Oklahoma State Department of Health

Public Health Fact Sheet

Mold Facts

What are molds?

Mold, mildew, yeast and mushrooms together make up the kingdom *Fungi*, and are very different from both plants and animals. In nature, mold and its relatives play a key role in the decomposition of leaves, wood, and other plant debris. Without the recycling powers of mold, dead plant and animal matter would accumulate in our environment. Molds are also necessary for making bread rise, fermenting alcohol, and cheese making. The first antibiotics were discovered in mold. But these normal members of our environment are sometimes too successful, and may become an irritant indoors.

How do molds grow in my home?

Mold spores are settling in your home all the time, but they need moisture to multiply. Mold can grow on wood, ceiling tiles, wallpaper, paints, carpet, sheet rock, and insulation. When excess moisture or water builds up in your home from a leaky roof, high humidity, or flooding, these conditions are often ideal for molds. Longstanding moisture or high humidity conditions and mold growth go together. Realistically, there is no way to rid all mold and mold spores from your home; the way to control mold growth is to control moisture.

How can I be exposed to mold?

When molds are disturbed, their spores may be released into the air. You then can be exposed to the spores through breathing. Also, if you directly handle moldy materials, you can be exposed to mold and mold spores through contact with your skin. Eating moldy foods or hand-to-mouth contact after handling moldy materials is yet another way you may be exposed.

How can molds affect my health?

The majority of molds are not a concern to someone who is healthy. However, if you have allergies or asthma, you may be sensitive to mold. You may experience skin rash, runny nose, eye irritation, cough, congestion, or aggravation of asthma. If you have an immune suppression or underlying lung disease such as tuberculosis or emphysema, you may be at increased risk for infections from mold.

Rarely, some molds produce toxins, called mycotoxins, to protect themselves against other molds and bacteria. If people come into contact with a large enough amount of these mycotoxins, they may feel unwell. Fatigue, nausea, headaches, and respiratory and eye irritation are some symptoms that may be experienced from exposure to mycotoxins. If you or your family members have health problems that you think may be caused by mold, you should consult with your healthcare provider.

How do I know if I have mold?

You may have seen white thread-like growths or clusters of small black specks along your damp bathroom or basement walls, or smelled a "musty" odor. Seeing and smelling mold is a good indication that you have mold growing in your home. Mold can also be growing behind wall coverings or ceiling tiles where you cannot see or smell it.

Common places to find mold are in areas where water has damaged building materials and furnishings perhaps from flooding or plumbing leaks. Mold can also be found growing along walls where warm moist air condenses on cooler wall surfaces, such as inside cold exterior walls, behind dressers, headboards, and in closets where articles are stored against walls. Rooms with both high water usage and humidity, such as kitchens, bathrooms, laundry rooms, and basements are often where mold growth can occur. If you notice mold or know of water damaged areas in your home, you should take action to control its growth.

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How can I control mold growth in my home?

Fix any moisture problems in your home:

- Stop all water leaks first. Repair leaking roofs and plumbing fixtures. Move water away from concrete slabs and basement walls.
- Increase air circulation within your home, especially along the inside of exterior walls, and ventilate with fresh air from outside. Provide warm air to all areas of the home. Move large objects away from the inside of exterior walls just a few inches to provide good air circulation.
- Install and use exhaust fans in bathrooms, kitchens, and laundry rooms.
- Ventilate and insulate attic and crawl spaces. Cover earth floors in crawl spaces with heavy plastic.
- Clean and dry water damaged carpets, clothing, bedding, upholstered furniture within 24 to 48 hours, or consider removing and replacing damaged furnishings.
- Vacuum and clean your home regularly.

How do I clean up mold?

The time you are most likely to stir up spores and be exposed is while cleaning the mold. To minimize your exposure, first try to determine the extent of the mold infestation. If the area is small and well defined, clean up can be done by you, as long as you are free of any health symptoms or allergies. However, if the mold problem is extensive, such as between the walls or under the floors, you should consider hiring a professional cleaner.

