

Mold Fact Sheet

Background

Mold is a general term that refers to a growth of fungi. Fungi are microscopic organisms that require oxygen, food and water. In the case of indoor environments generally the food comes from building materials that contain organic carbon and the water source is typically the result of water condensation or an unintended water loss such as a leak or a flood. Since an indoor environment will always contain oxygen and organic carbon the easiest way to control mold growth is by controlling excess moisture.

Health Effects

It is well documented that excessive exposure to mold can have adverse health effects. Those effects can be broken down into three categories:

1. Allergenic response- The body's immune system learns to recognize foreign objects (such as the proteins found on the outer walls of fungal spores) and react to them. In individuals with hypersensitivity this reaction is strong and the result is an allergic reaction to a type of mold. Persons are not allergic to "mold" in general. Rather they are allergic to one or more of the 100,000+ species of mold. It is up to their physician to determine to which types of fungi a person is allergic.
2. Infection-There are very few species of mold that can infect and multiply on or in a person. These infections can be topical as in the case of Athlete's Foot, or they can be systemic as in aspergillosis (colonization of the lungs by some species of *Aspergillus*). Systemic infections are nearly always opportunistic infections in people whose immune systems have been compromised.
3. Toxicosis-For example, some fungi under very particular circumstances will generate by-products that can cause adverse health effects when ingested or inhaled.

Exposure

Two common routes of mold exposure are ingestion and inhalation but it is important to recognize that exposure does not always result in an adverse health effect. Unfortunately at this time there are no exposure guidelines in place for airborne mold concentrations that will accurately predict adverse health effects and it is possible there never will be. Unlike many chemical exposures, individuals will react differently, if at all, to similar concentrations and types of mold. However, preventative measures to control excessive mold growth should always be taken.

Testing

Testing for mold is controversial. Depending on the situation, testing may not be warranted at all. In other situations, testing may be used to eliminate the hypothesis that fungi is the source of adverse health effects. Very rarely can testing for fungi be used to determine that exposure to mold is contributing to adverse health effects. Should testing be necessary it is critical to have it done by a well-trained, experienced investigator. There are several certification bodies that train inspectors and they are not all of the same quality. One possible resource is the American Industrial Hygiene Association's consultants listing for mold specialists, which can be found at <http://www.aiha.org/Content/AccessInfo/consult/consultantsearch.htm>.

Where (and where not) to get more information

Much has been written about mold in buildings, some of which is controversial and some of which is outright wrong. It is important to gather information only from reputable sources and publications. Two resources are the [Occupational Safety and Health Administration](#), [Environmental Protection Agency](#), and the [Centers for Disease Control and Prevention](#). There are countless articles both in circulation and on the Internet that are aggressively presenting incorrect and, in some cases, inflammatory “facts” that are not only untrue but are causing unnecessary hysteria. Please consider the source of any information gleaned off of the Internet or other non-reviewed sources before making any decisions.

“Toxic Mold” or “Black Mold”

These are two terms commonly use by uninformed parties trying to profit from the hysteria surrounding mold. The fact is, there are very few species of molds that may have toxic effects and routine testing cannot determine if your indoor environment had “Toxic Mold” versus “Non-toxic Mold.” When the term “Black Mold” is used it is most often by misinformed people who are referring to the genus of *Stachybotrys*. *Stachybotrys* is a common fungi that early on was implicated in several infant deaths in Ohio. That original study was conducted by the CDC, which has since amended their findings to conclude that there was no definitive link between the species *Stachybotrys atra* and those deaths. Furthermore, there are thousands of species of mold that are black but have never been associated with adverse health effects.

<http://www.eia-usa.org/fact-sheets/mold-fact-sheets/>

<http://www.epa.gov>

<http://www.stadr.cdc.gov>

Please contact Public Health at 226-6116 if you have any questions or concerns.

<http://www.epa.gov/lead/pubs/leadpdf.pdf>

<http://www.epa.gov/mold/moldguide.html>