

Department of Health

DIVISION OF PUBLIC HEALTH
Section of Epidemiology

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Mold Cleanup After Flood Events Fact Sheet

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Mold and Floods

Indoor mold can pose health risks, especially after a flood, when damp and humid conditions create the perfect environment for mold growth. Mold can begin to develop within 24 to 48 hours after water exposure, spreading quickly on walls, ceilings, and other surfaces. It is not only unsightly but can also cause respiratory issues, allergic reactions, and other health problems, particularly for those with weakened immune systems, asthma, or allergies. This fact sheet provides essential information on how to remove mold to protect your health and home following a flood.

Preparing for Clean Up

If you were evacuated due to a flood, it is crucial to wait for professionals to give the all-clear signal before re-entering your home. Ensure there are no structural damages, electrical issues, or other potential hazards that could jeopardize your health and safety. Prior to starting any cleanup efforts, reach out to your insurance company for guidance and document the condition of your home and personal belongings by taking photographs to support any future claims if needed.

Floodwater has the potential to contain harmful substances from household waste such as bleach, antifreeze, and cleaning agents, as well as industrial waste like paints and acids, which can lead to health issues. While direct skin contact with floodwater may not present a significant health risk, consuming or coming into contact with anything contaminated by floodwater can result in various illnesses. It is crucial to exercise caution, especially if you have any open cuts or wounds, by minimizing direct contact with floodwater and affected surfaces. Additional guidance on maintaining personal hygiene during emergencies can be found on the CDC website at CDC Personal Hygiene During an Emergency, along with valuable resources for staying safe in flood situations CDC Floods and Your Safety.

Frequently Asked Questions

Do I have mold in my home?

Mold may be present in a flooded home and can pose a health risk. If your house flooded and you could not dry your home, furniture, and other household items within 24-48 hours, you should assume you have mold growth. The longer the mold is left untreated, the more challenging it becomes to contain the spread and mitigate the damage. Do not delay cleaning and drying out as soon as it is safe to return.

Is it important to find out what type of mold is present in my home before cleaning it up?

No. All molds should be treated the same with respect to potential health risks and removal. It is usually a better use of resources to clean up the existing mold, and to identify and fix the moisture problem that is causing the mold growth. Standards for determining what constitutes an unhealthy amount of mold have not been established.

How do molds affect people?

Exposure to mold may cause a variety of health problems, particularly in persons with mold allergies. The health effects vary greatly, depending on the person, the amount and duration of mold exposure, and other variables. Molds can irritate the eyes, skin, nose, throat, and lungs. Persons who are allergic to mold may experience coughing, wheezing, runny nose, red eyes, and/or skin rashes. More severe reactions like fever, shortness of breath, and asthma attacks may occur in people with more serious mold allergies. People with a greatly weakened immune system are at risk of developing serious respiratory infections.

Persons who are concerned that they might be experiencing symptoms due to mold exposure should consult their health care provider.

Who should not clean mold?

People who are not recommended to clean mold include:

- Those with allergies, as they may have heightened sensitivity to molds.
- Those with compromised immune systems or underlying lung conditions who are at an increased risk of fungal infections.
- Those with chronic respiratory ailments such as asthma or chronic obstructive pulmonary disease (COPD), as they may experience difficulties with breathing when exposed to mold.

How much mold in the home is too much?

Any indoor mold growth is a problem because it can damage building materials. It is safest to treat any indoor mold growth as a "potential health hazard" that needs to be corrected because there are no health standards for mold and the health effects of mold are not well understood. Any amount or type of mold should be removed, and the moisture problem should be promptly fixed.

What is "toxic mold"?

Many molds can produce potentially harmful substances, including allergens, mycotoxins, or other compounds. The term "toxic mold" is inaccurate, and indoor molds are unlikely to be life-threatening. Much concern has been raised about a certain type of mold, *Stachybotrys chartarum*, which the media labeled as a "killer" mold because it was found in homes of infants who died of an unusual "bleeding lung disease;" however, no connection between the mold and the illness was identified.

