

AIRBORNE MOLD SPORES

Airborne mold (fungal) spores and other bioaerosols can result in a variety of symptoms, but are most commonly associated with upper respiratory allergy-type symptoms including sinus and pulmonary congestion, as well as eye irritation. Mold spores, the most common bioaerosol, are generally present in all indoor locations, with levels typically below outdoor levels. Where mold amplification sources are present (such as contaminated HVAC equipment, stagnant water sources, wetted surfacing materials, etc.) elevated spore production and distribution may result.

Individual sensitivities to mold spores vary widely across the population, from no response, to allergy-type responses, to life-threatening diseases and infections. Allergy-type symptoms include runny nose, eye and throat irritation, cough, congestion, and the aggravation of asthma. Some persons are at risk of developing Organic Dust Toxic Syndrome (ODTS) or Hypersensitivity Pneumonitis (HP). ODTS can result from a single exposure to elevated dust and mold spore levels, and produce “flu-like” symptoms. HP may occur after repeated exposures to an allergen, and can result in permanent lung damage.

The spores of some mold species can produce potent mycotoxins, which are fungal metabolites, and have been identified as toxic agents. *Stachybotrys* spores can produce such potent mycotoxins. *Stachybotrys* mold has also been linked to a variety of serious respiratory effects, including pulmonary hemorrhage/hemosiderosis in immunocompromised individuals. The *Stachybotrys* mold spores may also aggravate other respiratory conditions induced by other environmental contaminants.

Other mold species capable of producing potent mycotoxins include *Penicillium*, *Aspergillus*, *Fusarium* and *Trichoderma* species. *Penicillium* mold spores



are also a strong allergen, and can aggravate asthma conditions. Several *Aspergillus* species have been associated with infectious diseases, such as Aspergilliosis, in which the mold begins to grow inside the lungs of susceptible individuals with suppressed immune systems.

All visible mold growths and other areas identified with mold growth should be treated as potentially containing toxic mold spores. Disturbing these growths can result in the release of millions of spores into the air. Proper clean-up methods should be used to minimize the potential for spore release, and should generally include wet methods, containment, personal protective equipment, and proper disposal procedures.

For additional information or assistance, please call:

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