

About Mold Allergies

When we refer to mold allergy, many patients question, "Just what is mold and where are specific molds found?" This informational sheet is intended to help our patients understand more about mold allergy. Molds are actually very small plants that grow both indoors as well as outdoors. Molds thrive in the presence of dampness and darkness. Molds typically occur on other plant or animal matter such as fruit, flour and leather. Air currents cause mold to circulate in the atmosphere as a dust also called spores. The two most commonly occurring outdoor molds are *Alternaria* and *Cladosporium*. These molds mold spores are measurable in the spring months and peak in the fall. The most common indoor molds are: *Penicillium*, *Aspergillus* and *Mucor*, which are perennial or year round offenders. Indoor mold is commonly found in basements and crawl spaces as well as in furniture, bedding and stuffed toys. Included for your information is a brief description of commonly occurring mid-western molds.

ALTERNARIA – A common outdoor mold; however, may be found indoors on condensed window frames. May be found as a parasite on plants and plant materials. Found in dead decaying vegetables. May be responsible for the black spots on potatoes and tomatoes. Known habitats are soils, corn silage, rotten wood, composts, bird nests and various forest plants.

ASPERGILLUS – A common indoor mold found in damp, musty houses; on damp cloths as well as leather goods. Also found in damp hay and grain as well as soil, leaf and plant litter, decaying vegetable root, bird droppings, tobacco and stores of sweet potatoes. Commonly occurs on spoiled foods such as bacon, chicken, sausage as well as dried fruits as a bluish color and on onions as a black mold. *Aspergillus* is a thermotolerant mold – growing in a wide range of temperatures.

CLADOSPORIUM - This is the most frequently encountered mold in the air. Exists both indoors as well as outdoors; frequently found in unclean refrigerators, foodstuffs and moist window frames. Often found in homes with poor ventilation in low-lying, damp areas. Can be found on leather, rubber, cloth and wood products as a brown mold. Also found in decaying vegetation, spoiled meat and tobacco.

CURVULARIA – A common plant mold. May cross react with *Alternaria*. Exists as a leaf mold. Commonly seen on cotton, rice, barley, wheat and corn plants.

EPPICOCUM – Common in uncooked fruit, decaying plants and vegetative materials. Often found on dying plants as a black mold. It has been isolated from cereals, fruits, polluted fresh water, compost beds, insects and also human skin and sputum. It is an important outside mold.

FUSARIUM – Commonly found in slime in riverbeds, it is widely distributed in grass and other plants. It is a common soil fungus. Often responsible for plant disease as a major parasite of rice, sugar cane and sorghum especially on maize grains. It occurs on roots of fruits and vegetables, i.e. bananas, tomato and watermelon as well as other fruits and vegetables.

HELMINTHOSPORIUM – Most frequently isolated from grains, grasses, sugar cane, soil and textiles. Best know as parasite of cereals and grains. Occurs seasonally in hot weather readily distributed on dry, windy days.

MUCOR – The dominating mold found in house dust is primarily an indoor mold. Common in old furniture, houses, barns and barnyards. Can be found in soil, horse manure, plant remains, grains and vegetables. Often seen on soft fruit, fruit juice and marmalade. Appears as a grayish-white growth on the surface of meats.

PENICILLIUM – Both an indoor/outdoor mold isolated from decaying vegetable products, in stored grains, cereals and hay and is a major ripening agent in Camembert and Roquefort cheeses. This is the blue-green mold found on stale bread and fruits. This mold is a perennial offender, yet peak concentrations are found in the spring and winter months.

PULLARIA – A primary invader of various leaves. The spores are deposited on the leaf surfaces in the spring and begin decomposition in the fall as the leaf reaches senescence. Appears on the surface layers of soil and also on wheat seeds, barley, oats, tomato and pecans. Indoors is found in kitchen and bathroom areas and may cause damage to painted surfaces.

THE DOWN AND DIRTY ON MOLD: A QUICK CHECKLIST

Molds are microscopic fungi that reproduce by sending tiny seeds, called spores, into the air. There are hundreds of thousands of types of molds that exist indoors and outdoors. Molds like dark, damp and warm environments to grow in, and can grow on ANYTHING. Molds are also known as yeast, mushrooms and mildew. Molds are affected by weather conditions such as wind, rain or temperature. Outdoor mold spores begin to appear in early spring and reach their peak in July, August and September.

REMEMBERMUSTY SMELL = MOLD

Where is mold most likely to be in your home?

