

Mold Allergy

Molds (also known as fungi) can cause serious health problems. Molds make spores to reproduce. The spores get in the air. On inhaling them, allergy prone individuals develop symptoms of allergic rhinitis, sinusitis and asthma. Molds also make toxic substances. Inhaling the toxic substances may cause serious health concerns. There is significant awareness among the public about health issues relating to black mold. This concern reached wide publicity in the media after reports of several infants dying from bleeding in the lungs in Cleveland, Ohio. CDC and several other governmental agencies investigated the matter extensively. No definite connection between the deaths and exposure to the black mold was made.

Some of the common diseases caused by molds

Allergic rhinitis, commonly known as hayfever can develop or get exacerbated following exposure to molds. It causes significant sneezing, sniffles, nasal stuffiness and congestion, postnasal drainage and even sinus pressure headaches. Mold allergy is often perennial. It can get worse following summer rains and during dry and windy weather. Sinusitis is caused by inflammation of sinus linings. Mold spores can develop into **fungal balls** inside sinus cavities and can cause bleeding. However, most often they are asymptomatic and discovered on routine x-ray studies. In patients who are immunocompromised (having low white blood cell counts, HIV or Primary Immunodeficiency Diseases, Cancer, Leukemia or Lymphoma), inhaled spores can start growing inside the sinus cavities, start eroding the bony walls of sinuses and cause tissue destruction (**Invasive Fungal Sinusitis**). The fungus could also spread to other organs through blood stream and could cause life-threatening illnesses.

Allergic Fungal Sinusitis (AFS) is peculiar to the South Western part of the United States including Arizona. In this condition highly allergic people on inhaling fungal spores develop exuberant allergic inflammatory response to the fungi in the sinus cavities. This causes chronic sinusitis that is often resistant to treatment and may result in several sinus surgeries before the diagnosis is made. Such people characteristically make nasal casts (thick inspissated mucus of peanut butter consistency). **Allergic Bronchopulmonary Aspergillosis (ABPA)** is a closely related and more widely recognized condition. Patients who have allergic asthma are the ones who may develop ABPA on inhaling fungal spores. This causes recurrent pneumonias or infiltrates that migrate in their lungs visible on chest x-ray. Their asthma becomes refractory to treatment. If left unrecognized it could result in damage to the bronchial tubes resulting in bronchiectasis (irregularly dilated bronchi) and scarring of the lungs.

Molds can also **exacerbate asthma** without causing ABPA. It is not uncommon to see sudden increase in asthma exacerbations following summer rains. Moisture in combination with warmth is very conducive for mold growth. This results in sudden increase in mold spore count in the atmosphere. When people who are allergic to molds and have asthma inhale them, their asthma exacerbates resulting in office and ER visits and hospitalizations.

In **Hypersensitivity Pneumonitis**, inhalation of mold spores and other organic debris causes cough, pleuritic chest pain, fever, difficulty breathing and other flu-like symptoms. If you develop such symptoms for example every time after cleaning bird cages or animal pens, you may have Hypersensitivity Pneumonitis.

How are diseases caused by molds diagnosed?

The tests that you undergo to diagnose mold related illness depends on the type of illness you have. Allergy skin tests, blood tests to measure eosinophils and serum IgE level, Chest x-ray, Pulmonary Function Test and CT scans or MRIs of sinus cavities and chest are some of the commonly offered diagnostic procedures. More specialized tests to diagnose specific conditions are also available. Air-samples when collected from different parts of the suspected building by professionally competent people may give valuable information as to the likelihood of having mold growth in the building.

When do you suspect mold and what can you do about it?

Molds grow in places where there is dampness and lack of sunlight. Molds are uncommon in Arizona due to dry climate. However, molds do grow in old and water damaged buildings. Presence of water leak and flooding should alert one to the possibility of mold growth. Places in the house that are relatively dark and having poor ventilation (such as but not limited to bathrooms, showers, tubs, kitchen sinks) are the places to check first. If you see brown, green or black spots along the walls or the roof or if you smell musty odor, it is likely that mold is present. If the growth is slight, application of dilute bleach (after taking proper eye, skin and respiratory precautions recommended by the manufacturer), fixing the water leak and improving the ventilation in the room is often sufficient to eradicate the mold.

Removing bathroom carpets, cleaning garbage containers frequently, cleaning refrigerator door gaskets and drip pans, promoting ground water drainage away from a house, using exhaust fans in bathrooms for several hours daily and facilitating sunlight entry into houses are some of the other mold eradication measures recommended by the experts. You may want to stay indoors when the mold spore count is high in the atmosphere. Using HEPA filters in air-conditioners and keeping the doors and windows closed at all times may prevent mold spores from gaining entry into houses. You should seek professional help if the mold growth is heavier or comes back repeatedly after seemingly successful eradication measures.

About the author:

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