



599 North Avenue, Suite 8
Wakefield, MA 01880
Phone: 781-245-1400

THE TRUTH ABOUT "TOXIC BLACK MOLD"

We are frequently asked questions such as "Is this mold toxic, or just common mold?" Or, we get calls from worried building owners or occupants saying that they have discovered "toxic black mold." In fact, I decided recently to take an informal poll among some friends and family members as to what they "know" about "toxic black mold." To my great surprise, the vast majority was convinced that there is a bad-for-you, illness-inducing, black "toxic" mold, and then there are the other types, which for the most part are benign.

For the record, this notion of "toxic black mold" is, to a large degree, the result of misunderstanding fostered by ill-informed reporters and media outlets.

For example, I thought I would perform an internet search for "toxic mold" to see what I could find. I discovered the following statements on pages listed at the very top of my search results.

For those that are very sensitive or immune-compromised, exposure to some species of toxic (or sometimes called black) or pathogenic mold may cause or contribute to more serious illnesses including, infection, disease, cancer, and in rare occasions death. (ENVIROCHECK Website)

The Toxic Mold Website is a comprehensive guide to many aspects of mold and the potentially fatal dangers that it poses to infants and individuals with weak immune systems. (TOXIC MOLD & TORT NEWS ONLINE)

"These toxins are believed to be linked to memory loss and to severe lung problems in infants and the elderly." (Wickell)

These statements are illustrative of how the concept of "toxic black mold" has become a public fascination and has gained an almost mythic, dangerous, and even sinister reputation. This type of language was even more prevalent in the early 2000s, when it seemed as if a mold craze had enveloped the nation. The following excerpt was taken from the July 2001 issue of *Time*. The article is entitled "Beware: Toxic Mold."

After some of it was identified as *stachybotrys atra*--a fungus that has been linked to everything from sinus infections to brain damage--an industrial hygienist warned the Illers to evacuate... Like some sort of biblical plague, toxic mold has been creeping through homes, schools and other buildings across the U.S. (Hamilton)

It is this sort of sensationalized reportage that has succeeded in creating the seemingly omnipresent myth of "toxic black mold."

But what is the truth? Is there truly a mold that is "toxic"? And where has this mold been for so many centuries?

To put it in the words of Caoimhín P. Connell, forensic industrial hygienist and an outspoken critic of common mold myths, "There is no such thing as "toxic mould" any more than there is 'toxic milk' or 'toxic walnuts'"(Connell, 1). He goes on to say the following:

While it is true that some moulds may elicit an anaphylactic attack resulting in death, the same may be said about cheese, or peanuts, or pine pollen, or cat dander. The term "toxic mould" was a creation of drama seeking newspaper and television journalists attempting to sensationalize what is otherwise a very boring and mundane occurrence. (Connell, 1)

First of all, the "Black" part of "Toxic Black Mold" requires some discussion. "Black" mold could represent a huge variety of different organisms. Many different molds may appear black in certain situations, and other molds can be either black or white, depending on the environment.

To say that a certain type of mold is "toxic" is to say that at times they produce secondary metabolites called "mycotoxins". These chemicals, as the name suggests, can indeed be "toxic."

However, it must be noted that we are exposed to "toxins" everyday – whether it is sprayed from a perfume bottle, emitted from an exhaust pipe, or ingested during a meal at McDonald's. The real question is the following: "How much of this toxic substance is enough to cause negative health effects?"

According to Dr. Harriet Burge, Director of Aerobiology EMLAB P&K in San Bruno, California, "there are neither experimental nor epidemiological studies that indicate that the MVOCs themselves are likely to cause health effects, even in the moldiest of homes" (Burge, 4). She goes on to say that, whereas it is known that mold in homes can indeed cause some health problems, it is apparently not the MVOCs that are the actual cause. She says that, whereas some of the MVOCs are toxic, "the concentrations necessary for toxicity far exceed those that have been detected in indoor air, or even in small chambers in which the VOCs could accumulate."

In fact, many of the strong-smelling MVOCs are regularly present in the environment and are used in the manufacturing of various perfumes and flavors. Borneol, for example, is a mycotoxin that creates much of the odor that we associate with spices such as rosemary, thyme, and cardamom. That clean, fresh, earthy smell that arises at the beginning of a rainfall is in part caused by geosmin, another MVOC.

The fact that mycotoxins have not been found to have a negative impact on health does not however mean that indoor mold growth cannot be detrimental to one's health. In fact, more and more studies are identifying health problems associated with occupancy in damp, moldy environments. However, we must be aware of the fact that environments conducive to mold growth are also many times environments suitable for other microbial growth such as bacteria.



Many times, when moisture is involved, mold is not the only microscopic intruder.

So, when you hear an advertisement for a "toxic mold inspection," or read that an individual is a certified "toxic mold inspector," red flags should go up. Most of the time these terms are used in order to provoke an instinctual fear reaction in hopes of gaining your business. Indoor mold can be a problem, but it can become a bigger problem when put into the hands of ill-informed, opportunistic "experts."

We at Cashins & Associates are experts at evaluating the risks presented by indoor mold. Our assessments are thorough, our methods and knowledge are based on the latest scientific findings, and our recommendations are clear and straightforward.

For additional information regarding indoor mold and its effects on human health, you can visit the United States Centers for Disease Control and Prevention (CDC) website at <http://www.cdc.gov/MOLD/basics.htm>.

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