

# INTEGRATED PEST MANAGEMENT: MOLD

Mold and mildew are fungi found indoors and outdoors. Mold grows where there's a lot of moisture in the air, or when leaks or condensation cause surfaces, furnishings or building materials to be damp. We often clean up the mold, but don't fix the source of the problem and so the mold returns. It's important to take the steps to minimize moisture.

## When is mold a problem?

Mold can trigger asthma, allergic reactions and other respiratory problems for children and staff. These reactions can be immediate or delayed.

## Characteristics and habits

Mold grows anywhere moisture is present. It produces spores to reproduce and grow. These spores travel through the air until they settle on a moist, humid place. In buildings, mold may be found around windows, walls or ceilings if there are leaks or condensation problem. Mold is also common in bathrooms and damp areas under sinks. You can detect mold by its musty smell or dark stains on walls or underneath sinks.

### IPM strategies

#### 1 KEEP MOLD AWAY BY REMOVING MOISTURE

- ▶ Inspect regularly for water droplets collecting on walls or windows.
- ▶ Open windows to increase air circulation.
- ▶ Use exhaust fans in bathrooms, and when cooking, dishwashing and cleaning.
- ▶ Be sure that stoves, dryers and other moisture sources vent to the outside.
- ▶ Systematically clean the facility. Remember to clean roof gutters and air conditioning drip pans.
- ▶ Take action within 48 hours when you see damp or wet building materials or furnishings. If wet or damp areas are dried within 24–48 hours, mold usually won't grow.

- ▶ Fix leaks and other water problems immediately.
- ▶ Install carpets away from moisture-prone areas.

#### 2 MONITOR FOR MOLD

Check the following places for mold:

- ▶ Ceilings and walls, especially exterior walls
- ▶ Surface of walls behind furniture (condensation can occur because there is less ventilation)
- ▶ Underside of carpets and pads
- ▶ Under sinks and around pipes (leaks or condensing pipes)
- ▶ Heating ducts

#### 3 GET RID OF MOLD

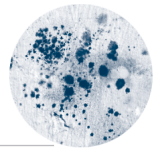
- ▶ You can clean up the problem if it's small (a 3x3 feet patch).
- ▶ If the heating, ventilation or air conditioning system has mold present, don't use it and read EPA's guide *Should You Have the Air Ducts in Your Home Cleaned?* ([www.epa.gov/iaq/pubs/airduct.html](http://www.epa.gov/iaq/pubs/airduct.html))

#### 4 BEFORE CLEANING MOLD

- ▶ Wear a mask, such as the N-95 respirator available at hardware stores.
- ▶ Wear gloves that cover your arms too.
- ▶ If you are cleaning a ceiling area, wear goggles in case there are drips.
- ▶ Wear long sleeves and pants.

#### 5 ONCE YOU'RE READY TO CLEAN

- ▶ Scrub the mold off with detergent and water.
- ▶ Completely dry the area.
- ▶ Replace absorbent materials like ceiling tiles and carpets.



[IPM strategies continued]

- ▶ If mold has grown on an expensive or sentimental item, consult a specialist in furniture repair, art restoration, carpet cleaning or water restoration.

## 6 GET RID OF MOISTURE

Once you've removed the mold itself, make sure to get rid of whatever caused the moisture in the first place (i.e., leaking pipes or indoor humidity). By eliminating the source of moisture, you'll prevent future mold problems.

If you suspect a problem is too big for you to clean up, hire a professional.

## ACTION PLAN FOR MOLD

WHEN TO TAKE ACTION	FIRST, PROTECT YOURSELF	SECOND, ELIMINATE THE MOLD	THIRD, FIX THE MOISTURE PROBLEM
<ul style="list-style-type: none"> <li>▶ When you see or smell mold or mildew growing.</li> </ul>	<ul style="list-style-type: none"> <li>▶ Inspect thoroughly to identify where the mold problem is present.</li> </ul>	<ul style="list-style-type: none"> <li>▶ Scrub the mold off with detergent and water and completely dry the area.</li> <li>▶ If the mold problem is too big, hire a professional.</li> </ul>	<ul style="list-style-type: none"> <li>▶ Eliminate the source of moisture.</li> <li>▶ If it is too difficult to fix yourself, hire a professional.</li> </ul>

### RESOURCES

Environmental Protection Agency—*Mold Resources*  
[www.epa.gov/mold/moldresources.html](http://www.epa.gov/mold/moldresources.html)  
 Center for Disease Control—*Mold*  
[www.cdc.gov/mold](http://www.cdc.gov/mold)

EPA's guide *Should You Have the Air Ducts in Your Home Cleaned?*

[www.epa.gov/iaq/pubs/airduct.html](http://www.epa.gov/iaq/pubs/airduct.html)

The California Department of Pesticide Regulation, IPM in Child Care  
[apps.cdpr.ca.gov/schoolipm/childcare](http://apps.cdpr.ca.gov/schoolipm/childcare)

California Childcare Health Program, University of California, San Francisco School of Nursing • [www.ucsfchildcarehealth.org](http://www.ucsfchildcarehealth.org)