



Do I have a mold problem?

The easiest way to know is if you see mold growth. Mold growth may be found behind walls or underneath materials where water has infiltrated. Look for discoloration of drywall or plaster. If there is a musty or earthy odor, or if the house exhibits chronic moisture control problems, you can assume you have a mold problem.

General cleanup procedure

1. Wear proper safety gear.
2. Identify and fix the moisture source.
3. Remove the mold.
4. Clean, disinfect and dry the area.

It is critical to remove the source of the moisture in order to ensure that the mold growth will not return.

Removing the source of moisture and drying the area is especially important before replacing any discarded items with new materials to prevent the new materials from becoming moldy.

Mold removal

Remove all porous materials such as ceiling tile, sheetrock, carpet and insulation that exhibit mold growth. Bag and seal all moldy material before removal from the work area. A vacuum can be used to help clean up, but only a vacuum with a high efficiency particulate air (HEPA) filter should be used.

Cleanup

Clean with a non-ammonia detergent mixed with hot water:

- Scrub the entire area affected by mold.
- Use a stiff brush or cleaning pad on block walls or uneven surfaces.
- Rinse the area with clean water.
- Thoroughly dry the area as quickly as possible. Repeat the cleaning as necessary to remove the mold.

Disinfect surfaces

After removing as much of the mold as possible, a disinfectant can be used to kill mold that might remain. The most common disinfectant used by homeowners is bleach. There are other products on the market for disinfecting the area being cleaned. For the correct mixing ratio of water to disinfectant, follow manufacturer instructions (no more than 1 cup bleach /1 gallon water)

- Apply a thin coat of bleach solution to ensure that the entire area is cleaned, not just where the moisture problem occurred and the mold growth was removed.
- Use a sprayer or a sponge to apply the solution liberally, but avoid excessive amounts of runoff or standing pools.
- Allow the area to dry naturally. Drying time is important for the disinfectant to be effective at killing mold and bacteria.

What can be saved or discarded?

Porous materials such as paper, wallboard, carpet, sheetrock, and insulation that exhibit mold growth should be discarded. Because of the porous nature of these items, mold growth is typically found throughout the material, making these items very difficult to clean thoroughly. Harder-surfaced materials such as glass, plastic or metal can be kept after they are cleaned and disinfected. Foundation materials that are impractical to remove should be assessed on a case-by-case basis and may need to be inspected by a building inspector for structural damage.

The important thing to remember when considering what to keep and what to discard is that the mold needs to be removed. Simply killing the mold may be inadequate because it does not remove the mold allergens from the environment.



**WARNING! Never mix bleach and ammonia.
The fumes are toxic!**



Health Effects

Are some molds more hazardous than others?

Yes. All molds can cause health problems; however, some species of mold are more capable of causing infections than others. In addition, some molds produce mycotoxins. Although the health effects from exposure to mycotoxins are unclear at this point, people should exercise added caution when dealing with a mold species known to produce a mycotoxin.

How much mold can make me sick?

It depends. Mold spores primarily cause health problems when they become airborne and are inhaled. For some people, a relatively small number of mold spores can cause health problems. For others it may take much more. There are no health-based standards or exposure limits for mold. The basic rule is, if you can see or smell mold, take steps to eliminate the excess moisture and to clean up and remove the mold.

Who is at greater risk when exposed to mold?

Exposure to elevated concentrations of mold is not healthy for anyone. The following individuals appear to be at higher risk for adverse health effects of molds:

- Infants and children
- Elderly
- Immunocompromised patients (people with HIV infection, cancer chemotherapy, etc.)
- Pregnant women
- Individuals with existing respiratory conditions such as asthma, allergies and multiple chemical sensitivity

What are the common symptoms?

Typical symptoms (alone or in combination) include:

- Respiratory problems, i.e., difficulty breathing
- Nasal and sinus congestion
- Eye problems, such as burning, watering, reddening, blurred vision and light sensitivity
- Dry, hacking cough
- Sore throat
- Nose and throat irritation
- Shortness of breath
- Skin irritation

Exposure to mold can occur during the mold removal and cleaning stage. Whether you or a professional contractor is doing the cleanup, steps should be taken to protect the health of your family, the workers and other occupants.

Cleanup Precautions

- Have people at higher risk for health effects leave the area while the work is being done.
- Wear protective clothing (that can be cleaned thoroughly or discarded), gloves, goggles and breathing protection.
- Seal off the area as much as possible. This would include covering any air vents near the work area.
- Remove any furnishings from the area for later cleaning or disposal.
- Use negative pressure in the work area if possible, or at least provide ventilation (open window, etc.) especially when using cleaning chemicals.
- Use a HEPA air filter in the work area if one is available.

After cleaning, can there still be mold odors?

Yes. It is possible that odors may persist. Continue to dry out the area and search for any hidden areas of mold growth. If the area continues to smell musty, you may have to clean the area again. Follow the cleaning steps on this fact sheet. Continue to dry and ventilate the area. Do not replace flooring or begin to rebuild with finish materials until the area has dried completely and mold growth prevented.

For Assistance Contact:

Indoor Air Quality Program,
Division of Waste Management at
701-328-5166 or visit
<https://deq.nd.gov/WM/indoor/>

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