

## Who we are

It doesn't matter how large or small, property damage from a fire, flood or storm is a terrible experience. At ERS (Emergency Restoration Specialists, Inc.) we have been offering restoration services throughout Southeastern Wisconsin for over 26 years. ERS understands the importance of response time. We have the experience and resources necessary to provide emergency response solutions for residential and commercial properties.

We specialize in Water and Flood Damage Restoration, Fire and Smoke Damage Restoration, Mold Remediation, Specialty (Biohazard) Cleanup and Deodorization, Complete Reconstruction and Carpet Cleaning. We provide 2-hour (or less) emergency onsite response, complete pricing by area utilizing a computerized "unit cost" estimating system, strict project management and communication, 3-year performance work guarantee, and can assist you with filing your insurance claim.

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# Your Guide To Mold Remediation



**Emergency Restoration Specialists, Inc.**

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## How can I learn more about molds?

Contact the certified and professional mold remediation technicians at Emergency Restoration Specialists, Inc. @ (414) 571-9977 or [www.removewater.com](http://www.removewater.com).

Environmental Protection Agency (EPA) at [www.epa.gov/mold](http://www.epa.gov/mold).

American Industrial Hygiene Association at [www.aiha.org](http://www.aiha.org).

Federal Emergency Management Agency (FEMA) at [www.fema.gov](http://www.fema.gov). This website has fact sheets and case studies about mold clean-up and prevention after flooding, hurricanes and other weather disasters.

## How do I ensure a job well done?

Mold remediation is based upon removing the source of the problem, preventing it from reoccurring, and cleaning up any residue. Two points to keep in mind are: (1) Remediation activities should reduce the mold population to what is normally found in not-affected indoor areas. (2) Remediation will not make an area totally free of all mold.

Remember, air testing results do not correlate well with health outcomes. However, if documentation for insurance or litigation purposes is needed, surface testing to verify contractor performance may be more useful than air sampling. It is desirable to do this inside of the containment structure before it is removed. At the end of a mold remediation project:

- There should be no visible dust, dirt, or debris in the area remediated.
- You should not see or smell any mold after the remediation is complete. If you do, consider hidden mold.
- Make sure all porous moldy materials have been removed, discarded, and replaced with clean and dry materials.
- Make sure all non-porous, previously contaminated materials have been cleaned thoroughly.
- Make sure all water leaks and moisture problems have been fixed and water can no longer collect where it's not supposed to collect.

## I think I have mold! What can I do?

Molds are natural, common, and typical in the environment. They are actually an important part of our ecosystem as they help decompose dead organic matter. However, we do not want an excess of mold growing in our homes, decomposing the structure and damaging our possessions.

### Do you have a mold problem in your home? Answer the following questions:

- Can you see visible mold growth? Look for evidence of mold in high moisture locations, especially bathrooms, kitchens, basements, and laundry areas. Keep in mind that mold can come in many colors, and look fuzzy, slimy, or sticky.
- Do you notice a musty or sour odor, especially in damp places? This is a typical sign of mold growth and would be a clue to look for evidence of mold growth.
- Do you have evidence of excess moisture, condensation, or water damage? If building materials have been damp or wet more than 24 to 48 hours, you probably have mold growth.
- Could you have hidden mold growth? If you have areas where there are water problems or you detect a musty odor, you may have hidden mold growth. Mold may be growing behind or underneath wall board, paneling, wall paper, vinyl wall coverings, carpet or furniture.

If your answers to the above questions confirm that you have a mold problem, then let's consider what to do next. Solving a mold problem is more than just cleaning. Environmental or mold experts talk about mold remediation (to remedy the matter or correct something that is deficient).

## Therefore, we need to think of mold remediation as:

- Finding and fixing the underlying water problem that led to the mold growth, including leaks, flooding and condensation.
- Mold Prevention: Can we prevent water problems in the home? How do we keep water problems from becoming mold problems?
- Mold Remediation: What do we do if we have mold in our homes?
- Cleaning and removing mold from materials and surfaces in the home.
- Disposing of mold contaminated materials that cannot reasonable and successfully be cleaned.

It is important to emphasize solving and fixing the water problem as part of a mold remediation plan. No matter how effective the mold cleaning or removal, if the water problem is not solved – the mold will return.

