



# Mold – How to Make Your Home Mold-free and Keep It That Way

## Health Education Facts

### **Mold can provoke allergic reactions**

This fact sheet is intended as a guide to keeping your home mold free. If a home has been flooded, if there is standing water in the basement or first floor after heavy rains, or there is an ongoing leak in the house, chances are the house will have mold that can provoke allergic or asthmatic symptoms. In addition, persistent symptoms of fatigue might indicate a problem with mold.

Molds are fungi, a vegetable-like life form that reproduces from seed-like spore, which send out tiny hair-like growths that penetrate and absorb moisture from whatever they land on, especially soft, porous surfaces such as clothing or paper.

Molds are hardy life forms that don't need much food; they can survive by using the water in the atmosphere.

### **Microscopic fungus reproduces quickly**

The fungus itself is about 115,000 of an inch across. Swarms of mold spores can float invisibly in the air when someone sits on a bed or chair that has mold. Mold can start reproducing and forming new colonies within hours after landing.

Their ideal growing conditions are between 70 and 80 degrees, with high humidity and relative darkness. All they require is a little carbon such as paper, wood, or clothing, and a moisture source.

Mold is particularly likely to grow in areas that are often wet from condensation, exposed to a small leak, or the water pan under an appliance such as a refrigerator.

Humidifiers must be maintained properly so they don't become breeding places for mold. Since mold can bother people when it is breathed in, home humidifiers not only can provide a good breeding ground for mold, they also disperse it into the air.

### **After a flood**

If a home has been flooded, mold problems can be extensive, and a homeowner must take care of contaminated materials immediately. Wet materials are a breeding ground for bacteria and mold.

Taking care of your home and the residents in

it entails cleaning and disinfecting; sometimes material has to be discarded. Parts of the house or furniture that came into contact with water are obvious potential problem spots, but the moisture could have affected upper floors and other parts of the house as well, so it is advisable to check for mold throughout the house.

The nose is one efficient indicator, for a musty smell can mean mold is in the air.

Basically, to eliminate a mold problem and prevent reinfection involves several steps:

- C Killing off the spores and colonies by washing with water, chlorine, and detergent;
- C Cleaning other sites that may store mold spores so they can't release spores and re-infect the cleaned sites;
- C Finding and eliminating the sources of excessive water;
- C Keeping surfaces clean; and
- C Providing good ventilation.

### **Dry out and clean**

First dry out your home and clean surfaces thoroughly. Under warm, wet conditions, mold requires only hours to multiply by hundreds, then thousands. To keep mold from forming and spreading, it is important to disinfect, clean, and dry surfaces.

**Carpets and Rugs:** Carpets and rugs that have been contaminated by flood water are perfect breeding places for mold and should be taken care of immediately. They also can ruin the wood flooring beneath them if they remain wet.

If a carpet has been flooded, the pad should be discarded. Generally, it is best to throw out the carpet as well. Place a carpet or parts of a carpet on plastic for easier dragging, as soaked carpet is hard to move.

A carpet that just smells moldy can be thoroughly vacuumed, but using a conventional sweeper can make the problem worse because it disperses the mildew and bacteria into the **air**. **The vacuum should be exhausted directly to the outdoors or on a truck outside.**

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### **Walls and ceilings**

Walls and ceilings in mold-troubled houses need to be cleaned not only after any flooding but each year thereafter. Surfaces should be cleaned with a solution of one part chlorine bleach to two parts of water, with enough dishwashing detergent included to cut through and clean off grime and oils in one swipe. Be sure not to mix the chlorine with ammonia; this combination produces toxic fumes.

Walls should be repainted after they are thoroughly cleaned and dried. Add about one cup of baking soda per gallon of paint to decrease the possibility of mold reforming and to decrease any lingering mold odor.

### **Furniture and other household material**

Identify moldy items. Anything that has been wet or subjected to long periods of dampness, such as items in a basement, should be either discarded or decontaminated. Washing clothes in chlorine bleach or borateen helps remove odors and mildew.

To decontaminate surfaces, use a 5 percent solution of chlorine bleach. For moldy areas, the bleach should be reapplied often enough that the area stays wet at least 15 minutes.

Use the diluted solution to clean any remaining dirt and mold. Always make sure there is plenty of ventilation when using chlorine bleach solutions. Dry the area rapidly to prevent mold regrowth.

### **Protect yourself when cleaning**

Mold spores can cause asthmatic or hay fever-like reactions if they are inhaled. In tackling mold, protect yourself from inhaling the spore.

Where there is little or no visible mold, use a “comfort mask” that covers your nose and mouth. These are inexpensive and disposable and should be changed every few hours.

People working in places where heavy mold is present might want to use a full-face approved respirator to be sure no spores are inhaled.

### **Eliminate the source**

Eliminating moisture means repairing all leaks permanently, especially those in the basement, and making sure there is no stagnant water in the home. Check the basement regularly for pools of water or water drips or leaks. Regularly clean the water pan from appliances such as under a refrigerator.

Other ways to reduce moisture include using exhaust fans while cooking or bathing. Vents on clothes dryers should go to the outside.

Reducing humidity and cleaning contaminated surfaces should eliminate the growth of mold. There is more mold in houses that have a lot of shade, organic material, and landscaping near them.