

Resident Expectations Regarding Mold

Molds and Mildew - Molds are part of the natural environment. Outdoors, molds play a part in nature by breaking down dead organic matter such as fallen leaves and dead trees. But indoors, mold growth should be avoided. Molds reproduce by means of tiny spores; the spores are invisible to the naked eye and float through outdoor and indoor air. Mold may begin growing indoors when mold spores land on surfaces that are wet. If the moldy area is less than about 10 square feet, handle the job yourself. If there has been a lot of water damage, and/or mold growth covers more than 10 square feet call trouble desk. There are many types of mold, and none of them will grow without water or moisture. For more information on mold, visit www.epa.gov/mold.

If mold is more than 10 square feet or inside HVAC units, please call the Trouble Desk at 253-3131 to have someone come out and inspect.

To keep your home free from mold and mildew:

- Keep things and places clean. Even small amounts of dirt or dried food will help mildew grow. Keeping closets, drawers, walls and clothing clean will help prevent many mildew problems.
- Leave closet doors and dresser drawers open occasionally. Be sure clothing is dry when stored. Hang it loosely in the closet.
- Store items where they will not get damp.
- Don't put furniture tightly against the wall.



NAVY AND MARINE CORPS PUBLIC HEALTH CENTER

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Navy Indoor Environmental Quality - Mold Sampling Policy in Navy Buildings

The Navy's policy, which is consistent with guidance from the U.S. Centers for Disease Control & Prevention (CDC) and the Environmental Protection Agency (EPA), is to not routinely sample for mold when evaluating indoor environmental quality (IEQ). This policy applies to the work environment and in government owned housing (Family Housing and Unaccompanied Housing).^{1,2}

The term "mold" is used to refer to fungi that are naturally occurring in the environment. Molds are found year-round in virtually every environment, indoors and outdoors, and at work and home. There is no practical way to eliminate all mold and mold spores from the indoor environment.

The emphasis for dealing with mold focuses on visual inspection and determining the source of the moisture (e.g., water intrusion, plumbing leaks, etc.), and other contributing factors (e.g., temperature, humidity, ventilation, sanitation, etc.). It is important to correct mold and moisture problems as soon as possible through remediation and/or removal of mold contaminated materials within 24-48 hours, cleaning the surfaces, controlling the moisture source, and drying the area completely.

A mold's ability to result in health effects and symptoms will vary by the genus/species. No one knows how many species of mold exist, but estimates are 100,000 or more. Individual susceptibility to mold varies widely depending on the species and amount of mold. Therefore, mold sampling and culturing are not reliable in determining an individual's health risk.

Due to these factors, there are no federal health standards for what are "unacceptable" levels of mold in the indoor environment. Therefore, there is no health standard to which mold sampling results can be compared. Further, since most people are allergic to more than one allergen, and most homes have multiple detectable allergens (e.g., pet dander, pollen, rats, mice, cockroaches, dust mites, air fresheners, candles, lawns, plants, trees, etc.), sampling for mold alone is also not a reliable factor for determining health risk.

All mold issues, regardless of species, are treated the same: control the moisture source, and remediate the contamination. Mold sampling results do not change this. Nor do they provide a reliable indication of health risk.

For more information about mold visit: <https://www.med.navy.mil/sites/nmcphc/industrial-hygiene/Pages/Mold-Information-Resources.aspx>

This policy also aligns with guidance from:

- CDC (<https://www.cdc.gov/mold/faqs.htm#test>)
- EPA (<https://www.epa.gov/mold/mold-testing-or-sampling>)
- OSHA (<https://www.osha.gov/dts/shib/shib101003.html>)
- American Industrial Hygiene Association (<https://www.aiha.org/publications-and-resources/TopicsofInterest/Hazards/Pages/Facts-About-Mold.aspx>)
- Army and Air Force policy is the same³
(<https://phc.amedd.army.mil/topics/workplacehealth/ih/Pages/Indoor-Air-Quality-Mold.aspx>)

1 OPNAVINST 5100.23G Navy Safety and Occupational Health Program Manual

2 NMCPHC Industrial Hygiene Field Operations Manual - <https://www.med.navy.mil/sites/nmcphc/industrial-hygiene/industrial-hygiene-field-operations-manual/Pages/default.aspx>

3 AFRL-SA-WP-SR-2014-0012 Technical Guide for Indoor Air Quality Surveys July 2014



Molds

What are molds?