## Does it matter how much mold there is in my home?

Another key part of a mold remediation plan is to consider the extent of the mold contamination. This is critical to several decisions that must be made about cleaning and removing the mold. We are going to follow the protocol of the U.S. Environmental Protection Agency (EPA), which considers small, medium, and large areas of mold contamination. Let's define what is meant by the different size areas, and then we can discuss more about how the size or extent of mold contamination determines mold clean-up and removal.

## 3. Floods

If water has been standing in an indoor space for longer than 24 hours (hot weather) or 48 hours (cold weather), any porous materials that were soaked, such as carpets, furnishings and wallboard, should be discarded, as there is a strong chance that mold will be growing on these materials. Mold may also be growing on the surface of tile floor covering and sealed wood. A professional mold remediation contractor may be needed to perform an assessment to determine the extent of the damage, and to perform the remediation in a safe manner according to established guidelines.

## 4. Special Populations

If mold remediation is to occur in the home of an individual who lacks a healthy immune system (such as people with cancer, asthma, etc.), special set-ups and procedures may be needed related to the containment structure and equipment and methods used to perform the mold remediation.

These practices may be similar to remediation protocols used in hospitals and other healthcare facilities. It is important that you discuss these issues with a professional mold remediation contractor who is accustomed to doing this type of work.

## When to call a professional.

If any of the following conditions apply to your home, you may wish to consider talking to a professional mold remediation contractor.

### 1. Size of Visual Contamination

If you see more than a few isolated areas of mold, such as half of the ceiling or wall, you may need to hire professionals to perform the remediation. Small jobs, such as isolated areas smaller than 3 by 3 feet can usually be handled safely by non-professionals, as long as they are trained properly and wear proper protective gear. Information about how to safely perform remediation yourself may be found in the “Resources Section” of this guide.

### 2. Hidden Mold

If you can smell mold or a musty odor, but can't find it, it may be in an inaccessible location, such as in a wall cavity or above a suspended ceiling. It may even be hiding underneath wallpaper. It is not uncommon to find mold underneath vinyl wall covering, especially in bathrooms and rooms that are air-conditioned or have high humidity. Sometimes, the tip-off is that a household member is experiencing chronic respiratory problems that improve when they leave the building, but worsen when they return to the building. If you think you have hidden mold in your home, consider calling a professional mold remediation contractor.

### Small Area of Mold Contamination (Less than 10 Square Feet)

With attention to detail, this amount of mold contamination is safe for you to clean-up and/or remove. A minimum amount of personal protection equipment is needed and it is usually not necessary to contain or separate the mold contaminated area from the rest of the building.

### Medium Area of Mold Contamination (About 10 to 100 Square Feet)

The recommendation for this amount of mold contamination includes experience or training of the person doing the mold clean-up and/or removal, more extensive personal protection equipment, and limited containment or separation of the mold contaminated area from the rest of the building. If you are inexperienced, you may want to consider professional assistance.

### Large Area of Mold Contamination (Over 100 Square Feet)

This amount of mold contamination usually requires the services of a professional who will use full personal protection equipment and will fully contain or separate the mold contaminated area from other parts of the building. The professional should follow a recognized protocol, such as from the EPA or the Wisconsin Department of Health Services.

As you evaluate the amount of mold you have to clean and remove, do not forget to consider the possibility of hidden mold. This mold problem can greatly increase the amount or extent of a mold problem.

## Do I need to test for mold?

- If you can see mold or smell the distinctive musty odor of mold, you have mold. If you have water problems in your home that have caused building materials to become wet for extended periods of time, you probably have mold. Testing for mold will most likely not tell you anything you do not already know – you have mold, and it needs to be remediated.
- Mold testing may document the type of mold, but this usually is not an issue in remediation.
- Mold testing can confirm mold growth, but that typically is known before testing is requested.
- Mold testing cannot tell you where the mold is growing.
- Mold testing takes time and this can interfere with getting the mold cleaned and removed.

There are no governmental standards for mold levels. Therefore, mold testing cannot be used to tell whether a building is in compliance with any standards for mold control.

Occasionally, mold testing may be advised. In some situations, a health concern suggests that the mold species needs to be identified. Litigation may require testing, especially to document reduction in mold levels with cleaning and removal. If you decide to test, a professional that follows a protocol from the American Industrial Hygiene Association ([www.aiha.org](http://www.aiha.org)) or the American Conference of Governmental Industrial Hygienists ([www.acgih.org](http://www.acgih.org)) is recommended.

