

METROSOUTH 2005

# HomeWorks

## SOURCEBOOK

The Insider's Guide to the Best Home & Garden Professionals

## Mold School

PREVENTING & REPAIRING MOLD DAMAGE  
BY DAVE CROWLEY

**M**old damage to homes is a large problem for property owners and insurance companies. Molds are fungi that reproduce by releasing tiny spores into the air. When spores land on moist objects they may begin to grow. There are thousands of different types of mold and we encounter many of them every day, inside and outdoors.

Floating particles of mold are invisible to the naked eye, so it is impossible to see where they have landed unless they begin to grow. Loose mold particles that accumulate on items within a house are easily inhaled and can be a constant irritation to the people and pets living there.

The toxic mold we hear about most often is *Stachybotrys chartarum*. This slimy, greenish-black mold grows on moisture-laden materials that contain cellulose, such as wood, paper, dry-wall, and other similar products. It does not grow on tile or cement. Standard industry practice is to have zero tolerance for the presence of *Stachybotrys* and mold remediators look to remove all water-damaged cellular matter in the area.

### WHERE DOES IT GROW?

Outdoors there is a large amount of air to dilute the effects of mold growth. As a result, outside levels or quantities of mold are considered normal, and the amount of mold spores in the air do not cause people health problems.

However, inside your home there is a measurable quantity of mold spores in the air.

Moisture and mold damage happens when there is some combination of high humidity and poor ventilation, poor construction, malfunctioning appliances, or water leaks left unattended for a long time. When moisture and a food source like wall-board, paper or wood is left unattended for over 48 hours or so, the mold spores multiply and problems begin. It starts as microscopic spore colonies. As the numbers grow, the mold

becomes visible and the material that it is growing on gets damaged.

Other problem areas in the home are bathroom exhaust-fans venting moist air into the attic rather than being piped outside, clothes dryer vents blocked or dumping moisture inside the home, poorly designed finished basements, and incomplete or improper flood clean-ups.

### INSURANCE COVERAGE

Insurance companies only pay for repairs to damaged materials if the moisture problem was the result of an incident named as a "covered peril" in the policy. Insurance will usually pay for mold damage caused by broken pipes, possibly undetected roof leaks, or water heater flooding. Insurance language and underwriting guidelines vary between companies. Mold damage resulting from groundwater leaks in the basement or poor ventilation in the attic, for example, are considered maintenance issues and are not "covered perils."

### REMEDIATION

The first step in mold remediation is to stop the water, or it will just come right back. It is important that every person entering the clean-up area during a project wear appropriate personal protection equipment including gloves and facemask respirators.

On larger projects, a containment envelope of plastic is set around the affected area. The containment is kept under negative pressure with a HEPA (High Efficiency Particle Arrestor) filtered fan exhausting outside of the building. This reduces the amount of contaminants in the air during remediation and prevents the spread of contamination to the rest of the building.

The area should be HEPA vacuumed to remove surface spores and loose contaminated material. Next, the mold is physically removed by cutting out the affected materials, and washing/scrubbing it away. Having a professional certified mold remediator (CMR) is important if the area in question is larger than 10 square feet. Many people think they can just spray the area with a bleach solution to take care of the problem. This is not correct. Even dead spores are a danger to people. The mold must be physically removed.

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On larger projects, every surface of the affected area is “Ice Blasted” to remove any surface contamination. Ice Blasting is an environmentally friendly coating removal process where practically any surface or substrate can be cleaned or stripped. Ice Blasting is similar to sandblasting except dry ice is used as the medium, removing most coatings/ rust/paints without significantly damaging the substrate. Ice blasting requires specialized high-pressure air preparation and blasting equipment.

Once the moldy area is cleaned, professionals will usually encapsulate (paint with an Acrylic sealer) the affected areas to seal residual spores in and keep water out. At this point in larger projects, air quality samples are taken and sent to a microbiology laboratory for analysis. The results tell the mold remediator if the area is clean. 🏠

*Dave Crowley is President of Abby Restoration, Inc, a large disaster repair contractor in Quincy. Abby Restoration, Inc has “Certified Mold Remediators” on staff, is certified by the Indoor Air Quality Association, and has extensive experience repairing mold contamination.*