Does any federal, state, or local agency inspect or test homes for mold in Alaska?

No. There is no state or local agency that inspects or tests homes for mold or interprets household mold test results.

What can I do to fix a mold problem in my home?

Mold cannot form or grow without a constant source of moisture. The source can be steam from the shower, condensation on windows, a leaky roof or pipe, improper weather sealing of the building, or flooding.

Best Practices for Safe Mold Cleanup

- 1. Protect yourself with the appropriate Personal Protective Equipment.
 - Wear rubber gloves, rubber boots, eye goggles, and an N95 or N100 type disposable mask (readily available for purchase at hardware stores). If you are sensitive to mold, a more protective mask may be needed. Wear outer clothing that can be easily removed in the work area and washed or tossed out.
 - Refer to CDC What to Wear Before Entering a Home or Building with Mold Damage.
 - Consider using a half-face or full-face respirator for extensive mold removal tasks, including tearing out moldy
 materials like drywall. Refer to <u>OSHA's general respiratory protection guidance</u> for proper usage.
 - Protect your eyes by wearing goggles that offer comprehensive eye protection. Select goggles designed to
 prevent dust and small particles from entering. Avoid using safety glasses or goggles with open vent holes, as
 they do not protect against dust and particles.
- 2. Remove standing water and wet materials; use a wet vacuum to remove water from floors, carpets, and hard surfaces.
- 3. Open all doors and windows when you are working and leave as many open as is safe when you leave.
- 4. Open inside doors, especially closets and interior rooms, to let air flow to all areas.
- 5. Open kitchen cabinets and bathroom vanity doors; remove drawers, wipe them clean, and stack them to dry.

- 6. Open the attic access to let air flow to the attic. Before you open the attic door, make sure nothing will fall on you.
- 7. When electricity is safe to use, use fans and dehumidifiers to remove moisture. Do not use fans if mold has already started to grow since fans can spread the mold.
- 8. Clean with water and a detergent. Remove all the mold you can see. Dry right away.
- 9. If you use cleaning products, <u>do not mix cleaning products together</u>. DO NOT mix bleach and ammonia because it can create toxic vapors.
- 10. Painting or caulking over mold will not prevent mold from growing. Fix the water problem completely and clean up all the mold before you paint or caulk.
- 11. Throw away items that cannot be cleaned and dried.
 - o Items that have absorbed moisture (porous materials) and have mold growing on them (e.g., drywall, insulation, plaster, carpet, ceiling tiles, paper, and non-solid wood products) should be thrown away.
 - Contaminated upholstery and fabrics, such as carpeting, floor padding, drapes, and furniture should be thrown away if they cannot be thoroughly cleaned.
- 12. Clean surfaces. Mold growing on non-porous or semi-porous materials, such as hard plastic, concrete, glass, metal, and solid wood can usually be cleaned.
 - Scrub all contaminated surfaces with either soap and water, a commercial mold cleaning product, or a bleach solution of no more than one cup of bleach in one gallon of water.
 - Bleach can irritate the eyes, nose, throat, and skin, so provide fresh air (ventilate) and protect the skin and eyes.
 For more information, visit CDC -How to Safely Clean and Sanitize with Bleach.
 - Bleach can also corrode and damage materials, so test the bleach solution on a small area before using.
 - Collect excess cleaning liquid with a wet/dry vacuum, mop, or sponge.
 - o Rinse the area with clean water and collect excess rinse water.
- 13. Disinfect surfaces (optional). After cleaning has removed all visible mold, disinfecting may kill any remaining mold.
 - Mix ¼ to ½ cup bleach in one gallon of water and apply to cleaned surfaces with a sponge or other method that
 does not leave excess water.
 - Collect any run-off with a clean wet/dry vacuum, sponge, or mop.
 - Do not rinse or wipe the treated area; allow the surface to dry.
- 14. Disinfect toys.
 - Make a cleaning fluid by mixing 1 cup of bleach in 5 gallons of water, wash off toys carefully with your cleaner, and let air dry.
 - If toys are unsalvageable and cannot be disinfected (e.g., stuffed animals and baby toys), throw them away.
- 15. For more information, please visit the following websites: CDC Homeowner's and Renter's Guide to Mold Cleanup After Disasters, CDC Safety Guidelines: Reentering Your Flooded Home, CDC What You Can Do to Protect Your Respiratory Health During Disaster Cleanup, and EPA Mold Remediation in Schools and Commercial Buildings Guide.

