However, lead solder could still be legally made up of 8% lead. In 2010, Vermont became one of the first states to further reduce the amount of lead in plumbing fixtures from 8% to 0.25%, and to 0.2% in solder and flux. Noncompliant plumbing fixtures and supplies cannot be sold or installed in Vermont as of 2010.

Because there is no safe level of lead in the body, Vermont has set a health advisory level of 1 ppb. This is the lowest level that can be reliably measured in water, and the Vermont Department of Health recommends taking action to reduce lead in water if any lead is detected. This can be accomplished by installing a treatment

system to remove lead, replacing pipes or plumbing fixtures and fittings, drinking and preparing food with bottled water, or getting water from a known safe source.

Schools and child care facilities in Vermont are also required to test their water for lead and take steps to eliminate or reduce the amount of lead to below 4 ppb. Learn more about [testing for lead in child care facility drinking water](#).

FACT: Lead concentration is highest in water left in pipes for a long time — for example, when the faucet isn't used overnight. To flush water that has been sitting in pipes for a long time, let the water run until it is as cold as it will get. Always use cold water for drinking, cooking, and mixing baby formula or cereal. Hot water dissolves more lead.

FACT: Boiling water will not get rid of lead in water. Boiling will actually increase the concentration.

Tip:

Some water and pitcher filters can remove lead from drinking water. However, the EPA recommends that any filter used should be certified to remove lead by the National Sanitation Federation (NSF) International organization. This means choosing a carbon filtration system with an NSF/ANSI Standard 53 Certification or a Reverse Osmosis system with an NSF/ANSI Standard 58 Certification.

Learn more about [lead in drinking water](#).

NOTE: *Please see our website for a [list of products that contain lead](#).*

IRC Practices

Interior visual inspection

Tool list

- interior visual inspection form (see pages 21–22)
- tape measure
- calculator

What is an interior visual inspection?

- The purpose of the visual inspection is to look for deteriorated paint coatings and to document where and how much is found.
- Because deteriorated paint is the primary source of lead in household dust, identifying and having deteriorated paint repaired helps reduce the risk that lead poses to children.
- Deteriorated paint is any paint or other coating that is peeling, chipping, chalking, or cracking, or any paint or coating located on an interior or exterior surface or fixture that is otherwise damaged or separated from the substrate.
- **The Lead Poisoning Prevention Law requires that a visual inspection be conducted at least once a year and anytime the unit changes tenants.** The results of the visual inspection must be noted on the Compliance Statement that is filed with the Vermont Department of Health at least every 365 days.
- If more than a total of one square foot (144 inches) of deteriorated paint is found in a room, then **all** deteriorated paint in the room must be stabilized within 30 days of the inspection.

How to conduct an interior visual inspection

1. Inspect all rooms in each dwelling, including common areas and any areas that can be accessed by tenants or children.
2. Write down the name of each room on the visual inspection form. See samples on [pages 21–22](#); you may use these forms

or any other system of recordkeeping you choose when performing your inspection. You do not need to submit these forms with your compliance statement.

3. Look for deteriorated paint on all painted or stained building components such as walls, floors, ceilings, doors, windows, baseboards, casings, and other trim.
4. Measure and add up any areas of deteriorated paint you find.
5. Record the amount of deterioration on the inspection form.
6. If a total combined area of less than one square foot of deterioration is found, in that room, then no further action is required.
7. If a combined area of more than one square foot of deterioration is found, the deterioration must be repaired within 30 days and the repairs must be made by a Vermont licensed Lead-Safe RRPM Supervisor working under a Vermont Lead-Safe RRPM Firm license, or by someone who has been trained and is directly supervised by this individual; or, [in the case of a child care facility, by a certified Uncompensated Child Care Operator \(UCCO\)](#).
8. Areas that are repaired should be noted (date and description) on the visual inspection form so that you have a record of what was done in each area.
9. Keep a record of the date of repairs and the RRPM supervisor and firm license numbers or UCCO certification number of the person(s) who completed the work. You will need to enter these when you file your compliance statement. You will not be able to file without valid license numbers. Check the license numbers with the [Vermont Department of Health, Asbestos and Lead Regulatory Program](#) before you allow the work to begin.

NOTE: Although repair of deteriorated paint is not required if there is less than one square foot, any deterioration of lead paint can contribute to elevated lead dust in a home. For the highest level of safety, repair any deterioration you find.

IRC Practices Interior Visual Inspection Sample Form

You do not need to submit this form with your annual compliance statement

Date of visual inspection: _____

Inspected by: _____

IRC Practices certification,
UCCO certification or RRPM Supervisor license #: _____

Owner: _____

Address: _____

Town: _____ Apt# or Common Area: _____

Room: _____ None <1 sq. ft. >1 sq. ft. (needs repair)

Date repaired: _____ List components repaired: _____

Room: _____ None <1 sq. ft. >1 sq. ft. (needs repair)

Date repaired: _____ List components repaired: _____

Room: _____ None <1 sq. ft. >1 sq. ft. (needs repair)

Date repaired: _____ List components repaired: _____

Room: _____ None <1 sq. ft. >1 sq. ft. (needs repair)

Date repaired: _____ List components repaired: _____

Room: _____ None <1 sq. ft. >1 sq. ft. (needs repair)

Date repaired: _____ List components repaired: _____

Room: _____ None <1 sq. ft. >1 sq. ft. (needs repair)

Date repaired: _____ List components repaired: _____

Room: _____ None <1 sq. ft. >1 sq. ft. (needs repair)

Date repaired: _____ List components repaired: _____

Work performed by: _____ UCCO cert. or RRPM license #: _____

IRC Practices Interior Visual Inspection Sample Form

You do not need to submit this form with your annual compliance statement

Date of visual inspection: 8/29/22

Inspected by: Pat Jones

IRC Practices certification, UCCO certification or RRPM Supervisor license #: 9998

Owner: Pat Jones

Address: 123 Main Street

Town: Anytown, VT Apt# or Common Area: #2

Room Hallway None <1 sq. ft. >1 sq. ft. (needs repair)

Date repaired: 8/30/22 List components repaired: _____

Approximately 8 square inches on baseboard noted

Room: Living None <1 sq. ft. >1 sq. ft. (needs repair)

Date repaired: 8/30/22 List components repaired: Stabilized

3 window sashes, all baseboard and 1 door jamb to kitchen

Room: Kitchen None <1 sq. ft. >1 sq. ft. (needs repair)

Date repaired: _____ List components repaired: _____

Room: Bathroom None <1 sq. ft. >1 sq. ft. (needs repair)

Date repaired: 8/30/22 List components repaired: Stabilized

deteriorated walls & ceiling. Baseboard & door trim ok.