## Plus, the following additional protection is needed:

- Disposable overalls.
- Any clothes, shoes, or protective equipment worn in the mold contaminated area should be removed in that area and cleaned before leaving the area.
- Alternatively, clothes and equipment can be placed in plastic bags and taken outside of the building for cleaning. This is to prevent mold spores from being distributed all over the building.

Some mold damaged materials may have sentimental value, such as photographs, or may be expensive items, such as antique furniture. In these cases, it is recommended that a professional conservation specialist is consulted. Look for someone knowledgeable about furniture, art, or antiques, as appropriate to what you want to restore. Ask for references and professional affiliations.

## How can I protect myself when cleaning up mold?

Personal protection is very important when working in mold contaminated areas or cleaning and/or removing mold. Anyone in the mold contaminated area should have the same personal protection equipment.

A long sleeve shirt and long pants are suggested to protect arms and legs.

In addition, the minimum safety protection is: Gloves, preferably extending to the middle of the forearm.

If you will be using a biocide, or any chemical cleaners, check to see that your gloves are resistant to the chemical.

N-95 respirator (approved by the National Institute of Occupational Safety and Health).

Goggles or eye protection.

If working in a limited containment area, such as for a medium area of mold contamination, a half face respirator with a HEPA filter is recommended.

## What is the safe method to clean-up mold?

Anyone in a mold clean-up area needs adequate personal protection. Review the section below: “How Can I Protect Myself When Cleaning Up Mold?” before beginning remediation.

### Small Areas of Mold Contamination (Less Than About 10 Square Feet)

These recommendation assume that mold has not penetrated the surface of the materials. If the mold has grown into the materials, or the materials are water damaged, remove, seal in plastic bags, and discard as normal waste.

The following is the recommended methods for mold cleaning for most household materials. The exception is gypsum wall board (dry wall). For wall board, skip steps 1 and 2.

1. Using a wet vacuum, clean the surface to remove all visible mold. If needed, dampen work area to minimize dust that would spread mold spores.

2. Clean surfaces with a cleaner appropriate to the material.

Hard surfaces such as concrete, vinyl, laminate, linoleum, and ceramic tile can be cleaned with an all-purpose cleaner or water and detergent solution. Check the label of cleaning products for the types of surfaces that can be safely cleaned with the product.

Carpets and upholstery can be steam cleaned.

Wood should be cleaned with a cleaner specifically for wood.

3. Thoroughly dry all surfaces and materials.

4. Vacuum all surfaces with a vacuum cleaner with a HEPA (high efficiency particulate air) filter. Dispose of the contents of the filter in a sealed plastic bag.

## Medium Areas of Mold Contamination (About 10 to 100 Square Feet)

As a minimum, the area of mold needs to be a limited containment area that separates it from the rest of the building to minimize the spread of mold spores. Limited containment requires:

- Polyethylene sheeting ceiling to floor around the mold contaminated area, with a slit entry covered by a flap.
- Maintenance of negative pressure in the limited containment area by a HEPA-filtered exhaust fan.
- Blocking all supply and return air vents of the heating or cooling system in the limited containment areas.

With larger areas of mold contamination, there is likely to be materials where mold has penetrated the surface of the material. This is particularly true of cellulosic or porous materials like carpet, carpet backing, upholstery, wall board, insulation, and wood.

These materials will need to be removed and discarded. Remove all moldy material plus material extending about 12 inches around the contaminated area. Seal the moldy materials in plastic bags while in the containment area and discard as normal waste.

Once the mold contaminated area has been isolated as a limited containment area and contaminated materials are discarded, the cleaning protocol is the same as for smaller areas of mold.

## Large Areas of Mold Contamination (Over 100 Square Feet)

- As recommended above, mold contamination this extensive should be handled by a trained professional who will fully contain the mold contaminated area.

## Should I use bleach to remove mold?

Chlorine bleach is a biocide, which means that it is a disinfectant chemical that will kill germs to control infections. Bleach may kill the mold spores, but it does not remove the mold hyphae. Using bleach to clean mold may not be adequate to stop mold growth or prevent health effects from mold byproducts.

In addition, bleach evaporates easily and can affect indoor air quality. Therefore, in most situations, using a biocide to clean mold is not recommended.

Cleaning mold from flood waters or sewer back-ups is a unique situation where biocides may be used. In these situations, the water leading to mold growth was contaminated and the biocide is part of the decontamination process. It would be very important that any detergents or cleaning products used to clean and remove mold are non-ammonia, in case they mix with bleach. Bleach and ammonia will form poisonous gas.