Best Practices for Preventing the Spread of Mold After Cleaning Up the Site

- Change Clothes: Before leaving the site, change into clean clothes and shoes. Ideally, this should be done outside the contaminated area to minimize the potential transfer of mold spores.
- Clean Personal Items: Wash any clothing, including work clothes, which may have come into contact with mold spores. Use hot water and laundry detergent to thoroughly clean and disinfect these items.
- Shower and Clean Up: Shower as soon as you return home to wash away any mold spores that may have settled on your body or hair.
- Clean Tools and Equipment: If you used any tools or equipment during the cleanup process, clean and disinfect them before bringing them home. Cleaning tools and equipment will prevent the further spread of mold spores.
- Inspect and Seal Items: Inspect any items you bring home for mold contamination. If possible, seal these items in plastic bags or containers to prevent the spread of mold spores.
- Ventilate and Air Out: Once you are back home, ensure good ventilation in your living space by opening windows and using fans to help circulate fresh air and reduce humidity, which can contribute to mold growth.

Additional Information

How do I control mold growth in the home?

- Keep humidity levels as low as possible, ideally no higher than 50%.
- Promptly fix leaky roofs, windows, and pipes.
- Ventilate shower, laundry, and cooking areas.
- Thoroughly and quickly clean up and dry out after a flood (ideally within 24–48 hours).

What can I do about mold in my rented home or apartment?

- If you see or smell mold in your rented home/apartment, it should be cleaned up and the moisture problem should be fixed. Inform your landlord verbally and in writing of the problem as soon as possible. Generally, the landlord is responsible for repairing moisture problems and cleaning up mold, unless it is an issue related to the tenant's behavior (e.g., using humidifiers or not using the bathroom or kitchen fans).
- There are no state or federal laws that deal specifically with mold in rental units. The rights and responsibilities of tenants and landlords with respect to mold can vary depending on the terms of the lease contract, the cause of the mold growth, and local (e.g., municipal) codes. For example, local property maintenance codes require that rental units be habitable and in good repair. If a rental unit becomes uninhabitable (not livable), this might constitute a breach of the lease. Refer to the publication, *The Alaska Landlord & Tenant Act: What it Means to You*, in the resources section below for more information.
- If you live in federal or state financed housing or are a low-income tenant, you may be able to get help from the Alaska Housing and Urban Development Office (for federal housing projects) or the Alaska Housing Finance Corporation (for state housing programs), depending on your situation. Low-income tenants may call Alaska Legal Services for help (see resources section below).

Resources

- Alaska Legal Services (free civil legal assistance for low-income Alaskans): 800-478-2230
- Alaska Housing Finance Corporation (AHFC), Division of Public Housing: 907-330-6100, 800-478-2432

State of Alaska

- Alaska Department of Law, Consumer Protection Unit, Landlord and Tenant Information
 Call: 907-269-520 or 888-576-2529 to request a copy
- Alaska Department of Health, Section of Epidemiology: 907-269-8000
- Alaska Department of Environmental Conservation: Flood Preparation and Response

Federal

- U.S. Department of Housing and Urban Development
 - o Anchorage Field Office: 907-677-9800, 877-302-9800.
 - HUD Multifamily Housing Complaint Line: 800-685-8470
 - o U.S. Department of Housing and Urban Development About Mold and Moisture