

Management Tools for a Healthy Learning Environment

Mighty Molds

Molds are micro-organisms that live everywhere, indoors and outdoors. In order to grow and reproduce, they need a food source -- any organic material, such as leaves, wood, paper, or dirt -- and moisture. Molds can be many colors -- green, gray, brown, black or white. They release tiny, lightweight spores which travel through the air. Some common indoor molds are *Cladosporium*, *Penicillium*, *Aspergillus*, and *Alternaria*. *Stachybotrys chartarum*, also known as *Stachybotrys atra*, is a greenish-black mold. For control, you don't need to determine what type of mold you may have, but you do need to take steps to prevent and eliminate it.

All molds should be treated with respect to potential health risks. If mold contamination in a building is extensive, many spores can be released into the air. People exposed to these spores can become sensitized and develop allergies to the mold or other health problems. Individuals with immune suppression may be at increased risk. If you or your family members have these conditions, contact a qualified medical clinician for diagnosis and treatment. Allergy clinics can test for mold-related allergies.



Above:
Mold growing in closet as a result of condensation from room air.

www.epa.gov/mold/



Above:
Alternaria spores
(photo by D.J. Young)



Right:
Penicillium in culture
(photo Bugwood.org)



Right:
Aspergillus spores

Examples of some common indoor molds.

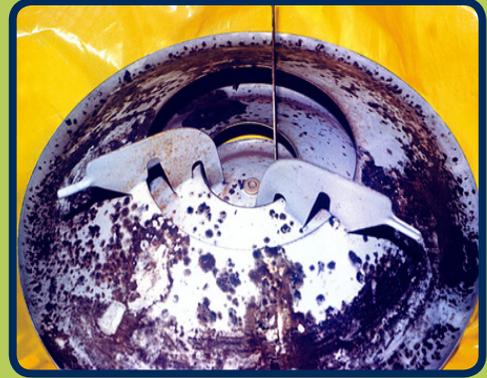
Did You Know?

Mold grows under carpeting, inside walls, above ceiling tiles or inside ventilation equipment — wherever there is enough moisture to support growth. Look for:

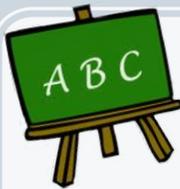
- Plumbing leaks, flooding, and leaky roofs.
- Sprinkler spray hitting the building.
- Damp basement or crawl space.
- Steam from shower or cooking.
- Wet clothes drying indoors or clothes dryers exhausting indoors.



Left:
Mold on painted concrete in a school building. Rainwater is wicking directly through the concrete walls, and there is also condensation on the earth-chilled concrete. The floor is about 3 feet below ground level. (photo by Terry Brennan)



Above:
Mold growth on air diffuser in ceiling.
www.epa.gov/mold/



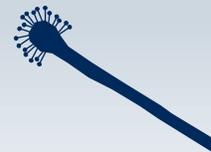
Managing Molds With Integrated Pest Management

- Regularly inspect all school buildings for signs of mold, moisture, leaks or spills.
- Identify and correct high moisture conditions quickly. Dry all wet areas within 24 to 48 hours.
- Eliminate sources of moisture by reducing indoor humidity — maintain indoor humidity levels between 30 and 60 percent.
- Prevent moisture condensation by increasing surface temperature, installing proper insulation and improving air circulation.
- Perform regular heating, ventilation and air conditioning (HVAC) inspections and maintenance as scheduled. Ensure HVAC drip pans are clean and unobstructed and flow properly.
- Establish a mold prevention and remediation plan within your Indoor Air Quality management program.

Once mold starts to grow in insulation or wallboard, the only way to deal with the problem is to remove and replace the contaminated building materials. If large areas are contaminated, use an experienced professional contractor. Contact the Utah Department of Public Health and Environment at <http://www.dhs.utah.gov/>



Above:
Mold on drywall under leaky sink. (photo by John Martyny)



For more info, please see:

U.S. Environment Protection Agency
www.epa.gov/iaq/molds/index.html

Centers for Disease Control and Prevention
www.cdc.gov/mold/stachy.htm