

Indoor Mold and Your Health

SPECIAL NOTE: If you have questions about licensure of mold assessors or mold remediators in Florida, please review this Florida law The Florida Department of Business and Professional Regulation is responsible for licensing mold assessors and remediators.

The Florida Department of Health has developed the following information to address some of the most common questions and concerns about indoor mold, how it affects human health, and ways in which you can prevent or remove it.

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### What are molds?

Molds are types of fungi. They grow in the natural environment. Tiny particles of molds are found everywhere in indoor and outdoor air. In nature, molds help break down dead plants, and can be found growing on soil, foods, plants and other items. Molds are also very common in buildings and homes. Mold needs moisture to grow. Indoors, mold growth can be found where humidity levels are high, like basements and showers. Molds pro

easily through the air. Spores can also be spread by water and insects. Live spores act like seeds, forming

and body aches and pains are sometimes reported in mold complaints, but causes of these physical symptoms are not yet understood. The toxic effects of certain molds are not well understood and currently a controversial topic in the medical and scientific community. There is evidence of specific long-term toxic effects from eating foods with mold toxins. Unfortunately, very little is known regarding the actual health risks from breathing in or skin contact with mold toxins. Allergic disease is now considered the most likely health problem related to mold exposures. Research on the possible health effects related to mold exposure continues today.

How can I tell if there is mold in my home, or should I test my home for mold?

Indoor mold growth can usually be seen or smelled. In most cases, if visible mold growth is present, sampling is not needed. There are no health or exposure based standards that you can use to evaluate a mold sampling result. The Florida Department of Health does not recommend mold testing or sampling to see if you have a mold problem, or to see what kind of mold might be growing. Sampling for mold in the air can be expensive and, if done, should only be done by experienced professionals. Investigate a mold problem; don't test.

- x Look for visible mold growth (it may look cottony, velvety, rough, or leathery and have different colors like white, gray, brown, black, yellow, or green). Mold often appears as a staining or fuzzy growth on furniture or building materials (walls, ceilings, or anything made of wood or paper). Look for signs of moisture or water damage (water leaks, standing water, water stains, condensation, etc.).
- x Check around air handling units (air conditioners, furnaces) for standing water. Routinely inspect the evaporator coils, liner surfaces, drain pans and drain lines.
- x Search areas where you notice mold odors. If you can smell an earthy or musty odor, you may have a mold problem.
- x If mold-allergic people have some of the symptoms listed above when in your home, you may have a mold problem.

How can I be exposed to mold?

Mold is virtually everywhere, floating in the air and on all surfaces. People are exposed to 24 hours a day, seven days a week, and 365 days a year. Exposures increase when indoor moldy materials become dried, damaged or disturbed, causing spores and other mold cells to be released into the air and then inhaled. Elevated exposure can also occur if people directly handle moldy materials or accidentally eat mold.

How much mold does it take to make me sick?

It depends on the situation and the person. This question is difficult to answer in the same way it's hard to say how much sun causes a sunburn: the amount varies from person to person. What one person can tolerate with little or no effect may cause symptoms in another individual.

The long-term presence of indoor mold may eventually become unhealthy for anyone. Those with special health concerns should consult a medical doctor if they feel their health is affected by indoor mold. The following types of people may be affected sooner and more severely than others:

x Babies and children

Water is the key. Without it, mold growth cannot start, much less multiply and spread. The easiest way to prevent the mold from gaining a foothold is to control dampness. Keep your home clean and dry. When water stands for even 24 hours, common molds can take hold. Keeping humidity levels below 60% and venting moisture from showering and cooking to the outside are several ways to prevent the conditions that can lead to mold growth. Other ways include:

- x Clean and dry up spills within 24 hours
- x Dry out wet building materials and carpets within 24 hours
- x Use an air conditioner or a dehumidifier to reduce the indoor humidity levels below 60%. If you have a central air conditioning system and need a dehumidifier to reduce relative humidity below 60%, you should have the air conditioning system examined for problems
- x Do not carpet bathrooms or basements
- x Note: While most experts suggest a relative humidity of less than 60%, below 50% is best for controlling both mold growth and dust mites. Dust mites are microscopic animals related to spiders, ticks and other mites. Dust mites eat mold and dead human or animal skin scales (flakes) and leave allergenic proteins. Dust mites reduce allergen production at these lower humidity levels.

#### How Should Mold Be Cleaned?

Mold should be cleaned as soon as it appears. Persons who clean the mold should be free of symptoms and allergies. Small areas of mold should be cleaned with detergent/soapy water or a commercial mildew or mold cleaner. Gloves and goggles should be worn during cleaning. The cleaned area should then be thoroughly dried. Throw away any sponges or rags used to clean mold. If the mold returns quickly or spreads it may mean you have an underlying problem, such as a water leak. Any water leaks must first be fixed when solving mold problems. Additional guidance is available in the US Environmental Protection's guidance [A Brief Guide to Mold, Moisture, and Your Home](#). If there is a lot of mold growth, consult the U.S. Environmental Protection Agency's guidance: "[Remediation in Schools and Commercial Buildings](#)". Printable versions of these and other guidance documents are available on the [EPA's Publications on Mold webpage](#). If the moldy material is not easily cleanable, such as drywall, carpet padding and insulation, removal and replacement may be necessary.

#### Should bleach or other biocides (disinfectants, sanitizers, or fungicides) be used to kill mold?

Using bleach or other chemicals to kill indoor mold growth is not needed in most cases. The goal should be to remove mold growth by cleaning or removing moldy materials. Dead mold can still pose health risks if you are exposed. Using bleach or other disinfectants on surfaces after mold removal may be needed where people are thought to be susceptible to fungal infections (such as a person with immune system problems). Should you decide to use bleach or another chemical, please read and carefully follow the label directions and hazard statements (caution, warning, danger). Do not mix bleach with ammonia cleaners or acids, because a dangerous chlorine gas may be formed.

#### Should I use an ozone generator to address an existing mold problem?

No. Ozone irritates lungs and is not likely to be effective at addressing an indoor mold problem. No one should expose themselves or others to ozone on purpose. Address the cause of the mold (usually moisture) and then remove the mold by cleaning surfaces or removing moldy materials.

Who should do the cleanup?

Who should do the cleanup depends on many factors. One consideration is the size of the mold problem. If the moldy area is less than about 10 square feet (less than roughly a 3 ft. by 3 ft. patch), in most cases, you can handle the job yourself. However,

- x If there has been a lot of water damage, and/or mold growth covers more than 10 square feet, consult the U.S. Environmental Protection Agency (EPA) guide [Mold Remediation in Schools and Commercial Buildings](#). Although written about schools and commercial bu

## Mold and Moisture Florida Department of Health- Environmental Health

- x Providing technical assistance and advice to the public, County Health Departments, School Districts and others
- x Distributing current information and other resources on mold and moisture control
- x Help you with the identification of mold problems and advise you on investigation techniques and cleanup methods
- x Answer your questions about health effects and possible hazards of mold exposure
- x Provide mold prevention advice into public message and disaster response plans
- x Direct concerned people to the appropriate local resources or to the Florida Department of Health Indoor Air Program staff

### Please note:

- x The Florida Department of Health does not provide mold testing.
- x The Florida Department of Health does not provide support to professional consultants.

<https://www.floridahealth.gov/environmentalhealth/mold/index.html>