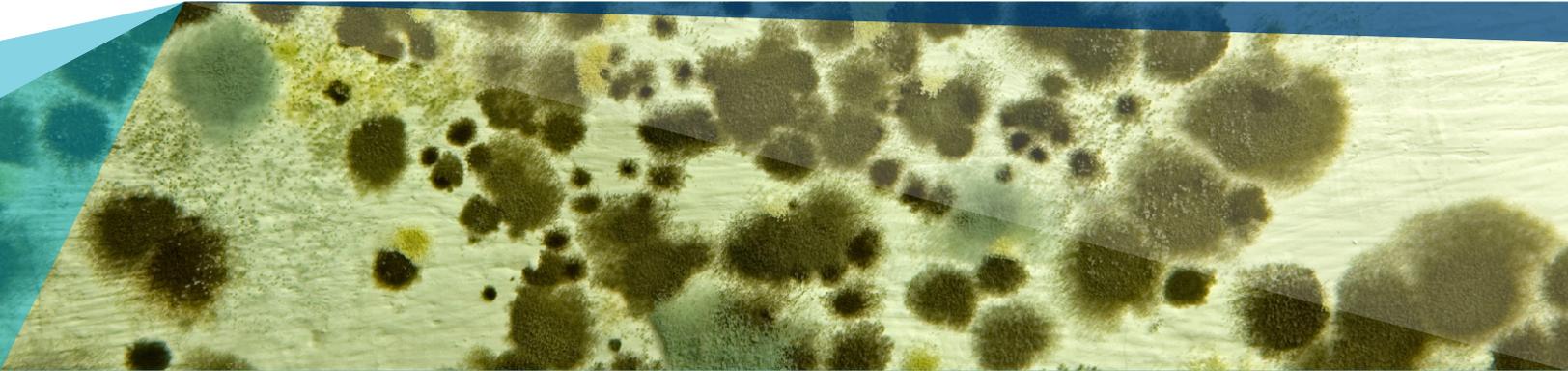


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MANAGING THE RISKS OF MOULD



Toxic mould has become a preeminent concern for property owners and managers. However, mould contamination can be prevented through measures that control moisture, and respond efficiently to a water leak or discovery of an emerging mould condition.

The term “**mould**” or “**mold**” describes more than a million species of microscopic fungi that grow on wet organic matter. Its many varieties can be found naturally outdoors as well as in indoor environments. As a rule, “healthy” buildings contain levels of mould similarly found in outdoor environments. When excess moisture is present, mould problems can spread and reproduce rapidly.

FOR MOULD TO GROW IT REQUIRES OXYGEN PLUS:

- Temperate climate (typically above 70 degrees Fahrenheit);
- Existence of nutrient source such as wood, paper, or other cellulose or carbon-based material; and
- Moisture (high humidity rather than pooled or running/dripping water is sufficient).

When these criteria are satisfied, mould growth can begin within 48 hours. Once mould growth begins, the problem becomes more complicated.

Mould reproduces by specialized microscopic cells called spores. Most spores are very buoyant and dispersed by

air movement. Some spores may remain viable for several years. A single spore can form a new colony which, within a few days, can release trillions of additional spores.

TEN THINGS YOU SHOULD KNOW ABOUT MOULD

1. Potential health effects and symptoms associated with mould exposures include allergic reactions, asthma, and other respiratory complaints.
2. There is no practical way to eliminate all moulds and mould spores in the indoor environment; the way to control indoor mould growth is to control moisture.

3. If mould is a problem, then it must be cleaned up and sources of moisture eliminated.
4. Fix the source of the water problem or leak to prevent mould growth.
5. Maintain indoor humidity (to 30-60 percent) to decrease mould growth by:
 - Venting bathrooms, dryers, and other moisture-generating sources to the outside;
 - Using air conditioners and dehumidifiers;
 - Increasing ventilation; and
 - Using exhaust fans whenever cooking, dishwashing, and cleaning.
6. Clean and dry any damp or wet building materials and furnishings within 24-48 hours to prevent mould growth.
7. Clean mould off hard surfaces with water and detergent, and dry completely. Absorbent materials such as ceiling tiles, that are mouldy, may need to be replaced.
8. Prevent condensation – Reduce the potential for condensation on cold surfaces (i.e. windows, piping, exterior walls, roof, or floors) by adding insulation.

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- In areas where there is a perpetual moisture problem, do not install carpeting (i.e. by drinking fountains or on concrete floors with leaks or frequent condensation).
- Mould can be found almost anywhere and can grow on virtually any substance providing moisture is present. There are moulds that can grow on wood, paper, carpet, and foods.

HEALTH HAZARDS

Moulds can produce a variety of allergenic substances, odorous chemicals, and toxic metabolites. When it multiplies and spreads indoors, high levels of mould can cause a spectrum of undesirable health effects. People are mainly exposed to mould by inhaling spores and skin/eye contact as mould, when growing, also releases chemicals to the air which people breathe. Tolerance/susceptibility to moulds varies in the population, hence health impacts can vary greatly from person to person. Irritations and allergic symptoms are the most common problems (e.g. mucous membrane irritation, rhinitis, and rashes). More severe effects (e.g. asthma attacks, hypersensitivity pneumonitis, infections, or toxic reactions) may also occur. Individuals who are more susceptible include those with respiratory problems, compromised immune systems, the elderly, and the very young.

IDENTIFYING MOULD

Discolouration - Discoloration is a sign of mould. However, all discoloration is not due to mould. Carpeting near baseboards, for example, can be stained by outdoor pollution entering the home. Stains or soot may also be caused by the smoke from burning candles or cigarettes.

Mould may be any colour: black, white, red, orange, yellow, blue, or violet. Dab a drop of household bleach onto a suspected spot. If the stain loses its colour or disappears, it may be mould. If there is no change, it probably isn't mould.

Smell/Odour - Sometimes moulds are hidden and cannot be seen. A musty or earthy smell often indicates the presence of moulds. But a smell may not be present for all moulds. Even when you don't notice a smell, wet spots, dampness, or evidence of a water leak are indications of moisture problems and mould may follow.

PREVENTING MOULD

The key to mould prevention is moisture control. Since mould cannot develop without a source of moisture, it is imperative to respond promptly to signs of moisture, leaks, or spills. All claims of water intrusion or suspected mould should be immediately reported and maintenance/engineering should respond to the work order immediately.

Buildings should be inspected for signs of mould, moisture, leaks, or spills. This includes looking for water stains or discoloration on the ceiling, walls, floors,

and window sills, and looking for standing water, water stains, or mould around and under sinks and in bathrooms. The mechanical room and roof should be checked for unsanitary conditions, leaks, or spills. Water should not be permitted to stand in air conditioning or refrigerator drip pans.

Humidity levels and dampness should be controlled through adequate ventilation and by using air conditioners and dehumidifiers. Condensation on cold surfaces (i.e. windows, piping, exterior walls, roof, or floors) can be reduced by adding insulation.

Carpeting should not be installed in areas where there is a perpetual moisture problem.

Spots and stains on floors and carpets should be removed immediately, using the flooring manufacturer's recommended techniques. Care should be taken to prevent excess moisture or cleaning residue accumulation on floors and carpets and to ensure that cleaned areas are dried quickly.

Marsh can assist clients in their mould risk management initiatives through

- Risk awareness briefings;
- Workshops and/or on-line training;
- Mould self-inspection programs and tools;
- Design of mould risk management plans; and
- Development of mould response plans.

For more information, please contact:

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