



Mold, Moisture, and Your Home

Molds are part of the natural environment. Outdoors, molds play a part in nature by breaking down fallen leaves and dead trees. But indoors, mold growth should be discouraged. Molds can gradually destroy the things they grow on. Also, too much mold can affect the health of you and your family. You can prevent damage to your home and furnishings, save money, and avoid potential health problems by controlling moisture and eliminating mold growth.

Molds reproduce by means of tiny spores. The spores are invisible to the naked eye and float through outdoor and indoor air. It is impossible to get rid of all molds and mold spores indoors. Some mold spores will always be found floating through the air and in house dust. The mold spores will not grow if moisture is not present. Indoor mold growth can and should be prevented or controlled by controlling moisture indoors.

◀ What is mold? ▶

Mold (fungi) is present everywhere - indoors and outdoors. There are more than 100,000 species of mold. At least 1,000 species of mold are common in the U.S. Molds are decomposers of dead organic material such as leaves, wood, and plants. Molds can sometimes infect living plants and animals. Mold is most likely to grow indoors where there is water or dampness - such as in bathrooms and basements. Mold can also make spores that are like very small seeds. The spores can be carried by air or water to new locations. These microscopic spores can survive conditions that are too hot, cold, dry, or wet for mold to grow, but when they land in a suitable location, they will start to grow.

◀ How does mold grow? ▶

Mold needs moisture to grow. Mold also needs food, oxygen, and a temperature between 40°F and 100°F. Mold can grow almost anywhere there is water damage, high humidity, or dampness. Mold decomposes or breaks down dead organic (once living) material. This means it can grow in wood, the paper facing on drywall, and other materials made from wood. Mold can also digest some man-made materials such as glues, pastes, and paints. Mold cannot get nutrients from inorganic materials such as concrete, glass, and metal. But it can grow on the dirt that is present on these surfaces. Removing the source of moisture through repairs or lowering the humidity can be critical in limiting mold growth.



Mold growing on fallen leaves.

◀ How can mold affect your health? ▶

Everyone is affected by mold differently. Many people are not affected by exposure to mold, unless they are exposed to a lot of mold. Unfortunately, we are not quite sure what "a lot of mold" means. Each person is different; what amounts to a "lot of exposure" for some people is "not so much" for others. Remember - mold is everywhere. We are all exposed to mold every day. If you are allergic to mold, or have asthma, exposure to "enough" mold can cause a reaction. But what "enough" is differs from person to person. Mold allergies also depend on the type of mold. Unfortunately, doctors can only test for allergy to a handful of mold species. Fungal (mold) infections are rare in healthy people. However, people with a suppressed immune system (people with AIDS, certain types of cancer, or on organ transplant drugs) are much more at risk to develop fungal infections.

◀ How can I prevent mold from growing in my home? ▶

The answer is simple: keep your home dry. First, prevent excessive moisture levels in the air by using exhaust fans in bathrooms and kitchens where moisture is often generated. Make sure the air from your clothes dryer exhausts to the outside. If you think that you need a humidifier, use a hygrometer to measure the relative humidity (RH) in your home. If the RH is above 60%, molds will grow. Second, look for damp or wet areas that might result from a roof, window, foundation, or plumbing leak. Fix leaks and dry affected areas within 24-48 hours. If you notice dampness or musty smells, don't ignore it. Small returning or continuous leaks can be difficult to spot, and hidden mold growth can be extensive if left uncorrected.



Mold growing on the back side of wallpaper.

◀ What should I do if I suspect I have mold in my home or apartment? ▶

First, don't panic. Remember mold is everywhere. Even if you have "lots" of mold in your house, it does not necessarily mean that it will affect your health. Although the air and surfaces in your home can be sampled by an environmental consultant and/or analyzed by a laboratory specializing in microbiology, these tests can be very expensive. There is no simple and cheap way to sample the air in your home to find out what types of mold are present and whether they are airborne. Even if you have your home tested, it is difficult to say at what levels health effects would occur. Therefore, it is more important to get rid of the mold rather than find out more about it. **The most effective way to treat mold is to correct underlying water damage and clean the affected area.** Mold should be cleaned as soon as it appears.



Cleaning while wearing N-95 respirator, gloves, and goggles.

Persons cleaning mold should be free of symptoms and allergies. Small areas of mold should be cleaned using a detergent/soap solution or an appropriate household cleaner. Gloves should be worn during cleaning. The cleaned area should then be thoroughly dried. Dispose of any sponges or rags used to clean mold. If mold contamination is extensive, a professional may need to be consulted. If mold returns quickly or spreads, it may indicate an underlying problem such as a leak. If you are renting your home or apartment, "you have the right to a clean, livable place in good repair." The landlord should repair any problems with the property as soon as possible after you ask. Please refer to the "Your Rights and Duties as a Renter" publication for more information about your legal rights as a renter.

◀ Will my health or my child's health be affected, and should we see a medical provider? ▶

If you believe that you or your children have symptoms that you suspect are caused by exposure to mold, you should see a medical provider. Keep in mind that many symptoms associated with mold exposure may also be caused by many other illnesses.

Additional Resources:

- Read the U.S. Environmental Protection Agency publication "A Brief Guide to Mold, Moisture, and Your Home" or visit www.epa.gov/mold website for more information about mold and mold prevention.
- For information about building maintenance standards, contact the Metropolitan Department of Codes Administration of Nashville & Davidson County at **(615) 862-6500**
- For additional materials or information, please contact the Metro Public Health Department Pollution Control Division at **(615) 340-5653**