Room: Master BR None <1 sq. ft. >1 sq. ft. (needs repair)

Date repaired: _____ List components repaired: _____

Room: Child BR None <1 sq. ft. >1 sq. ft. (needs repair)

Date repaired: 8/30/22 List components repaired: Stabilized

window trim & sash. Baseboard & door trim ok.

Room: _____ None <1 sq. ft. >1 sq. ft. (needs repair)

Date repaired: _____ List components repaired: _____

Work performed by: Jody Worker UCCO cert. or RRPM license #: 9999

Exterior visual inspection

Tool list

- exterior visual inspection form (see pages 26–27)
- tape measure
- pocket calculator

What is an exterior visual inspection?

- The purpose of the exterior visual inspection is to look for deteriorated exterior paint and visible paint chips on the ground and to record the conditions found.
- Because deteriorated paint is the primary source of lead in soil around the home, identifying and repairing deteriorated paint before it ends up in the soil helps reduce the risk for children.
- Deteriorated paint is any paint or other coating that is peeling, chipping, chalking, or cracking, or any paint or coating located on an interior or exterior surface or fixture that is otherwise damaged or separated from the substrate.
- **The Lead Poisoning Prevention Law requires that a visual inspection be conducted after each change of tenant and annually in rental units and child care facilities.** The results of the visual inspection must be noted on the compliance statement filed at least every 365 days.
- If a total combined area of more than one square foot (144 inches) of deteriorated paint is found on an exterior surface then all deteriorated paint must be repaired within 30 days of the inspection or have access blocked by physical barriers. This includes all outbuildings or other painted features that are accessible to the building occupants.
- Due to cold weather restrictions, if the deteriorated paint is reported or identified after November 1, Vermont law allows repairs to be completed by May 31 of the following year. However, you must restrict access to deteriorated areas until they are repaired.

- If you need more time to ensure repairs are made, you must [apply for an IRC Practices extension request](#) from the Vermont Department of Health.

How to conduct an exterior visual inspection

1. Inspect all exterior painted components including outbuildings unless the area is restricted to tenants by physical barrier.
2. Draw an outline of the building footprint on the exterior visual inspection form. Include relevant details like outbuildings and other structures. See samples [on pages 26–27](#). You may use these forms or any other system of recordkeeping you choose when performing your inspection. You do not need to submit these forms with your compliance statement.
3. Start with a wall and write down the name or area description on the exterior visual inspection form. Notice that the map grid contains letters to help in labeling which side of the building is which.
4. Look for deteriorated paint on all painted building components such as clapboards, corner boards, door and window trim, and roof trim.
5. Measure and add up areas of deteriorated paint.
6. Record the amount of deterioration on the exterior visual inspection form.
7. If a total combined area of less than one square foot of deterioration per wall is found, no further action is required. However, we recommend that even small amounts of deteriorated paint are repaired because these can still be a hazard.
8. If a combined area of more than one square foot of deterioration per wall is found, then all deteriorated paint must be repaired within 30 days of the inspection or have access blocked by physical barriers if it is winter. Paint repairs must be made by a Vermont licensed Lead-Safe RRPM

Supervisor working under a Vermont Lead-Safe RRPM Firm license or by someone who has been trained and is directly supervised by this individual, for rentals; or, in the case of a child care facility, by a [certified Uncompensated Child Care Operator \(UCCO\)](#).

9. Note areas where repairs have been made or barriers have been installed with a date and description on the exterior visual inspection form so that you have a record of what was done in each area.
10. Keep a record of the date of repairs and the RRPM supervisor and firm license numbers or UCCO certification number of the person(s) who completed the work. You will need to enter these when you file your compliance statement. You will not be able to file without valid license numbers. Check the license numbers with the [Vermont Department of Health, Asbestos and Lead Regulatory Program](#) before you allow the work to begin.

NOTE: *Vermont law requires that all visible paint chips be removed from the ground on the property. More detail on this requirement is provided [on page 30](#).*

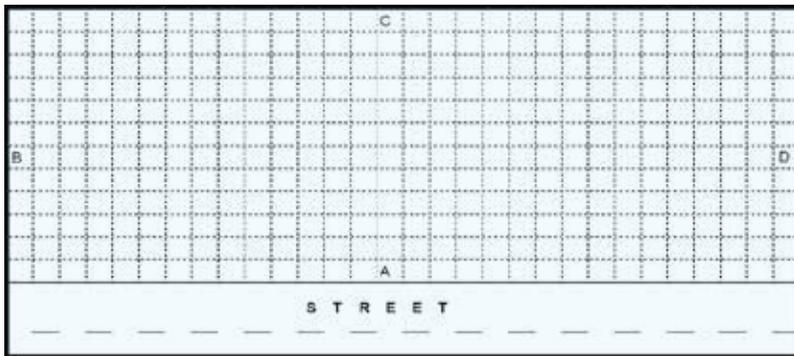
IRC Practices Exterior Visual Inspection Sample Form

You do not need to submit this form with your annual compliance statement

Date of visual inspection: _____
 Inspected by: _____
 IRC Practices certification, UCCO certification or RRPM Supervisor license #: _____
 Owner: _____
 Address: _____
 Town: _____ Apt# or Common Area: _____

Area/side: _____ <input type="checkbox"/> None <input type="checkbox"/> <1 sq. ft. <input type="checkbox"/> >1 sq. ft. (needs repair) Note areas and actions taken: _____ _____ Date action taken: _____
Area/side: _____ <input type="checkbox"/> None <input type="checkbox"/> <1 sq. ft. <input type="checkbox"/> >1 sq. ft. (needs repair) Note areas and actions taken: _____ _____ Date action taken: _____
Area/side: _____ <input type="checkbox"/> None <input type="checkbox"/> <1 sq. ft. <input type="checkbox"/> >1 sq. ft. (needs repair) Note areas and actions taken: _____ _____ Date action taken: _____
Area/side: _____ <input type="checkbox"/> None <input type="checkbox"/> <1 sq. ft. <input type="checkbox"/> >1 sq. ft. (needs repair) Note areas and actions taken: _____ _____ Date action taken: _____

Site sketch:



