

# Mold and Your Health



## What are molds?

Molds are fungi that can be found both indoors and outdoors. No one knows how many species of fungi exist but estimates range from tens of thousands to perhaps three hundred thousand or more. Molds grow best in warm, damp, and humid conditions, and spread and reproduce by making spores. Mold spores can survive harsh environmental conditions, such as dry conditions, that do not support normal mold growth.

## What are some common indoor molds?



Aspergillus



Alternaria



Penicillium




Cladosporium

## How do molds affect people?

Some people are sensitive to molds. For these people, exposure to molds can cause symptoms such as nasal stuffiness, eye irritation, wheezing, or skin irritation. Some people, such as those with serious allergies to molds, may have more severe reactions. Severe reactions may occur among workers exposed to large amounts of molds in occupational settings, such as farmers working around moldy hay. Severe reactions may include fever and shortness of breath. Some people with chronic lung illnesses, such as obstructive lung disease, may develop mold infections in their lungs.

In 2004 the Institute of Medicine (IOM) found there was sufficient evidence to link indoor exposure to mold with upper respiratory tract symptoms, cough, and wheeze in otherwise healthy people; with asthma symptoms in people with asthma; and with hypersensitivity pneumonitis in individuals susceptible to that immune-mediated condition.

The IOM also found limited or suggestive evidence linking indoor mold exposure and respiratory illness in otherwise healthy children. In 2009, the World Health Organization issued additional guidance, the [WHO Guidelines for Indoor Air Quality: Dampness and Mould](#)  [PDF - 2.52 MB]. Other recent studies have suggested a potential link of early mold exposure to development of asthma in some children, particularly among children who may be genetically susceptible to asthma development, and that selected interventions that improve housing conditions can reduce morbidity from asthma and respiratory allergies, but more research is needed in this regard.

## Where are molds found?

Molds are found in virtually every environment and can be detected, both indoors and outdoors, year round. Mold growth is encouraged by warm and humid conditions. Outdoors they can be found in shady, damp areas or places where leaves or other vegetation is decomposing. Indoors they can be found where humidity levels are high, such as basements or showers.

### **If I found mold growing in my home, how do I test the mold?**

Generally, it is not necessary to identify the species of mold growing in a residence, and CDC does not recommend routine sampling for molds. Current evidence indicates that allergies are the type of diseases most often associated with molds. Since the susceptibility of individuals can vary greatly either because of the amount or type of mold, sampling and culturing are not reliable in determining your health risk. If you are susceptible to mold and mold is seen or smelled, there is a potential health risk; therefore, no matter what type of mold is present, you should arrange for its removal. Furthermore, reliable sampling for mold can be expensive, and standards for judging what is and what is not an acceptable or tolerable quantity of mold have not been established.

### **A qualified environmental lab took samples of the mold in my home and gave me the results. Who can interpret these results?**

Standards for judging what is an acceptable, tolerable, or normal quantity of mold have not been established. If you do decide to pay for environmental sampling for molds, before the work starts, you should ask the consultants who will do the work to establish criteria for interpreting the test results. They should tell you in advance what they will do or what recommendations they will make based on the sampling results. The results of samples taken in your unique situation cannot be interpreted without physical inspection of the contaminated area or without considering the building's characteristics and the factors that led to the present condition.

### **What type of doctor should I see concerning mold exposure?**

You should first consult a family or general health care provider who will decide whether you need referral to a specialist. Such specialists might include an allergist who treats patients with mold allergies or an infectious disease physician who treats mold infections. If an infection is in the lungs, a pulmonary physician might be recommended. Patients who have been exposed to molds in their workplace may be referred to an occupational physician.

### **How can people decrease mold exposures?**

Sensitive individuals should avoid areas that are likely to have mold, such as compost piles, cut grass, and wooded areas. Inside homes, mold growth can be slowed by controlling humidity levels and ventilating showers and cooking areas. If there is mold growth in your home, you should clean up the mold and fix the water problem. Mold growth can be removed from hard surfaces with commercial products, soap and water, or a bleach solution of no more than 1 cup of bleach in 1 gallon of water.

If you choose to use bleach to clean up mold:

- Never mix bleach with ammonia or other household cleaners. Mixing bleach with ammonia or other cleaning products will produce dangerous, toxic fumes.
- Open windows and doors to provide fresh air.
- Wear non-porous gloves and protective eye wear.
- Always follow the manufacturer's instructions when using bleach or any other cleaning product.

If the area to be cleaned is more than 10 square feet, consult the U.S. Environmental Protection Agency (EPA) guide titled *Mold Remediation in Schools and Commercial Buildings*. Although focused on schools and commercial buildings, this document also applies to other building types. You can get it by going to the EPA web site at [http://www.epa.gov/mold/mold\\_remediation.html](http://www.epa.gov/mold/mold_remediation.html).

### **My landlord or builder will not take any responsibility for cleaning up the mold in my home. Where can I go for help?**

If you feel your property owner, landlord, or builder has not been responsive to concerns you've expressed regarding mold exposure, you can contact your local housing authority or seek legal assistance. You could also review your lease or building contract, your insurance company, or an attorney to learn more about your legal rights. You can find more information at <http://epi.publichealth.nc.gov/oii/pdf/Mold%20and%20Human%20Health%2008-18-05.pdf>.

**Information provided by the Centers for Disease Control and Prevention, [www.cdc.gov](http://www.cdc.gov).  
For more information, please contact Nash County Environmental Health at 252-462-9829.**

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