- **Bathrooms:** shower curtain, tiles, grout, behind the toilet, the tank or toilet itself, toilet seat covers, rugs, carpet and trashcans
- **Laundry room:** dirty clothes and hampers, overflowing washing machines.
- **Cellars, basements or attics:** walls, ceilings or floors
- **Kitchen:** under upper cabinets where crock pot or steamer is used, behind the refrigerator or in the refrigerator drip tray or spoiled food, rugs, fruit bowls and trashcans
- **Window sills**
- **Air conditioner**

- **Closets**
- **Mattresses and foam rubber pillows**
- **Old books or stacks of newspapers or magazines**
- **Dishwasher drain**
- **Pets:** bird droppings and litter boxes
- **History of leaky plumbing, leaky roof, flood damage, water leaks, sewer backups**

Where is mold most likely to be outside?

- Gardens, soil and compost piles
- On leaves, grass, hay, straw and weeds
- Tree bark or rotting wood
- Shady areas with heavy vegetation

Mold Avoidance Tips

- Wash clothes in hot water and not cold. Therefore, try not to buy clothes that need to be washed in cold water
- Do laundry often. Don't let dirty laundry pile up. Wash towels daily.
- Bleach around windows
- Avoid a fruit bowl. Keep fruit in the refrigerator instead.
- Organic fruit is more likely to mold quicker than non-organic produce.
- Dark spots on hard wood floors can mean mold, which can occur from exposure to moisture from a leak within the walls.
- Check wood bark for mold if bringing in to use for wood burning stove or fireplace.
- Going out after a rainstorm can increase your exposure to mold. Mold spores usually peak 2 hours after the rain. During this time-STAY INSIDE.
- Don't cut grass. (Or if you have to wear a mask).
- Don't rake leaves. (Or if you have to wear a mask).
- Keep your car windows closed when traveling.
- Empty the water in humidifiers daily and wash unit regularly.
- Don't hang sheets out to dry. Molds can collect in them.
- Use exhaust fans in bathrooms and in the kitchen when cooking to absorb steam.
- Any suspicious areas should be cleaned and sprayed with ½ cup of bleach to one gallon of water.
- Install a high-performance electrostatic filter in your central air conditioning and heating system to trap mold spores and inhibit mold.
- If you have an area that has poor ventilation consider purchasing a dehumidifier. Mold likes to grow in humidity greater than 50%.
- Invest in a hygrometer, which is an inexpensive device used to measure the humidity and monitor indoor level.
- Avoid kicking or stepping on mushrooms-that can cause a release of spores from under the caps.
- Outdoor molds peak in the early morning and evening hours when the temperature drops at sunset. Therefore try to stay inside during these times. Also, try to stay inside during windy days, when molds can be at their highest.
- Keep compost piles far away from the house.
- Mold grows on real Christmas trees. Trees are cut and packed in the presence of snow and frost, which with warming in the home provides the humidity that allows for prolific mold growth. Purchase a fake tree...you will get your money's worth!

- Consider the addition of air purifiers for multiple rooms.
- Wash drapes regularly. (Better yet discard them and go with blinds).
- Replace old plumbing and drains if leaking. (At least inspect them regularly if they are old).
- If you are going to paint basements, cellars etc. use paint with a mold inhibitor or add a mold inhibitor to standard paint for use in bathrooms.
- Use chemical moisture removers in closets.
- Never put damp clothing in closets or drawers.

TEA TREE TREASURE

Nothing natural works for mold and mildew as well as this spray. I've used it successfully on a moldy ceiling from a leaking roof, on a musty bureau, a musty rug and a moldy shower curtain. Tea tree oil is expensive, but a little goes a very long way.

2 teaspoons tea tree oil & 2 cups of water

Combine in a spray bottle, shake to blend and spray on problem areas. DO NOT RINSE.

(MAKES 2 CUPS)

Preparation time: under one minute.

Shelf life: indefinite

Storage: leave in the bottle

MOLD PREVENTION AND DETECTION EQUIPMENT

- Air purifiers (HEPA filters)
- Electrostatic filters
- Chemical moisture removers
- Dehumidifiers
- Hygrometer (measures humidity levels)

*All of the above can be found at local "Do it yourself" shopping centers (Lowe's or Home Depot)

CANDIDA

Predisposing Factors:

1. Frequent, prolonged antibiotic use
2. Prolonged use of birth control pills
3. Prolonged cortisone/steroid use
4. Multiple pregnancies
5. High environmental mold exposure
6. History of high sugar intake (cravings are common)
7. Ingestion of a high yeast diet
8. Diabetes

Common Symptoms:

1. Recurrent yeast vaginitis
2. Chronic throat, ear, and or rectal itching
3. Chronic fatigue
4. Chronic constipation sometimes alternating with diarrhea
5. Bloating and gassy abdominal distention
6. Chronic Cystitis
7. Recurring depression, irritability, poor concentration and decreasing memory
8. Chronic indigestion and other intestinal symptoms
9. Recurring fungal-type skin rashes
10. PMS and severe menstrual cramps