Work performed by: _____ UCCO cert. or RRPM license #: _____

IRC Practices Exterior Visual Inspection Sample Form

You do not need to submit this form with your annual compliance statement

Date of visual inspection: 8/29/22
 Inspected by: Pat Jones
 IRC Practices certification, UCCO certification or RRPM Supervisor license #: 9998
 Owner: Pat Jones
 Address: 123 Main Street
 Town: Anytown, VT Apt# or Common Area: #2

Area/side: <u>House B</u> <input checked="" type="checkbox"/> None <input type="checkbox"/> <1 sq. ft. <input type="checkbox"/> >1 sq. ft. (needs repair) Note areas and actions taken: _____ _____ Date action taken: _____
Area/side: <u>Garage B</u> <input checked="" type="checkbox"/> None <input type="checkbox"/> <1 sq. ft. <input type="checkbox"/> >1 sq. ft. (needs repair) Note areas and actions taken: _____ _____ Date action taken: _____
Area/side: <u>Garage C</u> <input type="checkbox"/> None <input type="checkbox"/> <1 sq. ft. <input checked="" type="checkbox"/> >1 sq. ft. (needs repair) Note areas and actions taken: <u>installed snow fence to limit access (see sketch); repair sched. for spring</u> Date action taken: <u>11/15/22</u>
Area/side: _____ <input type="checkbox"/> None <input type="checkbox"/> <1 sq. ft. <input type="checkbox"/> >1 sq. ft. (needs repair) Note areas and actions taken: _____ _____ Date action taken: _____

Site sketch:



Work performed by: Jody Worker UCCO cert. or RRPM license #: 9999

Performing repairs using Renovation, Repair, Painting and Maintenance (RRPM) requirements

In pre-1978 rental housing, for work that will disturb more than one square foot of painted or stained surface, you must hire a Vermont-licensed RRPM supervisor and firm. For a child care facility, the work must be done by a Vermont-licensed RRPM supervisor and firm or a certified UCCO.

Landlords or property managers can become RRPM-trained to perform the work on your rental property. However, you will need to apply for both the Vermont RRPM supervisor and RRPM firm licenses before you can perform work on your building.

Child care operators can become trained and be certified at no cost but may perform RRPM work only on their own child care facility. Child care operators can apply for a UCCO certification through the Vermont Department of Health.

RRPM and UCCO training requirements

To receive the RRPM or UCCO credentials, you must:

- take this IRC Practices training
- take any eight-hour initial RRP training accredited by the U.S. EPA or Vermont Department of Health (or a four-hour refresher RRP training if you have an initial RRP training certificate that has not expired)
- review the [What Workers Need to Know About Vermont's Renovation, Repair, Painting and Maintenance \(RRPM\) Regulations](#) and respond to test questions based on this information sheet

To maintain RRPM licensure, every five years these trainings need to be taken again, and you must reapply for the credentials.

Licensed RRPM supervisors must work under a company with an RRPM firm license. This means that an individual working as a sole proprietor must hold both an RRPM supervisor and RRPM firm license even if they work alone. A UCCO does not need a firm license.

You can apply for the Vermont RRPM supervisor and firm licenses and UCCO certification through the Vermont Department of Health, Asbestos and Lead Regulatory Program. The RRPM supervisor license and UCCO certification need to be renewed yearly. The RRPM firm license needs to be renewed every five years.

To learn more about RRPM and apply for the RRPM credentials, [visit the RRPM web page](#).

Prohibited work practices

The [Vermont Regulations for Lead Control](#) prohibit certain work practices, no matter how small the job. They include:

- open flame burning or torching
- heat guns operated at or above 1100°F
- dry scraping or sanding
- hydro-blasting or high-pressure washing
- abrasive blasting or sandblasting
- chemical stripping

Removal of visible paint chips

As part of IRC Practices, the [Vermont Regulations for Lead Control](#) require that all visible paint chips be removed from the ground at pre-1978 rental properties and child care facilities.

Paint chips are often found around the perimeter of old buildings and other painted features like fences. Children may become lead poisoned by ingesting paint chips, and they are the primary cause of residential soil contamination. Lead-contaminated soil is easily tracked or blown into homes where children can be further exposed.

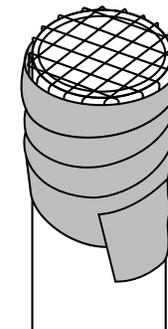


Removing paint chips from the ground can be difficult, particularly if there are many small chips. In some cases, it may be necessary to remove a few inches of topsoil that is highly contaminated in order to remove all the chips. Big paint chips can be picked up by hand (wear gloves). Raking chips from grassy areas is not advised, as this could further contaminate the soil by breaking the chips into smaller pieces. Instead, use a vacuum with a homemade attachment as described and shown below. Paint chips on driveways or other flat, hard surfaces should be misted with water and carefully swept up.

All visible paint chips should be removed as soon as possible after they have been identified and must be removed within 30 days. At least once a year and when there is a change of tenant, property owners must inspect all outdoor areas of the property for visible paint chips, focusing on areas that might not be plainly visible under normal circumstances.

Useful cleaning tip

A plastic pipe with one-fourth inch wire mesh wrapped around the end attached to the HEPA vacuum hose is an effective way to clean up paint chips that end up in the grass. It is best to wear a rubber glove to remove leaves and debris that frequently will stick to the mesh.



Remember:

Change vacuum bags that may contain damp soil at the end of the day to prevent rusting or mold growth on the inside of the vacuum.

Lead hazards in soil

Soil hazards and the Vermont Lead Poisoning Prevention Law

As part of IRC Practices, the [Vermont Regulations for Lead Control](#) require visible paint chips be removed, but the regulations do not specifically require any other treatments to deal with soil contaminated with lead. While it is possible that children could be exposed to lead by ingesting paint chips from deteriorated exterior paint, it is much more likely that a child will become poisoned by ingesting contaminated dirt while playing near the foundation of an older home.

Following the IRC Practices requirements by keeping the exterior paint intact does not mean that there are no soil lead hazards at a property. **It means that you have taken steps to keep them from worsening.**

Historically, lead paint for exteriors was designed to chalk so that rain would wash the surface clean. As a result, most old homes in Vermont have elevated levels of lead in the soil around the foundation drip lines (the area within three feet surrounding the perimeter of a building). Historic care and maintenance of a building also can contribute to elevated soil lead levels. Paint chips from unsafe exterior scraping jobs done decades ago can still exist in the soil around the home.

