

## What You Can Do to Reduce Mold Growth

### Where Can You Find Mold?

Molds and mildews are fungi that are found almost everywhere, both indoors and outdoors. They can grow on the surfaces of objects, within pores, and in deteriorated materials, as long as favorable conditions are present. Elevated levels of airborne mold spores can lead to allergic reactions in susceptible individuals and potentially to other health effects as well. While it is impossible to eliminate all mold and mold spores in the indoor environment, mold growth can be controlled indoors by controlling moisture indoors.

### Necessary Conditions for Mold Growth:

- Temperature range above 40° F and below 100° F
- Mold spores
- Nutrient base (most surfaces contain nutrients)
- Moisture (water or high humidity)

Human comfort constraints limit the use of temperature control. Spores are almost always present in outdoor and indoor air. Almost all commonly used construction materials and furnishings, including wood, paper, carpet, foods and insulation, can provide nutrients to support mold growth. Moisture control is the key strategy for reducing mold growth.

Mold can be white, green, black, yellow, brown, or orange. The texture can vary between appearing like powder, cotton, velvet, or tar-like. Mold can look like spots on an area, or cover an entire area, and it can smell musty. If you can find visible mold growth, please contact Facilities Solution Center at 413-545-6401 or submit a work request through <https://www.umass.edu/facilities/requests> to request cleaning for your area and remediation of the water source. If you do not see visible mold but you suspect a problem, please contact EH&S at 413-545-2682 to identify any potential issues.

### Tips for Reducing the Risk of Mold Growth:

- Please report any water leaks, including roofs, windows, wall repairs, plumbing, dripping pans, and wet carpet, to Facilities Solution Center at 413-545-6401 or submit a Work Order through <https://www.umass.edu/facilities/requests>.
- Any porous material in a building that has been microbially contaminated should be discarded; disinfection is rarely effective. Contaminated insulation, ceiling tiles and rugs must be removed. Smooth surface materials that have become contaminated can be

cleaned with a biocide and have them dry completely. Building materials cannot be thoroughly dried should be removed.

- Clean and dry damp or wet building materials and furnishings, including carpeting and drywall, as soon as possible to prevent mold growth. Dehumidifiers and fans should be used in areas that do not have high air change rates. Carpeting must be thoroughly dried when wetted as soon as possible. As much water as possible should be suctioned from wet carpets followed by the use of fans and dehumidifiers to ensure appropriate drying. Carpeting should never be used in areas such as on-grade concrete floors where persistent moisture is present. EH&S can assess moisture levels in materials. Contact us if you have any concerns at 413-545-2682.
- Ensure ventilation is adequate for the space. Keep room air vents/grills (where applicable) in all areas open and unobstructed to maintain proper airflow. Contact the Facilities Solution Center at 413-545-6401 or submit a work request to <https://www.umass.edu/facilities/requests> if you suspect problems with air handlers. For spaces that rely on natural ventilation, opening windows and using fans can be used to improve air circulation.
- Vent moisture generating sources, such as clothes dryers, to the outside. Exhaust from high moisture areas such as kitchens and shower areas should also be directed outside.
- Indoor relative humidity should be maintained between 20-60%. If ventilation and heating/air conditioning units are not sufficient, humidifiers/dehumidifiers may be necessary. Please see the EH&S fact sheet on humidifiers and dehumidifiers (<https://ehs.umass.edu/humidifiers-and-dehumidifiers-fact-sheet>) for more information. If you have concerns about relative humidity in your workspace, contact EH&S at 413-545-2682.
- Reduce the potential for condensation on cold surfaces, such as windows, piping, exterior walls, roof, or floors, by adding insulation. Increase air circulation of warmer dry air can also increase the material's surface temperature and prevent condensation.
- Do not pile wet towels, clothes, or other materials. Wet items should be dried or removed from spaces as soon as possible.
- If you are experiencing a mold/mildew problem, the moisture source must be identified and controlled or abated. Please contact Facilities Solution Center at 413-545-6401 or submit a work request through <https://www.umass.edu/facilities/requests>.

#### References and Additional Resources:

1. OSHA: <https://www.osha.gov/SLTC/molds/>
2. EPA: <https://www.epa.gov/mold>
3. CDC: [https://www.cdc.gov/mold/control\\_mold.htm](https://www.cdc.gov/mold/control_mold.htm)
4. AIHA: <https://www.aiha.org/taxonomy/biological-hazards/mold>