



## Mold after a Flood

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When the power goes off for several days in hot, humid climates, it is difficult to avoid an explosion of mold growth. Mold growth is common after flooding or water damage.

Under the right conditions, molds produce spores that spread easily through the air and form new mold growths (colonies). These conditions are moisture, nutrients (nearly anything organic) and a place to grow.

Mold can damage your home, possessions and health. The longer you allow mold to grow, the greater the risk and the more difficult the cleanup. **So as soon as it is safe to return home, begin cleaning and drying your home and possessions.**

Usually you do not need to have the mold tested; such tests are rarely useful to answer questions about health concerns. However, some insurance companies and legal services may require sampling for documentation.

The best way to avoid mold hazards is to hire a reputable firm that is licensed and trained in dealing with water damage and mold remediation. As that may be difficult after a disaster, you may have to do the cleanup yourself. If so, follow the steps below.

### After a flood

**First take an inventory:** Compile a room-by-room inventory of missing or damaged goods, and include prices, manufacturer's names, and dates and places of purchases. Take photographs to document the damages for insurance purposes.

**Dry all wet materials as quickly as possible.** If possible, use air conditioning or heat with fans and dehumidifiers. If you have no power and can get access to a generator, use the generator to run a dehumidifier indoors to help remove moisture from the air. New mold colonies can form in as little as 3 days if materials stay wet. Even if the wood and other materials look dry, they can still be wet enough to support re-growth.

**Remove wet carpeting right away.** It's best to discard wet carpeting. If you do salvage it, clean, disinfect and dry it quickly. Never reuse flooded padding.

**Cut away wet wallboard and remove all damp insulation immediately**—even if the wallboard appears to be dry. Wet insulation stays wet for too long, allowing the growth of hidden, unhealthy mold and decay fungi inside the walls.

**Clean items with nonphosphate detergents** (any phosphate residue is mold food). If you disinfect them, follow the directions carefully and never mix bleach with ammonia or acids (such as vinegar). Although disinfectants can kill molds, they do not prevent regrowth.

**Do all you can to speed the drying of subfloors, slabs and wall framing** before replacing insulation, wallboard and flooring. Use air conditioning, heaters, fans or, better yet, a dehumidifier. Contractors that specialize in water damage restoration have special equipment (dehumidifying blowers) that can provide the fastest drying.

**Use a moisture meter to test the moisture content of studs and sheathing** if possible before replacing insulation. Wood-products specialists recommend that wood have no more than 14 percent moisture by weight before you close the wall.

**DO NOT use vinyl wallpaper.** It will prevent further drying on the inside.

### [Mold cleanup guidelines](#)

**Minimize your exposure during cleanup.** People are exposed to mold by breathing spores or fragments. They can also be exposed through skin contact.

Wear gloves and a mask (N-95 or better) or a respirator to filter out mold spores. If you are sensitive to mold, wear splash goggles to help protect your eyes. Wear long sleeves, long pants and sturdy shoes.

**Isolate the work area and ventilate it to outdoors.** Because disturbing mold colonies can cause a massive release of spores, seal off the contaminated area from the rest of the house. If the power is on, use a fan to send air to the outdoors. If you have no power, ventilate the area if the outside humidity level is not above 60 percent.

**Remove and discard moldy materials.** Porous materials that are moldy or sewage contaminated should be removed, bagged and thrown away. This includes paper, insulation, plaster, carpet, carpet padding, ceiling tiles, gypsum wallboard and processed wood products. To minimize the spread of spores, cover the moldy material with plastic to contain the spores before removal.

Items that can be cleaned in a washing machine likely can be saved, depending on how long the mold has been growing on them. Extended periods of mold or mildew growth may stain them.

Discard upholstered fabric furniture if it has been in a flood. If it has only surface mold on it, you might be able to clean it outdoors by letting the mold dry in the sun and then cleaning it with a HEPA-filtered vacuum.

### **Clean all surfaces.**

Surface mold can usually be cleaned from nonporous materials such as hard plastic, concrete, glass, metal and solid wood. The cleaning must remove—not just kill—the mold because dead spores can still cause health problems.

After cleaning, you may choose to use a disinfectant to kill any mold missed by the cleaning. In the case of sewage contamination, you must disinfect. Use 1 cup of bleach to 1 gallon of water solution.

Always handle bleach with caution. Never mix it with ammonia; test on a small area before treatment.

Do not use bleach in the air system. Instead, use milder, less corrosive disinfectants such as alcohols, disinfecting cleaners and hydrogen peroxide.

You may wish to consult a specialist if you are unsure about how to clean an item, or if the item is expensive or of sentimental value. Phone books often have listings of specialists in furniture repair, restoration, painting, art restoration and conservation, carpet and rug cleaning, water damage, and fire or water restoration. Look for specialists who are affiliated with professional organizations. Be sure to ask for and check references.

### Remain on mold alert

Continue looking for signs of moisture or new mold growth. If the mold returns, repeat the cleaning and consider using speed drying equipment and moisture meters. Re-growth may signal that the material was not dry enough or should be removed. Wait to rebuild and refurnish until all the affected materials have dried completely.

Adapted from “Avoiding Mold Hazards in Your Flooded Home,” by Claudette Hanks Reichel, Professor and Extension Housing Specialist, Louisiana State University Ag Center.