A study of soil lead levels around Vermont homes built before 1978 found that the average level of lead in the soil around the foundation drip lines was 1,071 parts per million. What does that level mean? The [Vermont Regulations for Lead Control](#) defines residential soil lead hazard as bare soil that contains total lead equal to or exceeding 41 parts per million based on soil samples. This type of soil contamination is generally limited to the first few feet of soil nearest the foundation, although historic use of the property could alter the size of a contamination area significantly.

If, for instance, a painter had scraped the house 20 years ago on a windy day and let paint chips blow around the yard, the entire yard could be contaminated. Other contamination hot spots could be associated with other historic uses of the property, such as previous structures that no longer exist or the burning of lead painted debris, automotive repairs, spills of leaded gasoline, previous industrial pollution, and other activities including shooting ranges and even previous agricultural property use (lead arsenate was a commonly used agricultural pesticide).

Safety recommendation:

For the highest level of safety for children, property owners should take steps to reduce the risk of all soil lead hazards. Typical treatments to reduce the risk are simple and easy to implement in most cases.

Easy treatments to control lead hazards in soil

To minimize the risk of lead poisoning due to high lead in soil, a variety of options are available. Some options are described below but any type of treatment that either lowers the level of lead or minimizes the contact by children will generally help minimize risk.

Temporary treatments (interim controls)

- Cover bare soil areas with bark mulch, gravel, or additional top soil.
- Rototill soil to lower surface concentration of lead — dampen first, to minimize dust.
- Plant grass or groundcover to eliminate bare soil spots.

Permanent treatments (abatement)

- Remove soil.
NOTE: Soil removed must be handled and disposed of according to Vermont's Solid Waste Management Rules or Hazardous Waste Management Regulations, as applicable.
- Cover soil with durable coverings such as concrete, asphalt or paving stones.

Usage controls

- Establish safe play areas away from contamination.
- Install fences to limit access to contamination.
- Plant bushes, shrubs and flower beds to limit access to contamination.
- Install sidewalks or paving stones if walkways must cross contaminated areas.

Gardens

- Never plant edible vegetables in areas of contamination. Flowers and ornamentals are okay.

Children

- Never allow children to play in bare soil areas close to pre-1978 buildings because they may be contaminated by lead.
- Wash children's hands frequently.

Pets

- Do not place pet pens or tie-outs in areas of contamination.
- Do not let pets dig near foundations.

Your home

- Remove shoes at the door.
- Regularly clean your floors to remove dust tracked in from outside.
- Place walk-off type door mats or tack mats near entrances.

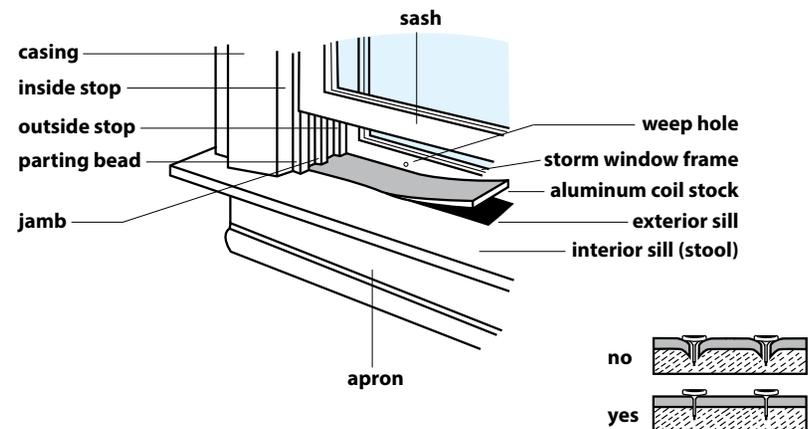
Window well liners or inserts

As part of IRC Practices, the [Vermont Regulations for Lead Control](#) require owners of pre-1978 rental housing and child care facilities to ensure that all pre-1978 wooden sash windows with a window well or trough have 18-gauge coil stock window well inserts installed.

A window well liner or insert is a piece of thin sheet metal (usually aluminum coil stock) or other smooth durable material cut to fit the shape of a window well that is installed in the window well with caulking and aluminum nails or glue for the purpose of making it smooth and cleanable.

Smooth vinyl flashing without an embossed or stamped texture or pattern, or other types of sheet metal may be used such as aluminum flashing or sheet copper. Any material used for window well inserts must be suitable for exterior use and be resistant to degradation from exposure to ultraviolet light or made from UV stabilized vinyl. Steel or other ferrous or galvanized sheet metals are not suitable for window well inserts because they will rust or corrode. Aluminum foil, or plastic sheeting is not appropriate because these materials are not durable.

Typical window details



Installing window well liners or inserts

Tool list

- coil stock (or other smooth durable material)
- ruler, tape measure or straight edge guide
- tin snips, tin shears or utility knife
- HEPA vacuum
- caulk or caulking gun
- putty knife
- scraper
- aluminum nails and/or glue (for example, Liquid Nails)
- safety glasses
- garbage bags (doubled)
- paper towels or disposable rags
- 6 mil polyethylene sheeting (poly)
- all-purpose cleaner
- OPTIONAL:
 - drill and a drill bit smaller than the nails
 - pry bar, screw driver or pliers to remove nails or other hardware in well
 - wood chisel to remove paint build up in corners, notching bottoms of parting beads to receive coil stock

Set up work area

- Work in only one room at a time. Post a warning sign at entrance to the room or put up barrier tape. Notify occupants that they are not allowed in the work area until after all work is complete and the area has been cleaned.

- Move furniture at least five feet away from work area. Use judgement in deciding what to move. If the work performed will put contamination farther away than five feet, set up a larger area. Heavy items that cannot be easily moved may be covered with poly. Window curtains, shades, blinds, etc. should be removed.
- Turn off heating, air conditioning, and ventilation systems and tape poly or cardboard over air vents and baseboard heaters. Plastic should never be taped over electric baseboard heaters, electric and gas stoves, or any other high temperature heat source.
- Tape poly to floor and extend five feet out from work area in all directions. Avoid using large amounts of tape on floors and avoid taping to painted surfaces because tape will remove more paint. Avoid walking on tape applied to floors as this will increase the tape adhesion and will increase the chance for damage to the floor finish when removed.
- For worker protection, wear disposable coveralls, safety glasses, disposable gloves, and protective shoe covers or work shoes.
- HEPA-vacuum the window well to remove loose dust, paint chips, and debris.
- Prepare the window well. All protruding nails, eyebolts, hooks or other hardware should be removed from the well. Excessive paint buildup in corners and old caulking should be removed (score with knife or use chisel). Loose and flaking paint should be wet-scraped. The well is properly prepped if the window well insert can be installed without buckling.
- Additional work may be required depending on the type of window. If the window has vinyl or metal jamb liners, try to insert a putty knife under and move the jamb liner up enough to slide the new coil stock under. For windows with wood parting beads, either cut or chisel a notch in the parting bead to slide coil under, or optionally cut corresponding notch in new coil stock. Occasionally, unpainted wood parting beads may be moved up enough to allow coil stock to slide underneath.

