Mold 101: What property owners should know

Dyke Whyard
Mold is everywhere. Mold has been around forever. Why is it a problem now? Concern about indoor exposure to what has been called "toxic mold" is increasing as the public becomes more aware. High-profile owners such as Erin Brockovich and Ed McMahon contended with the problem of dangerous levels of mold growth such that sections of their homes had to be partitioned off. A family in California torched their home to get rid of it, while a jury awarded another family $32 million because of it.
In fact, we have all gone into areas of our homes or offices where we see dark, dirt-like material clinging to surfaces in somewhat inconspicuous places or walked into our basements and smelled the distinctive musty odor.
The term "toxic mold" is not an accident. Certain species of molds produce allergens that cause allergic reactions in individuals who may suffer long-term exposure to higher levels of these mold spores. Other mold species break down organic matter while growing, producing toxic substances called mycotoxins. Most of the adverse reactions by individuals exposed by these "toxic molds" have a history of allergies or respiratory problems.

How the problem spreads
More than 10,000 species of mold exist in the world today. Mold spores are in everything that is porous and live on organic substances such as those found in many building materials. Molds are members of the family of plants known as fungi and reproduce through spores. The spores germinate wherever they find a food source, being virtually any organic substance, and moisture.
These mold spores are carried throughout the structure, in many cases, by means of the ventilation system. Mold spores are naturally present in building materials such as drywall, insulation, wood, concrete, ceiling tiles and carpet. They can lie dormant until they find sufficient moisture to grow, which can begin in as quickly as 24-48 hours. Excessive moisture in a
building can be caused by a number of reasons. Many are directly related to improper construction, but just as many are caused by poor maintenance. A large number of problems occur from leaking pipes within walls that go unnoticed. Over a period of time, mold growth occurs behind vinyl wall coverings and spreads. Other cases occur from flooding of dwellings without adequate drying of the interior before returning to live in the house, or a leak in the roof that soaks ceiling materials in areas without adequate ventilation. Elevated moisture levels in a home can occur in many different ways. Therefore, all owners should conduct periodic inspections and maintenance as needed to correct any problems encountered. Some items to be aware of include:

- Leaks in plumbing and within roofing systems;
- Watch for condensation and wet spots in poorly ventilated areas;
- Maintain a comfortable temperature in your building, but reduce indoor humidity levels when possible (levels below 60 percent are recommended);
- Vent to the outside moisture-creating appliances like dryers and areas such as showers;
- Inspect basement walls and at the base of any finished basement wall for evidence of water seepage;
- Use fans, dehumidifiers and other means to thoroughly dry any damp and porous surface as quickly as possible.

**What you can do**

Owners should be diligent in their efforts to minimize the risk to their families, occupants, employees and, especially, themselves. If you encounter evidence of mold growth, try not to touch the mold with the bare hands, avoid getting the mold spores in your eyes (such as contamination in a ceiling when working over your head), and use some sort of respiratory protection such as a dust mask for minor problems.

In all cases of major contamination, consult a professional before making any attempt to remediate the problem yourself. The spores could be carried to other areas of the dwelling, causing greater problems.

On minor growth areas around window seats and bathroom corners, one can mitigate the problem with simple cleaning.

On larger situations where building materials are involved and visibly contaminated, in most cases, removal of the item and replacement is the best option. Once the spores become imbedded in the material, such as sheetrock, cleaning with bleach or detergent attacks only the surface and leaves the mold within the interior of the material to return once conditions are right.

The current explosion of mold litigation has led many insurance companies to exclude coverage for remediation due to contamination by mold. Builders find it more difficult to find coverage for their services when it comes to mold as well.

All of this places a larger burden of responsibility on the owner for their own protection when it comes to mold-related issues. Simple inspection using sight and smell are the best ways to detect the presence of mold in the home or office. If you are concerned about any dwelling, contact a local professional to discuss what actions you should take.
For additional information, any owner can view the Environmental Protection Agency publication, "A Brief Guide to Mold, Moisture, and Your Home," on the agency's Web site, [www.epa.gov](http://www.epa.gov).

_Dyke Whyard is an environmental professional with Bhate Engineering Corp. (www.bhate-eng.com) in Birmingham. He can be reached at (205) 591-7062 or dwhyard@bhate-eng.com._

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