

Aspergillosis

Depending on the source, there are several definitions of Aspergillosis. The simplest description is a general name to cover any disease caused by a number of different fungi. The Manual of Clinical Microbiology from the American Society for Microbiology, lists 29 different genera that can be linked to Aspergillosis. Another source suggests that any of the approximately 400 species of *Aspergillus* and *Penicillium* can be considered as agents for the range of symptoms associated with this disease. The book Medically Important Fungi, by Larone, notes that the sites of infection range from lung, paranasal sinus, ear, eye, skin, mucous membranes, as well as multiple systemic sites as places where the fungus may invade. It goes on to note that the most prevalent species involved with Aspergillosis are *Aspergillus fumigatus*, *Aspergillus flavus* and occasionally *Aspergillus niger*.

There are two types of Aspergillosis. Bronchiopulmonary aspergillosis is a generalized infection of the lung by inhaled spores. This is considered an allergic response. Invasive aspergillosis is most often caused by *Aspergillus fumigatus*. The fungus invades the blood vessels of immunocompromised persons. Antifungal drugs and oral corticosteroids are available through a doctor, if he/she believes that aspergillosis is present.

Testing with spore traps in an environment, such as a home or business, can confirm if high levels of *Aspergillus* or *Penicillium* are present. The increase in spores inside is quite often due to water leaks, wet rugs, poorly performing or contaminated HVAC systems, and high relative humidity. Rising numbers of *Aspergillus/Penicillium* spores are often associated with allergic responses.

If a specific species of *Aspergillus* is needed for identification, then traditional culture methods are recommended. This type of testing can confirm if viable *Aspergillus fumigatus* spores are present.