- HEPA-vacuum again to remove all preparation work debris from the window well. Large debris that could clog the vacuum hose should be picked up with wet paper towels first.
- Wash with general all-purpose cleaner.
- Measure the width and length of the well. The window well insert should fit tightly against existing storm windows. If no storm window is in place, measure to extend coil stock to within 1/8" to 1/4" of the lower edge of the well/sill area.

Installation

1. Using tin snips or utility knife, cut insert material to size.
2. Dry fit the insert to check for binding and flat fit, trim and adjust as necessary.
3. Apply a bead of caulking around the edges of the window well, then fill in the center of the window well with several additional beads of caulking. Always place caulking beads in the window well itself, never on the insert to be installed. Caulking on the insert can be very messy to install.
4. Place the insert in the well, inserting square edges under window stops or jamb liners.
5. Glue the insert into place. Caulk around the edges of the insert. There are small holes located on the bottom edge of storm-window frames called weep holes that allow water to drain from the windows. Be careful not to caulk over the weep holes when you are caulking the exterior-facing edge of the window well insert. If they become blocked by debris, paint, or caulk, water can seep into the wood of the sill and cause it to rot.
6. If there are weep holes in the storm window, check to see that they are open. If blocked, drill to re-open.

Important reminder:

Caulking the lower edge of the storm across the entire window or blocked weep holes in the storm will cause a water dam that could allow rain water to back up and leak into the wall or house and could cause rotting of the sill and well area.

Cleanup

1. Pick up larger debris with wet paper towels or wet wipes and dispose in a doubled garbage bag.
2. HEPA-vacuum all surfaces, including poly in the work area.
3. HEPA-vacuum clothes, work shoes or remove protective shoe covers and place on poly.
4. Fold up poly from all corners and place in doubled garbage bags.
5. Mist surfaces in work area with general all-purpose cleaner. It is always preferable to apply the cleaning solution with a sprayer to eliminate contamination of a bucket of solution. If a sprayer is not available, dip clean disposable rags/paper towels in cleaning solution only once. After a towel has touched a contaminated surface, do not dip into the cleaning solution a second time, as this will put lead into the cleaning solution.
6. Wipe surfaces with paper towels and dispose of in doubled garbage bags.
7. HEPA-vacuum surfaces again.
8. Mop bare floors as outlined [on pages 55–56](#).
9. Remove gloves and place in doubled garbage bag.
10. Change out of work clothes and wash up.

See step-by-step photos on the following pages.

Remove all furniture and other items from the work area.



Gather all supplies in work area.



Lay plastic sheeting.



Brace window open if necessary.



Restrict access to work area and post "Warning" sign.



Typical condition of window wells.



HEPA-vacuum loose debris from window well.



Remove built-up paint to square up corners.



Wet-scrape deteriorated paint from window well.



If possible, create a gap under window parting bead to allow coil stock to be slid underneath.



Remove old caulking, hardware, and other debris.



Wipe up debris with wet disposable towel.



Pick up larger debris with wet disposable towel.



HEPA-vacuum remaining debris.



Measure well length and width.



Measure coil stock.



Coil stock may be cut by scoring with a utility knife, using a straight edge as a guide.



Bend coil stock as shown to break on a scored line.



Coil stock may also be cut using tin snips.



Dry fit to determine if edge cuts are necessary.



Measure for window well depth.



Mark edge cuts.



Cut as previously described.



Cut edges to fit shape of jamb.



Dry fit to check accuracy of edge cuts.



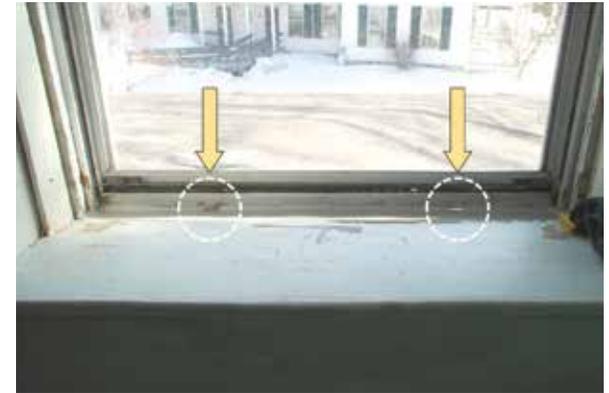
Caulk around edges.



Apply caulking to window well only, not directly on coil stock.



If caulking lower edge, leave weep holes for water to escape.



Place coil stock into well and press firmly into caulking.



HEPA-vacuum work area.



Fold up plastic, keeping contaminated side turned in.



Place all debris in doubled garbage bags and dispose of properly.



Check area for any remaining dust or debris and HEPA-vacuum or wipe if necessary.



Cleaning

As part of IRC Practices, the [Vermont Regulations for Lead Control](#) require specialized cleaning of all horizontal surfaces except ceilings at change of tenant and at least annually in interior common areas pre-1978 residential rentals or child cares.

Specialized cleaning means cleaning using methods, products, and devices that have been shown to be effective at removing lead-contaminated dust. When done properly, specialized cleaning removes visible debris and dust particles too small to be seen by the naked eye. Specialized cleaning is necessary because lead dust and chips cause lead poisoning. Over time lead dust is created by deteriorated or chalking lead-based paint.

Additionally, any work that disturbs lead-based paint also can produce dangerous quantities of lead dust. If you have work done on your building, the licensed RRPM supervisor who does the work must perform specialized cleaning at the end of each workday and at the end of the job **and** verify that the work area has been adequately cleaned before the job is considered complete. Visit the [RRPM web page](#) to learn what to look for when RRPM work is being performed, and who to contact if things don't look right.

IRC Cleaning Requirements

Activity

Change of tenant

Annual cleaning of common areas

Cleaning required

Floors, window wells, sills, and all horizontal surfaces (except ceilings) in unit. This includes surfaces like the tops of the baseboards.

