

# Mold Allergy



# What is a Mold Allergy?

- Mold is a type of fungus that produces spores that float through the air. It can grow on almost anything
  when moisture or damp environments are present. It can be found indoors and outdoors. Mold is also a
  common cause of allergy and asthma symptoms.
- Mildew is also a common type of mold. Molds are different from plants or animals in how they reproduce and grow. The "seeds," called spores, travel through the air. Upsetting a mold source can send the spores into the air. Some spores spread in dry, windy weather. Others spread with fog or dew when humidity is high. This makes it easier for you to breathe the spores into your lungs. Inhaling the spores causes allergic reactions in some people. Allergic symptoms from fungus spores are most common from July to early fall. Fungi grow in many places. They can grow both indoors and outside, so allergic reactions can occur yearround. Many molds grow on rotting logs and fallen leaves, in compost piles, and on grasses and grains. Unlike pollen, molds do not die with the first killing frost. Most outdoor molds become inactive during the winter. In the spring, they grow on plants killed by the cold. Indoors, fungi grow in damp areas like the bathroom, kitchen, or basement.

## Species of Molds:

#### Acremonium

Acremonium has been found indoors, growing on building materials, such as acoustic and thermal fiberglass insulation used in heating, ventilation, and air conditioning systems. Because of its high water affinity, it is often isolated from cooling coils, drain pans, window seals, and water from humidifiers.

#### Alternaria

Found throughout North America, with the greatest abundance being in areas where grain is grown. The spores grow on organic debris in soil and leaves, flowers and fruits of vegetables, grains, and ornamental plants. The highest numbers occur on dry days in the summer and fall from noon to 3 pm daily.

#### • Aspergillus

A common soil fungus that grows on stored food products under damp conditions. It is common on grain and flour. It is common in the house, especially in basements and appliance drip pans. Also used in preparing soy sauce, sake, and organic chemicals.

#### Aureobasidium

This yeast-like fungus is commonly found on caulk or damp window frames in bathrooms. Aureobasidium (Pullularia) may be pink or black in color. Although it seldom causes infections, it can be allergenic. This is one type of mold that is a type of mildew. It will grow in cooler climates and, along with Cladosporium, is commonly found growing on siding.

#### Bipolaris

It is a common outdoor mold that frequently grows on grasses, plants, and soil. In the home, it may grow on houseplants, decaying food like celery or corn, or on water-damaged materials such as sheet rock, carpeting, or hardwood flooring. A rapid growing mold, bipolaris appears soft or fluffy with color ranging from whitish to gravish brown as it starts to grow and becomes dark olive or black as it matures, usually within five days. There are no known uses for bipolaris mold in an industrial or manufacturing setting.

#### Candida

Candida can live in soil and organic debris, but Candida albicans commonly lives on the skin and in the mouth, intestinal tract, vagina, and other moist, warm, and dark areas of the body.

#### Cladosporium (Hormodendrum)

It is the most common mold in the world and a common soil fungus. Abundant in wet, damp weather. During hot dry weather, spore production declines. As temperatures fall and humidity rises production rises. Found on dead vegetation and textiles, parasites on tomatoes, spinach, and bananas.

#### Epicoccum

Widespread, found in temperate regions, especially grasslands and agricultural areas. Highest counts in dry, cool autumns in the Midwest. Spore counts rise and fall with mountain cedar pollen counts. Will colonize on textiles and foodstuffs.

Mold counts **PEAK** after rain and during times of high humidity

# Molds most likely to trigger an allergic response:

- Alternaria
- Aspergillus
- Aureobasidium
- Cladosporium
- Epicoccum
- Fusarium
- Mucor
- Penicillium
- Rhizopus

# Mucor

It is often found in soil, plant debris, stored grains, dairy products, and dung, as well as on plants and decaying fruits and vegetables. However, mold reproduces via spores, which can be transported by air, water, and insects. So even if a fungus originates outdoors, it often can enter a dwelling through a variety of means, including doorways, windows, vents, and heating and air conditioning systems. Mucor colonies have been found in homes, hospitals, schools, and offices in mediums such as house dust, carpet, mattresses, and ventilation ducts.

# • Phoma

Phoma is a ubiquitous mold of the Order Pleosporales, found in soil and decaying plant materials worldwide. It is a well-known plant pathogen, causing mostly root and leaf damage.

# Rhizopus

Found mainly indoors, but also grows on organic debris in the soil. Black bread mold.

# Stemphylium

It is important in the Midwest and the South, as it grows on farm crops, tomatoes, and grains. If brown spots appear on your lawn in the late summer, it could be this mold. It peaks in ragweed seasons.

# How Can I Prevent an Allergic Reaction to Mold?

You can reduce your allergy symptoms by avoiding contact with mold spores. These steps can help:

Reduce your exposure to mold spores outside.

- Limit your outdoor activities when mold counts are high. This will lessen the amount of mold spores you inhale and your symptoms.
- Remove leaves and piles of dead plant material or tree clippings as soon as possible.
- Wear an N95 mask, hat, and sunglasses when caring for your lawn or garden.
- Have someone without a mold allergy do yard work, if possible.
- Promote groundwater drainage away from your house.

Reduce your exposure to mold spores inside.

- Prevent mold and mildew build up inside the home. Pay close attention to mold in bathrooms, basements, and laundry areas. Be aggressive about reducing dampness.
- If mold grows, clean it right away. If it grows on a hard surface, scrub the mold off with detergent and water. Let it dry fully. Protect yourself with goggles, gloves, and a mask. You may have to throw away soft materials, like carpet or furniture, where mold can't be fully removed.

If you use bleach and water to clean the mold, make sure the air is well-ventilated (has proper air flow). Bleach can cause asthma symptoms, so wear a mask or have someone else clean if possible. Don't mix bleach with other chemicals. This may cause a dangerous chemical reaction.

- Increase air flow in your home. Open doors between rooms, move furniture away from walls, and use fans if needed.
- Repair roof leaks and roof gutters. Clean out your gutters to remove leaves and debris. When gutters are full or damaged, it can cause leaking.
- Fix plumbing leaks as soon as possible.
- Use central air conditioning with a CERTIFIED asthma & allergy friendly® filter. This can help trap mold spores from your entire home. Freestanding air cleaners only filter air in a limited area. Avoid devices that treat air with heat, electrostatic ions, or ozone.
- Lower your indoor humidity. Air cleaners and filters can't reduce mold spores if your home is too humid. If indoor humidity is above 50%, mold will thrive. Use a tool called a hygrometer to measure your indoor humidity. The goal is to keep humidity between 45 and 30%. Use a dehumidifier to remove moisture and keep humidity in your house below 45%. Drain the dehumidifier often and clean the condensation coils and collection bucket.

If you use a humidifier, clean the fluid container at least twice a week to prevent mold growth. Air conditioners and dehumidifiers can also be a source of mold. Choose a high-quality humidifier that you can easily clean and check for mold growth.

- If you have houseplants or potted herbs, only water them when the soil is dry. Here are some other ways to prevent mold in houseplants:
  - o Plant them in sterile soil
  - o Give them more light
  - o Use a fan to circulate air around the plant
  - Trim dead leaves often