For small areas (10 square feet or less):

1. Protect yourself by using goggles, gloves, and breathing protection while working in the area. For small isolated areas of mold growth, a cotton dust mask should do.
2. Seal off area from the rest of your home. Cover heat registers or ventilation ducts/grills. Cover all your furniture. Open a window before you start clean up.
3. Bag all moldy materials you will be discarding.
4. Damp wipe. Whether dead or alive, mold is allergenic, and some molds may be toxic. Mold can generally be removed from nonporous (hard) surfaces by wiping or scrubbing with water, or water and detergent. It is important to dry these surfaces quickly and thoroughly to discourage further mold growth. Instructions for cleaning surfaces, as listed on product labels, should always be read and followed. Porous materials that are wet and have mold growing on them may have to be discarded. Since molds will infiltrate porous substances and grow on or fill in empty spaces or crevices, the mold can be difficult or impossible to remove completely.

For large areas (more than 10 square feet):

1. Consider having a professional cleanup the area. To find a professional, check under “Fire and Water Damage Restoration” in your yellow pages. If you decide to clean up on your own, follow the guidance below.
2. Protect yourself by using goggles, gloves, and breathing protection while working in the area. For large consolidated areas of mold growth, you should use an OSHA (Occupational Safety & Health Administration) approved particle mask. You may obtain these for a reasonable price at most home improvement stores.
3. Seal off area from the rest of your home. Cover heat registers or ventilation ducts/grills. Open a window before you start to clean up.
4. Remove all your furnishings to a neutral area to be cleaned later. Follow cleaning directions below.
5. Bag all moldy materials you will be discarding.
6. Damp wipe. Whether dead or alive, mold is allergenic, and some molds may be toxic. Mold can generally be removed from nonporous (hard) surfaces by wiping or scrubbing with water, or water and detergent. It is important to dry these surfaces quickly and thoroughly to discourage further mold growth. Instructions for cleaning surfaces, as listed on product labels, should always be read and followed. Porous materials that are wet and have mold growing on them may have to be discarded. Since molds will infiltrate porous substances and grow on or fill in empty spaces or crevices, the mold can be difficult or impossible to remove completely.

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Small surface area (less than 10 square feet)

Material or furnishing affected	Method(s)
Books, papers, and wallboard (drywall and gypsum board)	3
Carpet, backing, concrete, cinder block, upholstered furniture, and drapes.	1, 3
Hard surface, porous flooring (linoleum, ceramic tile, vinyl). Non-porous, hard surfaces (plastics, metals). Wood surfaces.	1, 2, 3

Large surface area (greater than 10 square feet)

Material or furnishing affected	Method(s)
Books and papers	3
Concrete or cinder block	1, 3
Carpet, backing, upholstered furniture, and drapes.	1, 3, 4
Hard surface, porous flooring (linoleum, ceramic tile, vinyl). Wood surfaces.	1, 2, 3, 4
Wallboard (drywall and gypsum board)	3, 4
Non-porous, hard surfaces (plastics, metals).	1, 2, 3

Cleanup Methods

Method 1. Wet vacuum (in the case of porous materials, some mold spores/fragments will remain in the material but will not grow if the material is completely dried). Steam cleaning may be an alternative for carpets and some upholstered furniture.

Method 2. Damp-wipe surfaces with plain water or with water and detergent solution (except wood—use wood floor cleaner); scrub as needed.

Method 3. High-efficiency particulate air (HEPA) vacuum after the material has been thoroughly dried. Dispose of the contents of the HEPA vacuum in well-sealed plastic bags.

Method 4. Discard—remove water-damaged materials and seal in plastic bags while inside of containment, if present. Dispose of as normal waste. HEPA vacuum area after it is dried.

Should I use bleach to clean up mold?

The purpose of mold remediation is to remove the mold to prevent human exposure and damage to building materials and furnishings. It is necessary to clean up mold contamination, not just to kill the mold. Dead mold is still allergenic, and some dead molds are potentially toxic. The use of a biocide, such as chlorine bleach, is not recommended as a routine practice during mold remediation, although there may be instances where professional judgment may indicate its use (for example, when immune-compromised individuals are present). In most cases, it is not possible or desirable to sterilize an area; a background level of mold spores will remain in the air (roughly equivalent to or lower than the level in outside air). These spores will not grow if the moisture problem in the building has been resolved.

If you choose to use disinfectants or biocides, always ventilate the area. Outdoor air may need to be brought in with fans. When using fans, take care not to distribute mold spores throughout an unaffected area. Biocides are toxic to humans, as well as to mold. You should also use appropriate PPE and read and follow label precautions. Never mix chlorine bleach solution with cleaning solutions or detergents that contain ammonia; toxic fumes can be produced.

For further information call or visit us on the World Wide Web:

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