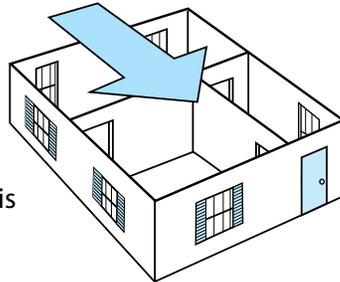
Floors, window wells, sills, and all horizontal surfaces (except ceilings) in common areas.

Cleaning techniques

Lead dust can stick tightly to surfaces, making it difficult to remove. Special cleaning techniques are needed to remove it. Rough or porous surfaces like concrete or worn wood can be particularly difficult to clean, so it is best to try to prevent them from getting contaminated when doing paint stabilization work.

The key elements of cleaning to remove lead dust are:

- wet-wiping or washing
- HEPA-vacuuming
- cleaning in one direction to avoid cross-contamination
- visually checking for dust and debris



Cleaning tip:

Cleaning rooms furthest from the entrance first and working your way towards the entrance helps prevent re-contaminating rooms that were just cleaned.

To avoid spreading contamination, **never**:

- dry sweep
- use a shop vacuum or a vacuum without a HEPA filter
- change vacuum cleaner bags inside
- use a bucket and sponge or reusable rags for cleaning

What supplies are needed for specialized cleaning?

Different surfaces require different cleaning methods, but most cleaning jobs can be accomplished with some combination of:

- all-purpose cleaning solution
- HEPA vacuum
- misting bottle
- disposable gloves
- disposable rags or wet wipes

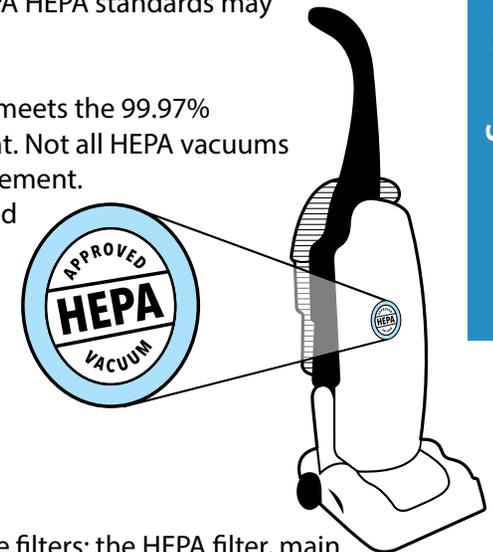
- wet disposable mop cloths or wringable mop and three mop buckets
- paper towels
- garbage bags (doubled)



What is a HEPA vacuum?

HEPA (high-efficiency particulate air) vacuums differ from conventional vacuums in that they contain high-efficiency filters that are capable of trapping extremely small, micron-sized particles. These filters can remove particles of 0.3 microns or greater from air at 99.97% efficiency or greater. Use of a HEPA vacuum is required if you are going to vacuum any lead-containing dust and debris. Not all vacuums on the market advertised as HEPA meet these filtration requirements. Look closely at the vacuum product details to make sure it meets these standards. Looking for HEPA vacuums that advertise they meet the U.S. EPA HEPA standards may help narrow your search.

Make sure your HEPA vacuum meets the 99.97% efficiency filtration requirement. Not all HEPA vacuums on the market meet this requirement. The HEPA vacuum must be used following the manufacturer's instructions. Adding a HEPA filter or bag to a generic vacuum like a shop vac does not make it an approved HEPA vacuum.



Parts of a HEPA vacuum

Most HEPA vacuums have three filters: the HEPA filter, main filter, and pre-filter. Debris gets sucked in through the hose into the vacuum bag. The air and dust get filtered through the pre-filter, the main filter, and the HEPA filter. The HEPA filter catches the lead dust before the air is released back into the work area.

Normal household vacuums will release small particles of lead into the air. A contaminated household vacuum will continue to spew small particles of lead every time it is used. Users should also be careful of cheaper vacuums that have HEPA filter add-ons. A good HEPA vacuum must filter 100% of the exhaust air.

As a rule of thumb, if you feel air not associated with the exhaust leaking from the vacuum while it is running, it could be releasing lead particles into the air. Better-quality HEPA vacuums usually will have housing parts with gaskets or soft rubber seals to prevent air leakage and multiple pre-filters. Pre-filters in a vacuum will help prevent dirt from directly impacting and clogging the HEPA filter, which are usually expensive to replace. Never get a HEPA filter wet because it destroys the filter's ability to screen the smallest particles.

Cleaning of horizontal surfaces

Before doing this cleaning, which is required at any change of tenant and annually in interior common areas, perform a visual inspection and ensure any deteriorated paint is stabilized first. When cleaning horizontal surfaces (except the ceiling), work from top to bottom and end with the hard floor or carpet.

Supplies

- all-purpose cleaner
- HEPA vacuum
- disposable gloves
- disposable rags or wipes
- wet disposable mop cloths or wringable mop and three mop buckets
- paper towels
- garbage bags (doubled)



Steps

1. HEPA-vacuum all horizontal surfaces very slowly. Vacuum all ledges, sills, stools, molding tops, or other surfaces where dust collects. Work from top to bottom.
2. Mist surface with all-purpose cleaner. Scrub surface with paper towel. Lead needs scrubbing, not just wiping. Work from top to bottom.
3. Repeat process until there is no visible dirt on paper towels. Do not re-dip dirty towels into detergent or you will contaminate the solution. Alternatively, you can use disposable wipes.
4. Wipe one last time with damp paper towel or disposable wipe and clean rinse water.
5. Throw dirty towels away in doubled plastic garbage bags.

The last horizontal surface to clean is the carpet or floor, using the methods described in the next section. Please note that more frequent cleaning of common areas is recommended.

Carpeted floors

1. HEPA-vacuum carpeted floors using a corner tool in corners, cracks of trim, and edges of carpet. Use a vacuum with a carpet tool or a vibrating or power carpet head.
2. **Important: Vacuum carpets very slowly.** Allow the vacuum time to bring dust from the deepest parts of the carpet.
3. Vacuum the room in one direction for the first pass, then vacuum the room in a direction that is 90 degrees from the original direction for the second pass.

Bare floors

1. HEPA-vacuum floors using a corner tool in corners, cracks of trim, and between the floor boards.
2. Mop the floor using either the wet disposable mop cloth method **or** the wringable mop and three buckets method.

