

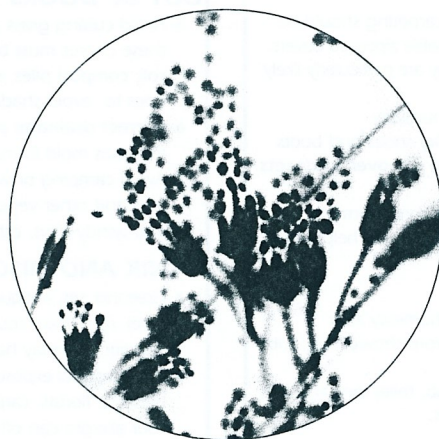
# MOLD ALLERGY

## What is mold?

Molds are microscopic fungi which, unlike plants, are unable to produce their own food from sunlight and air. They are made up of clusters of filaments, and live on plant or animal matter, which they decompose for their nourishment. Molds are among the most widespread living organisms, with tens of thousands of different varieties. The common bread mold is a well known example. Some molds produce penicillin or other antibiotics, or are necessary for agriculture and food production; others produce potent toxins or are major sources of plant disease. Many molds reproduce by releasing spores into the air, which then settle on organic matter and grow into new mold clusters. These airborne mold spores are far more numerous than pollen grains, and when inhaled can produce allergic symptoms.

## Where are molds found?

Molds can be found in most environments, and unlike pollens do not have a strictly limited season. Their growth is encouraged by warmth and high humidity, however, so they are most prevalent during the humid seasons of the year. Molds are found out of doors and in the home. They are present in outside air unless there is a cover of snow on the ground, and are especially prevalent in shady, damp areas and on decaying leaves or other vegetation. Mold spores produced outside become widely dispersed through the air, and can enter the home. Other molds are produced in the home, especially in areas of high humidity such as showers and basements.



## What can be done to decrease mold exposure?

Mold sensitive individuals should avoid exposure to areas of high mold growth, such as basements, compost piles, fallen leaves, cut grass, barns and wooded areas. A face mask should be worn when such exposures are unavoidable. In the home, it is important to prevent high levels of humidity. A gauge measuring relative humidity should be obtained, and the level in the house kept below 40%. This can be accomplished by the use of air conditioners and dehumidifiers in the summer, and by preventing over-humidification in the winter. Excess humidity produced by showering or cooking should be removed with an exhaust fan. Mold growing in the home can be killed with various products. These and other important mold avoidance measures are detailed on the next page.

Penicillium Mold Releasing Spores  
Microscopic View (X400)  
Photo © Allergy Control Products, Inc.

# MOLD CONTROL IN THE HOME



## THROUGHOUT THE HOUSE

- **Keep humidity low**, 35% if possible, but in no case over 50%. Use a gauge to monitor relative humidity.
- **Use an air conditioner or dehumidifier** in times of high humidity, with the windows closed. Dehumidifiers must be emptied of water regularly, or connected to a constant drain. Special air conditioner filters can be added to help trap the airborne allergens, and room air cleaners can help clear the air of mold spores.
- Very tightly insulated houses prevent the escape of moisture and thus encourage mold growth. **Allow adequate ventilation.**
- If using a humidifier in the winter, **avoid over humidification.** If mold is present, rinse the interior of the unit with a dilute bleach solution. Some humidifiers prevent mold growth by a special heating process. Central humidifiers should be checked and cleaned frequently.
- **Clean walls and ceilings and add mold inhibitor to paint** before applying.
- Window condensation can lead to moisture and mold growth on the window frame.
- Although indoor plants are not a major source of indoor mold spores, it is prudent to **limit the number of houseplants.**
- Mold is present on the bark of wood. If using a fireplace or woodburning stove, do not store firewood inside. **Avoid live Christmas trees.**

## IN THE BEDROOM

- Follow steps to **decrease dust exposure.** Ideally, carpeting should be removed and mattresses encased in allergen-impermeable zippered covers.
- **Avoid foam rubber** pillows and mattresses, since they are particularly likely to become moldy.
- A **dehumidifier** or air-conditioner can help reduce humidity.
- Mold grows in closets, which are damp and dark. Dry shoes and boots thoroughly before storing. **Use a chemical moisture remover in closets and storage spaces** to help prevent mold growth.
- Good quality **HEPA air cleaners** can remove mold spores from the air.
- **Convection heat units** can make mold spores nonviable and help reduce the spread of mildew.

## IN THE BATHROOM

- **Use an exhaust fan or open window** to remove humidity after showering. Use a squeegee to remove excess water from shower stall, tub and tiles.
- Wash shower curtain, bathroom tiles, shower stall, tub, toilet tank and tiles with **mold-killing and mold-preventing solutions.**
- **Do not carpet the bathroom.**

## IN THE KITCHEN

- **Use an exhaust fan** to remove water vapor when cooking.
- Mold can grow in refrigerators, particularly around door gaskets. **Empty water pans** below self-defrosting refrigerators frequently. Remove spoiling foods immediately.
- Molds grow in garbage containers, which should be emptied frequently and kept clean.

## IN THE LAUNDRY ROOM

- **Vent the clothes dryer** to the outdoors. Dry clothing immediately after washing.

## IN THE BASEMENT

- Carpet and pad should not be laid on a concrete floor. **Vinyl flooring** is a better choice.
- Correct seepage or flooding problems, and remove any previously flooded carpet. If a dirt floor is present, cover with a plastic vapor barrier.
- Keep the basement free of dust, and remove moldy stored items.
- **Add a paint mold inhibitor to paint**, especially on brick or cinderblock walls.
- Allergic individuals should not have their bedroom on the basement level.

## OUT OF DOORS

- Avoid cutting grass and raking leaves, or **use a well fitting face mask** if these chores must be done by the allergic individual. Avoid exposure to soil, compost piles, sandboxes, hay, fertilizers and barns. Prune or cut trees to avoid shading of the home. Eliminate vines.
- **Correct drainage problems** near the house, as pooled water greatly increases mold formation.
- Avoid camping or walking in the woods, where mold growth on rotted logs and other vegetation is high. Some mold spores are spread on dry and windy days, others at times of rainfall.

## WORK AND MISC. ENVIRONMENTS

- Greenhouses, antique shops, saunas, sleeping bags, summer cottages and hotel rooms are sources of increased mold exposure. Automobile air conditioners may harbor mold.
- Occupational exposure to mold occurs in farmers, gardeners, bakers, brewers, florists, carpenters, mill workers, upholsterers and paper hangers. Your allergist can offer specific recommendations.