

## ABOUT MOLD ALLERGENS

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 common outdoor molds are: *Alternaria* and *Cladosporium*. These 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 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 moist 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.

**ASPERGILIUS-** A common indoor mold found in damp, musty houses: on damp cloth 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 stored 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 thermo tolerant mold, growing in a wide range of temperatures.

**BOTRYTIS-** A soil and plant mold. Described as a gray mold appearing on decayed plant tissues. It is a parasite on a wide range of plants producing flower and fruit rot. May appear on cabbage, lettuce, or tomato. Has worldwide distribution, yet thrives in humid, warm locales.

**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*. Commonly seen on cotton, rice, barley, wheat, and corn plants.

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**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, also human skin and sputum. It is an important outside mold.

**FUSARIUM-** Commonly found in slime in river beds, 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 vegetable, 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 known as parasite of cereal 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. Commonly found 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.

**PHOMA BETA-** A paper and plant mold. Commonly occurs as a soil fungus attacking weak and damaged plants. It may be isolated from various soils, dead plant tissues and potatoes. Indoors it's found on humid surfaces and is associated with painted walls.

**PULLULARIA-** 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 it's found in kitchen and bathroom areas and may cause damage to painted surfaces.

**RHIZOPUS-** Closely related to Mucor. Spores are dispersed in hot, dry weather. Frequently, it is isolated from forest and cultivated soils and has been isolated in children's sandboxes. Typically found on sweet potatoes, cold-stored strawberries, and stewed fruits. Found in bird nests, feathers, and wild bird droppings. Occupational exposure may occur among food handlers associated with transfer of strawberries, peaches, cherries, corn and peanuts.

**TRICHODERMA VIRIDIE-** A widely occurring soil fungi. Commonly found on fallen timber outdoors and indoors in kitchen areas on unglazed ceramics. This mold may be a problem in industrial cultivation of mushrooms and frequently infects tulip bulbs.

**T.O.E.-** A fungal mixture containing: Trichophyton, Candida, and Epidermophyton which is seldom airborne and occurs as a skin fungus. The words 'mold' and 'fungi' are used interchangeably.

**GRAIN SMUTS-** A fungi found on wheat, corn, oat, or grass grains. These fungi are released during the flowering cycle as well as the harvesting time of the specific plant.