Wet disposable mop cloth method

- a. Scrub a small section of floor.
- b. Repeat until no evidence of dirt or debris appears on the disposable mop cloth.
- c. Move to a new section of floor and repeat steps a and b.
- d. As a final step, using a clean mop cloth, mop over the entire area you have cleaned. If the cloth does not appear clean, repeat steps a–c.

Wringable mop and three bucket method

- a. Use three buckets: one for cleaning solution, one for rinsing, and one for wringing.
 - b. Put mop into bucket of cleaning solution. Wring excess into empty bucket.
 - c. Scrub a small section of floor with mop and then put mop into rinse bucket. Wring excess into empty bucket.
 - d. Repeat steps c and d until entire floor is clean and no evidence of dirt or debris appears in the mop water, or on the mop
 - e. Do not use detergent for the final mopping (rinse) stage.
 - f. Dump mop water down the toilet. Putting mop water down the toilet avoids potential contamination of sinks, food preparation areas, surfaces around sinks, or soil.
Dispose of the disposable mop cloths as you would other lead-contaminated material.
3. Clean smaller or hard-to-reach surfaces using a sprayer with cleaning solution, cloth and rinse bucket, or with paper towels or wet disposable wipes. Continue to clean until a new rag, paper towel or disposable wipe appears clean after being wiped across the entire area that has been cleaned.

Cleaning child care facilities

The [Vermont Regulations for Lead Control](#) require that IRC Practices are performed at child care facilities prior to initial licensing and at least annually thereafter. Child care facilities must submit an IRC Practices Compliance Statement at least every 365 days to the Vermont Department of Health.

Although not required by the law, it is highly recommended that child care facilities implement more extensive cleaning practices and take steps to minimize exposure to lead hazards. Because children are more likely to ingest lead dust that may be produced from deteriorated paint, and from friction or impact of painted surfaces, regular daily cleaning of surfaces where children play and where dust collects should be part of every child care facility's routine.

Minimizing risk

In addition to the IRC Practices, other steps can be taken to reduce the risk to children and should include the following:

- **Play areas**

Play areas should be established on easy-to-clean surfaces. A play area on a vinyl floor that is easy to clean is much safer than a play area on an unsealed, porous wood floor that is difficult to clean. Putting an area rug over a lead painted floor makes that surface safer.

- **Interior hazards**

Limiting access to areas that are likely to contain lead dust (such as child-accessible window wells) also reduces the chance that children might ingest lead. This can be as simple as keeping a window closed or arranging furniture in a room so children can't easily touch the window(s).

- **Exterior hazards**

Limit exterior dust tracked in by removing shoes, wiping feet, etc. When children are outside, do not let them play in any area where there is bare soil, especially in areas next to the building foundation, or in any area where paint chips are visible on the ground. The law requires that all visible paint chips be picked up.

- **Hand, face and toy washing**

Frequently washing the children's hands and faces and cleaning the toys is another way to reduce the risk to children by removing lead dust before it can be ingested. Since children tend to put their hands and toys in their mouth and often eat with their hands, swallowing lead dust is the most common way they are exposed to lead. Wash children's hands and face frequently, especially before meals, snacks, and bedtime. Wash toys and pacifiers frequently.

- **Toys**

There may be lead paint problems with some imported toys. It is a good practice to check the [Consumer Product Safety Commission website](#) for the most up-to-date recall notices. At the same time, please remember that in Vermont, most children are poisoned by lead-based paint in housing, not by lead in toys.

- **Diet & nutrition**

Studies have shown that children's ability to absorb lead decreases when they are fed a healthy diet with foods containing calcium and iron. Serve snacks and meals to children at the table or in their highchairs.

Remember:

Anything that limits a child's access to a lead hazard lowers their risk of ingesting lead. The method of limiting access should consider children's normal behavior. Children are inquisitive by nature and do not understand the risk. A barrier that is easily overcome by a child or an instruction that is age inappropriate (like a warning sign) will not lower the risk.

Cleaning

The [Vermont Regulations for Lead Control](#) require annual specialized cleaning and cleaning after paint is disturbed (as described in the previous sections). However, child cares are frequented by children at the most susceptible ages for extended periods of time.

For the highest level of safety, in addition to the required annual cleaning, a more aggressive approach to cleaning is recommended for child care providers. This should include regular frequent cleaning of surfaces where lead dust is likely to collect and where children play. While the amount of cleaning required can vary from building to building, the following techniques and schedules should offer a much higher level of safety for children by eliminating lead dust as it collects on various surfaces.

General cleaning techniques

Lead dust may be cleaned by HEPA-vacuuuming, mopping, or wet-wiping floors and other surfaces where dust may collect in child occupied areas. Using non-HEPA vacuum cleaners or brooms may spread dust to other areas. Any all-purpose cleaning product will work and is best used in a spray bottle for misting surfaces. Using paper towels to wipe surfaces after misting with the cleaning solution, or using disposable wipes, will put the contamination on something that is thrown away; while using a sponge or rag and a bucket of cleaning solution will just spread contamination around.

Remember to keep the cleaning solution out of the reach of children, and that some cleaning agents (especially bleach or ammonia) can cause asthmatic reactions in some children. For detailed cleaning techniques, see instructions [on pages 51–56](#).

Immediate cleaning

Always clean any visible paint chips in a child-occupied area immediately. Wash dropped pacifiers and teething rings before allowing children to use them again.

Daily cleaning

Play area floors, toys, toy boxes, pacifiers, tables, and food preparation areas should be cleaned daily.

Weekly cleaning

Windows, window wells (when windows are open), tops of baseboards, non-play area floors, and any other trim detail or furniture where dust collects should be cleaned weekly.

Disposal of lead-containing paint waste and debris

The Vermont Department of Environmental Conservation (DEC) regulates all lead-containing paint (LCP) wastes in the State of Vermont as either solid or hazardous type waste. The EPA has issued policy guidance that exempted household LCP waste from hazardous waste regulations and the Vermont DEC has also adopted a similar policy. Essentially, any LCP waste generated in households (including apartments) by either homeowners or contractors (including IRC Practices, RRPM and abatement contractors) is classified as “household waste,” which means it may be disposed of without hazardous waste restrictions and requirements.

Although LCP from households is not regulated as hazardous waste, other types of LCP waste generated because of business activity may be regulated. For additional information, see the [DEC fact sheet](#).

