

## Preventing Mold in Your Home

### Facts

- Molds are simple, microscopic fungi found everywhere in indoor and outdoor environments. They spread and multiply by releasing tiny living cells called spores into the air.
- In order to grow, mold needs a source of nutrition (such as dust, wood products or paper), a place to grow, and a source of moisture. Your home may be at risk if you have had flooding, a backed-up sewer, a leaky roof, ice dams, high indoor humidity and condensation problems, a damp basement or ongoing plumbing leaks. Uncontrolled mold growth can cause health problems, damages to goods and furnishings, and structural problems in your home.
- The most common symptoms of exposure to mold include nasal and sinus congestion, eye and throat irritation, breathing difficulty, and other respiratory problems. If enough mold spores are in the air inside your home, they can contribute to asthma, allergies and other health problems.
- All molds should be treated the same with respect to potential health risks and removal.
- It is difficult to determine who may experience health effects associated with mold exposure, but mold exposure poses an increased risk of adverse health effects among children, the elderly, individuals with allergies and asthma, and individuals with immune suppression such as HIV infection, chemotherapy, or organ transplant. Consult a medical professional if you are having health problems you believe are related to mold.

### Safe Behavior

- Be prepared to recognize mold if it appears in your home. Look for discoloration (white, orange, green, brown or black) on walls or other surfaces. Look for signs of water damage such as cracking plaster, loosening tape, warped wood, musty odor, and window condensation. Remember this basic rule: if you can see it or smell it, get rid of it. Be alert for possible symptoms of mold exposure, and always be suspicious of water-damaged areas and discoloration. Be aware that mold can grow in hidden areas under cabinets, inside walls, and under carpet, carpet padding and wall coverings.
- Some individuals may become ill when exposed to mold. Any time you find clean water damage in your home, try to dry thoroughly within 48 hours to prevent mold growth. You may use a water extraction vacuum, fan, and/or dehumidifier to facilitate the drying process. Any time you find mold in your home, you should take steps to remove it immediately.
- Mold removal can dramatically increase the number of mold spores in the air. Take steps to protect your health during cleanup. Consider using an N95 face mask, rubber gloves, eye goggles, and wear clothing that can be discarded or laundered afterward.
- Begin your cleanup by identifying and eliminating all leaks or other sources of moisture that may be contributing to the mold problem. Some winter causes of moisture are humidifiers, cooking/dishwashing, bathing/showering, ice dams plumbing or roof leaks, houseplants, fire wood, unvented clothes driers, line-drying clothes inside, and improper venting on combustion appliances.
- Remove and discard any porous materials that may have soaked up the water and remain wet for more than 48 hours. These include ceiling tiles, drywall, plaster, insulation, carpet and carpet padding, processed wood products (paneling, plywood, particle board, etc.), and upholstered furniture. If pieces have high monetary or sentimental value, you may wish to consult a restoration specialist. You do not need to discard studs, joists, rafters or other structural components made of solid lumber, unless they are no longer structurally sound.

- Fabrics (drapes, bedding, clothing, etc.) that are or may be moldy should be laundered in hot water with detergent and bleach or dry-cleaned.
- Clean non-porous and semi-porous moldy surfaces with a soap or detergent in hot water, or a good commercial cleaner. These include solid wood, plastics, metals, concrete, linoleum, ceramic tiles, and vinyl. Scrub surfaces with a stiff brush and then rinse well. Use a water extraction vacuum to take up the rinse water. Wear eye protection and rubber gloves, and make sure the work area is well ventilated.
- Disinfect affected surfaces (if desired) after removing visible mold and other soil from contaminated surfaces. A disinfectant could be used to kill mold missed by cleaning. In the case of sewage contamination, disinfection must take place. Contact the Minnesota Department of Health for appropriate advice. Mix 1¼ to 1½ cup of household bleach per gallon of water (approximately 10% bleach solution) and apply to surfaces where mold growth was visible before cleaning. Never mix bleach with any other liquid except water, or if the product clearly allows for mixing with bleach. Companies hired to apply antimicrobial chemicals are required to be licensed by the Minnesota Department of Agriculture.
- Following disinfection, dry out affected areas as quickly as possible, using fans and dehumidifiers. Be patient – it may take weeks for drying. Be sure that spaces inside walls are thoroughly dry before installing new building materials (carpet, paint, drywall, etc.). If you've had a mold problem in the past, be extra vigilant.
- If the mold grows back, continue to eliminate moisture sources and repeat the cleaning procedure.
- Landlords are responsible for correcting most moisture and mold issues in rental housing.

### **Additional Materials**

- [Minnesota Department of Health - Mold in Homes](#)
- [Minnesota Department of Health – Mold in Rental Housing](#)
- [Minnesota Department of Health – Healthy Homes](#)
- [Minnesota Department of Commerce – Energy Information Center – Home Energy Guides](#)
- [University of Minnesota Environmental Health and Safety – Managing Water Infiltration into Buildings](#)
- [North Dakota State University Extension - Home Moisture](#)
- [U.S. Environmental Protection Agency – Indoor Air – Molds](#)

### **Contact**

- Minnesota Department of Health Indoor Air Unit  
Phone: 651-201-4601 or 800-798-9050 8 a.m.- 4:30 p.m.  
Web site: <http://www.health.state.mn.us/divs/eh/indoorair/mold/index.html>