Mold





Mold is an environmental hazard that can occur in flood-stricken areas. With a little effort you can make yourself safer from its toxic effects.

What is mold? Molds are a form of fungi that are found everywhere, both inside and outside. Mold grows rapidly in hot and humid conditions but can also grow in cooler climates. Mold is typically found around air conditioners, bathrooms, soil, plants, and damp areas. Mold produces tiny spores that float through the air.

Where is mold found in flooded areas? Any damp surface! Porous materials such as wet insulation, carpeting, dry wall, ceiling tiles, curtains, furniture, fabric, paper, wallpaper, stuffed animals, and foods are the big mold threats.

How does mold enter the body? By mouth and breathing. People with sensitive skin may react to mold.

What are the symptoms of mold exposure? Mold can produce mild to severe health problems. Examples are stuffy nose, itchy eyes, wheezing, difficulty breathing, and rash. Mold often produces strong odors. This may make you feel nauseous or make you gag. MOLD IS A KNOWN TRIGGER OF ALLERGIES AND ASTHMA.

Where does mold harm the body? Lungs and skin.

How can you protect yourself while working in a mold contaminated area? CHILDREN, PREGNANT WOMEN, THE ELDERLY, AND ANYONE WITH AN IMMUNE SYSTEM DISEASE SHOULD NOT BE IN THE AREA WHEN REPAIRS AND CLEANING ARE TAKING PLACE.

- Wear protective clothing, waterproof gloves, protective eyewear, and a disposable shower cap (it is easy for mold to get into your hair!).
- Avoid touching your face, especially your mouth and eyes.
- Use a two-strap, tight-fitting filtering face piece or a N95 respirator when cleaning up mold.
 A STANDARD DUST MASK OR SURGICAL MASK WILL NOT PROTECT YOU.
 Ensuring a proper fit and replacement of the mask are necessary to reduce mold exposure.
- Do not attempt to clean large areas of mold. If you start cleaning and your health starts changing, get out! Call a professional.
- Be very cautious when cleaning mold because mold releases spores when it is disturbed. The area should be well ventilated when you clean but do not use a fan. Fans may spread existing mold and send more spores into the air.
- Testing is generally not necessary. Focus on removing water and mold contaminated materials.

Porous materials such as wet insulation, carpeting, dry wall, ceiling tiles, curtains, furniture, fabric, wallpaper, and stuffed animals will probably be ruined and will probably have to be thrown away. Precious documents can sometimes be saved by washing the mold off them and then drying them as thoroughly as possible. Photos can be put in a Ziploc bag and frozen until having them professionally restored, but unfortunately this is expensive. Wedding dresses and other special clothing can be hung outside uyntil dry and then sealed in a plastic bag and taken to a dry cleaner.

STEPS FOR CLEANING FLOORS, WALLS, AND OTHER HARD SURFACES

(metal, glass, ceramics, plastic, concrete, and other hard surfaces)

NOTE: All cleaning should be done using wet wiping and wet mopping.

Step 1. Before cleaning

• Remove all wet items. Everything that has been in flood water for more than 48 hours should be thrown out. If you have any doubts, then throw it out!

NOTE: There may be hidden mold in air ducts and behind walls.

Step 2: Get supplies

• You will need a scrub brush, trash bags, sponges and rags, and a non-ammonia cleaning detergent or a pine-based cleaner like Pine-Sol. Read the instructions on the product. Use clean, hot water.

Step 3: Cleaning hard surfaces

- Clean these surfaces with detergent and a scrub brush, sponge, or rag.
- Rinse the surfaces with clean water.
- After the surface is clean you need to disinfect the surface using a solution of 1 cup of bleach in 1 gallon of water.
- The bleach solution should then dry for 6 to 8 hours.
- IMPORTANT! Never mix bleach with ammonia! The fumes are very toxic!
- Put all dirty rags and sponges into a plastic bag and tape the bag closed.

Step 4: When you are finished cleaning

- After working in a moldy area you should shower and thoroughly wash your hair. Clothes that you were working in should be washed separately in a solution of freshly prepared ¼ cup household bleach in 1 gallon of clean water.
- Keep shoes and work clothes away from living area.

Source: Wayne State University Environmental Health Sciences Center, The University of Iowa Environmental Health Sciences Research Center, and the National Institute of Environmental Health Sciences **Resources:** Iowa Department of Public Health, http://www.idph.state.ia.us/adper/common/pdf/mold_facts.pdf **Contact:** Peter S. Thorne, The University of Iowa, peter-thorne@uiowa.edu