Because LCP waste still can cause the spread of lead contamination, all LCP waste should be handled using the following guidelines:

- Always store LCP waste away from children and animals.
- Always collect LCP waste in heavy plastic bags (double-bagged) or wrap in plastic.
- When possible, store larger architectural LCP components in covered containers/roll-off dumpsters until ready for disposal.
- When moving LCP components to dumpsters, lay a pathway of plastic to collect paint chips that may fall off the components while being moved.
- Transport LCP waste from work site in covered containers to approved solid waste facilities.
- Use of LCP waste as mulch is prohibited.
- Burning of LCP waste is prohibited.

For more information about where and how to dispose of LCP waste, contact your local Solid Waste Management District.

NOTES

Disposal of waste & debris

Recordkeeping & Real Estate

Recordkeeping, compliance statements, and notification

Performing IRC Practices is considered a reasonable standard of care for lead paint in a property, but there must be proof that IRC Practices were completed. This is why, under Vermont law, IRC Practices require pre-1978 rental property or child care owners to attest to their activities by submitting a “compliance statement.” The owner is establishing a formal record of what IRC activities have taken place at a property. This record can be used as evidence should legal proceedings occur because of lead poisoning.

Although under Vermont law, IRC Practices require that only the compliance statement be submitted to the Vermont Department of Health, it is a good idea to keep records of any activity regarding lead paint. This would include, but is not limited to, visual inspection forms, receipts for materials and contractors, copies of inspection reports, copies of notifications, etc. This can be best accomplished by establishing a folder for each property and adding information as it is collected.

The federal disclosure rule also applies to records of lead-based paint activities. The federal disclosure rule requires all records of lead-based paint activities be [disclosed to buyers of property or current or prospective tenants](#).

IRC Practices Compliance Statement

The compliance statement must be filed every 365 days with the Vermont Department of Health for all pre-1978 rental housing and child care facilities unless the property is found to be lead-free by a Vermont-licensed lead paint inspector or lead risk assessor who has conducted a comprehensive paint inspection. This inspection must be done using an X-Ray Fluorescence (XRF) lead-based paint analyzer or paint chip analysis. Vermont law does not recognize the use of swab test kits for paint testing.

The compliance statement allows the owner of a pre-1978 residential rental property or child care facility to attest that they have completed the requirements of the Lead Poisoning Prevention Law. Compliance statements are completed and filed online.

The law requires that copies of compliance statements must be given to tenants and to the property insurance carrier within 10 days of the date the statement was filed. The compliance statement can be provided through email or hard copy to the tenants and the insurance carrier. For child care facilities, a copy of the compliance statement must be provided to the Vermont Department for Children and Families.

Learn how to establish your [IRC online user account](#) and [file your compliance statement online](#).

If you have questions about filing your IRC Compliance Statement, email the Asbestos and Lead Regulatory Program at IRCCompliance@vermont.gov.

Notice to Occupants poster

Under Vermont law, IRC Practices require that owners of pre-1978 rental properties or buildings containing child care facilities post, in a prominent location, [a notice to occupants](#) emphasizing the importance of promptly reporting deteriorated paint to the owner or owner's agent. Contact information for the owner or owner's agent must be included. This notice must be posted in each housing unit or placed prominently in a common area used by all tenants.

Tip:
Place inside kitchen cabinet doors.



Notice to Occupants

Promptly report all deteriorated paint or visible paint chips to the Owner or Owner's agent. This means any paint on the inside and outside of this building that is chipping, peeling, chalking, flaking, cracking, or damaged. It also includes any visible paint chips on the ground.

Prevent Lead Poisoning

Name of Owner or Owner's Agent: _____
Address: _____
Telephone: _____

18 V.S.A. § 1759
December 2018

Information to tenants and owners of child care facilities

Under Vermont law, IRC Practices require that written lead-based paint hazard information, approved by the Vermont Department of Health, be given to current and prospective tenants and current and prospective owners of child care facilities. The Vermont Department of Health has approved the EPA pamphlet "[Protect Your Family From Lead in Your Home](#)" for this purpose. In addition to this pamphlet, copies of each compliance statement must be given to tenants.

Federal disclosure of lead-based paint hazards in housing

Before renting or buying a pre-1978 home or apartment, federal law requires:

- Sellers must disclose known information on lead-based paint or lead-based paint hazards before selling a house.
- Real estate sales contracts must include a specific warning statement about lead-based paint. Buyers have up to 10 days to check for lead.
- Landlords must disclose known information on lead-based paint or lead-based paint hazards before leases take effect. Leases must include a specific warning statement about lead-based paint.

All information generated as a result of doing IRC Practices is considered a significant and relevant record of lead-based paint activities at your property.

Find the federal lead disclosure forms [here](#).

Real estate transactions and the Vermont Lead Law

Disclosure requirements

[The Vermont Lead Law \(18 V.S.A. §1767\)](#) requires sellers to provide lead disclosure information and educational materials approved by the Vermont Department of Health during real estate transactions for all pre-1978 housing, whether owner-occupied or rental.

Sellers of rental properties must disclose whether the property is in compliance with the Lead Poisoning Prevention Law and whether a current IRC Practices Compliance Statement has been filed with the Vermont Department of Health. In addition, sellers of rental properties must disclose if the property is subject to any assurance of discontinuance, administrative order or court order and whether the terms of such assurance or order have been completed.

Along with these disclosures, sellers of rental properties must also provide buyers with certain lead educational information, including a fact sheet that summarizes IRC Practices requirements for the buyers. A buyer of a rental property that is not currently in compliance with the IRC Practices requirements has 60 days after closing to bring the property into compliance, unless an extension of time is granted by the Commissioner of Health. Failure to comply with this requirement will result in a mandatory civil penalty.

Realtor and seller responsibilities for pre-1978 residential rental properties

Real estate agents and sellers must provide the buyer with these educational materials when selling a residential rental property:

- [Vermont Lead Law: What Landlords and Child Care Providers Need to Do](#)
- [Protect Your Family from Lead in Your Home](#)
- [Lead Hazards in Housing](#)
- [Don't Spread Lead brochure](#)

Seller must verify that:

- IRC Practices have been completed
- a current IRC Practices Compliance Statement has been filed with the Vermont Department of Health

Seller must disclose:

- any information or documentation regarding the presence of lead paint, such as any testing that has been performed
- if the property is currently subject to an assurance of discontinuance, administrative order, or court order

The seller must ensure that the [Vermont Lead Law Disclosure and IRC Verification Form](#) is completed before the execution of a purchase and sale agreement and sent to the Vermont Department of Health using the address on the form. Depending upon the circumstances of the sale, it may also be needed at the time of sale.

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healthvermont.gov/irc • healthvermont.gov/rrpm