Molds are small organisms found almost everywhere, inside and outside, including on plants, foods, and leaves. Another common term for mold is “mildew.” Molds grow best in warm and damp conditions, although they can grow during cold weather. There are thousands of species of mold, and they can be any color. Many times, mold can be detected by a musty odor. Molds produce microscopic cells called spores that spread easily through the air. Mold spores can survive harsh environmental conditions, such as dry conditions, that do not support normal mold growth. Live spores act like seeds, forming new mold growths, called colonies, under the right conditions.



Certain types of molds have proven extremely valuable in the production of antibiotics. Molds are beneficial to the environment and are needed to break down dead material. However, when molds are present in large numbers, they may cause allergic symptoms in people similar to that caused by plant pollen.

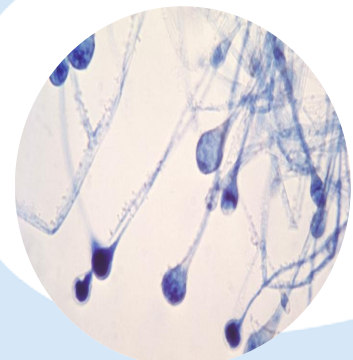
How do molds affect people?

In general, we are exposed to molds every day, and most of us don't have any reaction. Under the right conditions, some people may experience allergic

reactions such as watery eyes, a runny nose, sneezing, nasal congestion, itching, coughing, wheezing, difficulty breathing, headache and fatigue. These symptoms are temporary and can be eliminated by removing the mold. Molds may also aggravate asthma. In rare cases, infections from building-associated molds may occur in people with seriously weakened immune systems. Some people may be more sensitive to molds than others, including:

- Infants and children
- Elderly people
- Pregnant women
- Individuals with respiratory conditions or allergies and asthma
- Persons with weakened immune systems (for example, chemotherapy patients, organ or bone marrow transplant recipients, and people with HIV infections or autoimmune diseases)

Symptoms that seem to be related to mold exposure can be due to other causes, such as bacterial or viral infections or other allergies. However, see your doctor if you have special health concerns.





Are there different types of mold?

There are more than 100,000 types of mold. Common classes of mold include *Cladosporium*, *Penicillium*, *Alternaria*, and *Aspergillus*.

What is “Black Mold”?

“Black mold” is a term sometimes used for *Stachybotrys chartarum*, a type of greenish-black mold commonly associated with heavy water damage. It has received quite a bit of media attention in the past few years. Not all molds that appear to be black are *Stachybotrys*. The **known** health effects from exposure to *Stachybotrys* are similar to other common molds. Studies are currently underway that will try to determine if exposure to *Stachybotrys* is associated with more severe health effects.

Are some molds more harmful than others?

Any extensive indoor mold growth should be treated as a potential health concern and removed as soon as practical – regardless of the kind of mold present.

Can mold become a problem in my home/work space?

Molds can grow almost anywhere if there is sufficient moisture.

Be on the lookout for these common sources of moisture:

- Flooding
- Roof leaks
- Plumbing leaks, drainage problems
- Damp basements and crawl spaces
- Steam from the bathroom or kitchen
- Condensation resulting from poor or improper insulation or ventilation
- Humidifiers
- Heating/Air Conditioning System Drip Pan
- Wet clothes drying inside the home or a clothes dryer venting indoors

- Poor or improper ventilation of combustion appliances

Indications of a moisture problem can include discoloration of the ceiling or walls, warping of the floor, or condensation on the walls or windows.

What can I do to get rid of mold indoors?

It is impossible to get rid of all molds because they are everywhere - indoors and outdoors. Mold will not grow if moisture is not present. Indoor mold growth can and should be prevented or controlled by controlling moisture. To get rid of mold growths indoors, the mold must be removed **and** the water problem fixed. Care must be taken with water damaged materials. Some water damaged materials can be cleaned and dried sufficiently for preventing mold growth. However, some materials cannot, and need to be discarded. If you clean up the mold but don't fix the water problem, it is likely that the mold will come back. **The key to preventing mold growth is to control moisture problems.** At work, it's important to let your building manager know about mold issues and/or water leaks as soon as possible to prevent or reduce mold issues from occurring.

For more information:

If you have questions regarding the information in this fact sheet, please contact:

LOCAL POC IF POSSIBLE

Web resources are available at the following links:

Centers for Disease Control and Prevention

<http://www.cdc.gov/mold/default.htm>

U. S. Environmental Protection Agency

<http://www.epa.gov/mold/index.html>

Occupational Safety and Health Administration

<http://www.osha.gov/dts/shib/shib101003.html>