

Mold - Indoor Air Quality

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Mold is found everywhere in nature and plays a large role breaking down organic matter. It reproduces by spreading very small spores. Invisible to the human eye these spores can travel great distances in the air. Mold needs moisture to grow. We are exposed to molds frequently in outdoor environments. It begins to grow indoors when the spores land on a surface that is at the very least damp. Thousands of different types of mold exist, but none of them can survive without a source of moisture to help them grow and thrive.

Under normal circumstances mold growth is usually not a problem in indoor locations. In cooler climates, such as New England, the dry heat used to warm your home or office during the fall and winter is usually sufficient to prevent the growth of mold. During summer months with the air conditioning and fresh air movement in our homes and offices, mold growth is often unlikely. The locations that can support mold growth are damp basements, areas that may have had previous water leaks, such as plumbing problems or roof leaks.

A recent example of extreme mold growth occurred after Hurricane Katrina. Many of the areas of New Orleans that had been under water for days or even weeks were covered

with molds. The conditions for uncontrolled growth were perfect in this damp warm environment. Often with the buildings not occupied and closed up to the outside air movement the growth became overwhelming and most of the building materials such as insulation and sheetrock became food for the mold spores. Many, if not most of the buildings had to be condemned.

Although several attempts have been made by Federal and State agencies to develop standards for mold as of now none have been established. The primary reasons for this are as follows:

A. There are thousands of types of mold existing in the world, some less harmful than others. The sheer volume makes it hard to categorize which molds are of concern.

B. Mold types have different effects on individuals. Some people may be very sensitive while others have little or no sensitivity.

C. Testing for mold can often identify the type and/or the total number of colony forming units (cfu). However, information is difficult to correlate with possible health concerns.

D. Corrective actions are always the same. This entails removing the source of moisture, disinfecting or removing the material, and, if necessary, re-

painting and refinishing.

If mold is visible it is not necessary to test. As mentioned above in this article the treatment is always consistent.

- 1)** Remove the source of moisture. No Moisture-No Growth.
- 2)** Remove all growth either by disinfection (see below) or remove building materials that have growth on them.
- 3)** Disinfect the area. A 10% solution of bleach is often the best way to kill most mold growth. This may be dependent on where the mold is growing. A carpet may need a deep cleaning and then a complete drying to ensure no further growth. Note: Severe damage from mold should be handled by trained professionals.
- 4)** Refinish or repaint areas that have been damaged by growth. Mold resistant building materials are available, including treated lumber, treated sheetrock and mold resistant paints.

We are all exposed to mold on a regular basis. It is in the air much of the time, although in the winter it is not nearly as significant in New England. In the summer months we could actually get



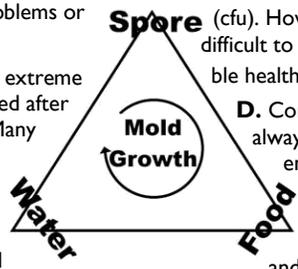
“The locations that can support mold growth are damp basements, areas that may have had previous water leaks, such as plumbing problems or roof leaks.”

mold spores on our shoes or clothing and track them indoors; they will not grow without a moisture source. Mold can become a health issue if the growth increases and we develop sensitivity to that mold.

Mold generally has a very characteristic appearance fuzzy, spotted and often a musty odor. Black soot from air supply ducts and crystals from concrete, bricks or masonry, can be confused with mold.

Allergic reactions to mold vary, and can often be confused with other more common sensitivities such as dust and pollen.

Mold has become one of the more significant concerns in dealing with Indoor Air Quality. If you believe you have mold growth in your office or work area contact the Facilities Department work-order center on your campus. They will often contact EH&S and request a consult.



The Mold Growth Triangle

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