

Dr. *Nancy* BECKER

EARS, NOSE & THROAT ● ALLERGY THERAPY ● FACIAL PLASTIC SURGERY

1427 Jefferson, Suite 101, Enumclaw, WA 98022 ● Office: 360.825.4466 ● Fax: 360.825.2064 ● www.drnancybecker.com

MOLDS

Molds as inhalant allergies are of primary importance in allergic asthma and rhinitis. While there are some seasonal variations and certain peak periods, most molds have the capability of living year-round indoors, as well as outdoors. Mold spores establish new colonies quickly, making elimination difficult.

Fungal spores are more abundant than any other airborne particles found in the atmosphere, including pollen grains. They are also much smaller than pollen grains. Thus, it is easier for the spores to be inhaled directly into the sensitive mucosa to cause asthma.

PENICILLIUM NOTATUM Penicillium grows in dusty green colonies and dominates in temperate soils where spores are easily released into the atmosphere. Indoors it is the familiar blue-green mold found on stale bread and citrus fruits. Penicillium has no big seasonal variations, but reaches peak concentrations in the winter and spring.

CLADOSPORIUM HERBARUM (Hormodendrum): The genus Cladosporium, with 25 different species, has the widest distribution of all molds. The colonies are a velvety olive green or shades of brown or greenish-gray. Some species can grow below 20° F, which makes it a serious problem for refrigerated foods. It is often found in houses with poor ventilation or around most window frames where it covers the entire painted areas.

ASPERGILLUS Aspergillus is found in fertile soil, decaying vegetable matter, flours, swimming pool water, but it is most commonly cultured from houses, basements, bedding, house dust, and raw textile materials. A non-toxic strain is used in making vinegar and soy sauce. Aspergillus thrives at 40° F, whereas most other molds require more moderate temperatures. The spores are at peak concentrations in the autumn and winter.

MUCOR Mucor is called “sugar fungus” because it attacks carbohydrates. It can be found on rotting vegetable material such as mushrooms, horse dung and soils. In the house it grows in soft fruits, sour milk and marmalade. It is the dominant mold in floor dust. Mucor requires 92% humidity to grow and 95% humidity for sporulation. It is considered an indoor mold, thus influencing perennial (year round) asthma and rhinitis.

ALTERNARIA TENIUS Alternaria species occur worldwide and are considered outdoor molds. Alternaria follows a seasonal pattern appearing when the weather is warm and humid. It is found on fruits and textiles. Black spots on tomatoes may be caused by Alternaria.

HELMINTHOSPORIUM The colonies appear black and velvet-like and are found worldwide in surveys. Helminthosporium almost always occurs seasonally and the spores are released on dry, hot days. It is frequently isolated from oat, corn, grasses, sugar cane, soil, and textiles.

PHOMA This is a very common soil fungus attacking weak or damaged plants. It is frequently isolated from different soils, dead plant tissues, and potatoes. Phoma is frequently found indoors as a contaminant of humid surfaces, in connection with bio-deterioration of painted walls, producing colored spots often pink or purple. Phoma can also be found on moldy shower curtains.

PULLULARIA This mold is a primary invader of all kinds of leaves. It also appears in the surface layers of soils and has been found in seeds of wheat, barley, oats, tomato, and pecans. Pullularia is often found in kitchens and bathrooms and can damage interior painted surfaces. It is a common contaminant of the wood and water in saunas and hot tubs.