The overlooked threat of indoor mold, what you should know…

Molds produce toxic substances call **mycotoxins**. Many symptoms and human health effects attributed to inhalation of mycotoxins have been reported including: mucous membrane irritation, skin rash, nausea, immune system suppression, acute or chronic liver damage, acute or chronic central nervous system damage, endocrine effects and cancer.

Environmental Protection Agency (EPA), U.S. Government, Mold Remediation in Schools and Commercial Buildings, 402-K-01-001 September 2008, pg 41-42

Research studies have shown that building dampness and mold have been associated with respiratory symptoms, asthma, and respiratory infections. Individuals with asthma or hypersensitivity pneumonitis may be at risk for progression to more severe diseases if the relationship between illness and exposure is not recognized and the exposures continue.

National Institute for Occupational Safety and Health *(NIOSH), U.S. Government, NIOSH Alert November 2012, Preventing Occupational Respiratory Disease from Exposures Caused by Dampness in Office Buildings, Schools and other Nonindustrial buildings.*

Can mold spores contain toxins? Yes. Some of these fungi produce toxic metabolites (mycotoxins), and almost all molds that grow in the environment can produce triple helical glucan, both of which are toxic to lung cells. The form of glucan that dominates in molds such as Aspergillis and Penicillium and related fungi is called beta-1, 3-D-glucan.

American Industrial Hygiene Association (AIHA), Facts about Mold, December 2011, pg 7,9

The trichothecene mycotoxins are a group of toxins produced by multiple genera of fungi. Systemic symptoms can develop with all routes of exposure (especially inhalation) and might include weakness, ataxia, hypotension, coagulopathy (clotting/bleeding disorder), and death.

http://emergency.cdc.gov/agent/trichothecene/casedef.asp

While the fungi represent a very large population of organisms, most important mycotoxins are produced by a subpopulation of fungi commonly known as molds. Indeed, it is not known *why* molds produce mycotoxins, but we do *know* that the production of mycotoxins has important consequences for man. Tichothecene mycotoxins of *Stachybotrys chartarum* have recently been shown to be in the air, where they can be inhaled. These toxins have actually been shown to be in the bodies of people inhabiting these buildings. These trichothecene mycotoxins are highly toxic, having been designated as "biological warfare weapons" by no less an authority than the Office of the Surgeon General and the United States Army. Therefore, it is no surprise that the presence of these toxins in the indoor environment is considered to be highly problematic.

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