

Housing Fact Sheet

Controlling Mold Growth in the Home

Molds naturally grow indoors. Mold spores may enter the house through open doorways and windows, or heating, ventilation and air conditioning systems. Spores in the air outside can attach themselves to people and animals, making clothing, shoes, bags and pets convenient vehicles for carrying mold indoors. Although mold spores are too small to be seen, colonies of mold growth are sometimes visible on damp walls and musty-smelling textiles. Many kinds of mold give off a musty odor.

Mildew is one type of mold that can often be seen. Mold spores will grow if they find moisture – such leaks in roofs, pipes, walls, plant pots, or areas that have flooded – and nutrients. These nutrients can come from many sources, including wet cellulose materials such as paper and paper products, cardboard, ceiling tiles, wood and wood products, paints, wallpaper, insulation materials, drywall, carpet, fabric and upholstery.

In most cases, testing for mold growth in a home is not practical. Since standards for “acceptable” levels of mold in a dwelling don’t exist, testing usually just compares levels of mold spores inside the house with levels outside the house. Generally, the better plan is to look for mold in those places where conditions promote mold growth.

No matter what kind it is, mold growing inside homes and buildings indicates a problem with water or moisture. Fixing this problem is the first step.

After the source of moisture is removed, the next step is cleaning up the mold already growing.

To clean mold off surfaces, use a weak bleach solution. If mold is growing under carpets, the carpets usually need to be removed. Removal and replacement is the only way to deal with mold growing in insulation or wallboard.

The Center for Disease Control does not recommend taking any different precautions with *Stachybotrys chartarum*, than with other molds unless an extensive area is affected.

with water mixed with chlorine bleach, diluted 10 parts water to 1 part bleach, is necessary to prevent mold growth. Never mix bleach with ammonia. Moldy items should be discarded.

Once you know that you have a mold problem the following steps are recommended for general clean-up:

1. Identify and correct the moisture source.
2. Clean, disinfect, and dry the moldy area.
3. Bag and dispose any material that has moldy residues, such as rags, paper, leaves or debris.

To prevent further damage from mold, regularly check for moisture condensation on windows, cracks on plasterboard, loose drywall tape, warped wood and musty odor. If these problems occur, eliminate the source of water penetration as quickly as possible.

Removal of Moldy Materials

After repairing the moisture source and removing excess moisture, the cleanup can begin:

- Wear an "N95" disposable respirator to protect lungs. Ordinary "nuisance dust" masks are not sufficient.
- Wear gloves when handling moldy materials.
- Remove porous materials, such as ceiling tiles, sheet rock, carpeting, wood products.
- Carpeting can be a difficult problem – drying does not remove the dead spores. If the mold infestation is heavy, consider disposing of the carpet.
- Bag and discard the moldy substances.
- Allow the area to dry two or three days. Moisture in studs should not exceed 15 percent.
- Remove all flooded sheet rock to at least 12 inches above the high water mark. Visually inspect the wall interior and remove any other intrusive molds. Check insulation to be sure it is not wet at the point where it is removed. (This step may have to be carried out by a licensed contractor.)

Soap Cleanup

Before disinfecting contaminated area, clean the areas to remove as much of the mold (and its nutrient source) as possible.

- Wear gloves and N-95 disposable respirator when doing this cleanup.
- Use a non-ammonia soap or detergent, or a commercial cleaner, in hot water, and scrub the entire area affected by the mold.
- Use a stiff brush or cleaning pad on block walls or uneven surfaces.
- Rinse clean with water. A wet/dry vacuum is handy for this.

Disinfect Surfaces

- Wear gloves and N-95 disposable respirator when using disinfectants.

- After thorough cleaning and rinsing, disinfect the area with a solution of 10 percent household bleach (one and a half cups bleach per gallon of water). Using bleach straight from the bottle will not be more effective.
- **Never mix bleach with ammonia – fumes are toxic.**
- Use a garden hose and nozzle for spraying exterior large areas.
- When disinfecting a large structure, make sure the entire surface is wet (floors, joists and posts).
- Avoid excessive amounts of runoff or standing bleach.
- Let disinfecting areas dry naturally overnight to kill all the mold.

Exposure to mold can occur during the cleaning stage. Mold counts can be 10 to 1,000 times higher than background levels during the cleaning of mold damaged materials. Take steps to protect your health during cleanup:

- When handling or cleaning moldy materials, consider using a mask or respirator to protect from airborne spores. Respirators can be purchased from hardware stores; select one for particle removal (sometimes referred to as a N95 or TC-21C particulate respirator). Respirators are not as effective removing bleach fumes, so minimize your exposure when using bleach or other disinfectants.
- Wear protective clothing that is easily cleaned or discarded.
- Use rubber gloves.
- Clean a small test patch of mold first. If your health is adversely affected, consider paying a licensed contractor or professional to carry out the work.
- Ask family members or bystanders to leave areas when being cleaned.
- Work over short time spans and rest in a fresh air location.
- Air your house out well during and after the work.

If the repair work is going to be a bigger job than you want to handle, consider hiring a licensed contractor or professional to carry out the work. When choosing a contractor, solicit three bids, select a person you can work with, and ask the contractor to give you an estimate on the amount of time it will take to repair the damage. Never give the contractor more than one third of the amount of money down when beginning a job. If you have any questions about a contractor, contact the Better Business Bureau for more information.