Mold has certainly made its way into people's homes as well as the headlines recently. Many people still don't fully understand the health hazards of fungal exposure. The term toxic mold is somewhat misleading as it exudes an idea that certain molds are toxic, when actually certain types of molds produce secondary metabolites that produce toxins. The correct term is mycotoxins.
Airborne mycotoxins from can definitely destroy one's health. Sometimes, people are unaware that they are breathing mold spores and mycotoxins until they are very sick. Certain people have a minor allergic reactions to the non-toxic mold, but once you leave the affected area they most likely recover with few serious side effects. However, if they have been exposed to the dangerous molds such as *Stachybotrys* or *Chaetomium*, they could suffer from a myriad of serious symptoms and illnesses such as chronic bronchitis, learning disabilities, mental deficiencies, heart problems, cancer, multiple sclerosis, chronic fatigue, lupus, fibromyalgia, rheumatoid arthritis, multiple chemical sensitivity, bleeding lungs and much more.

This non-profit organization is dedicated to the hundreds of thousands of innocent people who have lost their lives, health, and homes to this scourge as our government, insurance companies, social service organizations, and disaster management groups have ignored them in their greatest time of need. We offer the finest education, resources, and solutions regarding what everyone must know about one of the most devastating national health hazards of this millennium.

Unfortunately, the government has failed to establish guidelines that determine unhealthful amounts of poor indoor air quality standards, making it impossible for thousands of sick people to obtain help during this looming national health crisis. This is the main reason why so many people are confused about the damage mold can cause. As most know, many molds can cause allergens that can affect some of the population, but some molds can also cause toxins, which can affect *everyone*, depending on the length of exposure. Approximately 25 million Americans suffer from allergic reactions to molds yet most of them don't even realize that when they're sneezing and sniffling the cause could be from fungi.

The molds that produce airborne toxins that can cause serious symptoms, such as breathing difficulties, memory and hearing loss, dizziness, flu-like symptoms, and acid reflux. Common ailments from toxigenic mold---including allergies (hypersensitivity after initial toxicity), and excessive bruising---usually can be treated and reduced after people leave their contaminated environment. Often medication, diet, and other treatment protocols are necessary. But other health problems may remain permanently, such as brain damage and weakened immune systems. Eyesight, memory, coordination/balance, and hearing are generally the most common residual effects that often do not improve after treatment in most cases.

Molds can be found wherever there is moisture, oxygen, and something to feed on. In the fall, they grow on rotting logs and fallen leaves, especially in moist, shady areas. In gardens, they can be found in compost piles and on certain grasses and weeds. Molds grow in our homes in moist warm areas like damp basements, closets, and bathrooms, even after the moisture has dried up. Also, molds can grow in places where fresh food is stored, refrigerator drip trays, house plants, humidifiers, garbage pails, mattresses, upholstered furniture, or foam rubber pillows. The worst place that molds can grow, however, is inside wall cavities and flooring of our homes, wherever there may be cellulose materials they can feed on, such as wood, ceiling tiles, or plasterboard, even if they are not visible, and they have sustained water damage at one time or another. This is very common if there has been a plumbing leak or an inadequate roof.

Many people are either unaware, ignorant, or in denial about the severe health hazards involved with some types of indoor household molds. Molds come in thousands of different varieties, but a few who are some of the offenders that invade our homes. Alternaria and Cladosporium are the molds most commonly found both indoors and outdoors throughout the United States. Aspergillus, Penicillium, Helminthosporium, Epicoccum, Fusarium, Mucor, Rhizopus, and Aureobasidium are also common. One of the mycotoxins,

aflatoxin, is produced by the fungi Penicillium, Aspergillus flavus and Aspergillus parasiticus. Four different aflatoxins, B1, B2, G1 and G2, have been identified with B1 being the most toxic, carcinogenic and prevalent. Another very dangerous family of toxin producers is Fusarium. The toxins zearalenone, trichothecenes or moniliformin can be formed by various types of Fusarium including F. moniliforme, F. oxysporum, F. culmorum, F. avenaceum, F. equiseti, F. roseum, and F. nivale.

The most dangerous mold strains are: Chaetomium (pronounced Kay-toe-MEE-yum) and Stachybotrys chartarum (pronounced Stack-ee-BOT-ris Shar-TAR-um) as they have been proven to produce demylenating mycotoxins among others, meaning they can lead to autoimmune disease. Under certain growth and environmental conditions, both of these fungi release toxic, microscopic spores and several types of mycotoxins that can cause the worst symptoms which are usually irreversible such as neurological and immunological damage. Some of these natural mycotoxins include a very strong class known as trichothecenes. Trichothecenes are also produced by several common molds including species in the genera Acremonium, Cylindrocarpon, Dendrodochium, Myrothecium, Trichoderma, and Trichothecium. The trichothecenes are potent inhibitors of DNA, RNA, and protein synthesis, and have been well studied in animal models because of concern about their potential misuse as agents of biological warfare, due to their ability to destroy human health (mentally and physically), and never appear in an autopsy.

The disturbing factor about airborne mycotoxins is that it is impossible to know how much damage they have caused to one's health until it is too late. Therefore, It is imperative to not knowingly expose oneself even for brief periods of time in any place that smells moldy or has an appearance of mold or mildew. If you suspect that the air quality in your home is being compromised by mold spores you can have the air tested, but it can be quite expensive in some instances. It's worth it if it helps save your health. Mold Help approved testing companies are listed on this site with more reasonable costs. These testing companies have been approved due to their thoroughness, value, and efficacy. You will find that their cost is generally lower than most, but this in no way compromises the value of their work.

Some molds are cryophytes (these adapt to low temperatures), some are thermo tolerant (they adapt to a wide range of temperatures) and some are thermophiles (they adapt to high temperatures). Depending on the species, these microbes will grow just about anywhere. Not even a fire in excess of 500 degrees Fahrenheit has been able to destroy some molds such as Stachybotrys. Mold requires a compatible temperature for each species. Environmental factors (temperature, nitrogen, oxygen, etc. ) are necessary compounds for indoor molds to thrive.

Mold also needs an organic source of food. People might be confused as mold can grow on glass, tile, stainless steel, cookware, etc., but it is generally feeding off of some organic source deposited on this material (oils, film, dirt, skin cells, etc.). The fiberglass insulation which some assume that mold does not grow on their product which is a fairly true statement, however, it grows on the organic debris that become trapped in these products. Mold also grows on things such as wood, fabric, leather, gypsum, fiberboard, drywall, stucco, and many insulation fibrous materials. All molds require some form of moisture to grow however, like temperature, the amount of moisture varies for different species. Some are xerophillic (colonize under very dry conditions) some are xerotolerant (colonize under a wide range of moisture levels) and some are hydrophilic (colonize at high moisture levels). It does not have to be a leak. . . Humidity or moisture content of the substrate can often be sufficient (relative humidity 50% start becoming problematic in many indoor cases). It can spread very easily through any HVAC system.

Mycotoxins are examples of chemical substances that molds create generally as secondary metabolites, thought to possibly play a role in either helping to prepare the substrate on which they exist for digestion, as defense mechanisms, and some have suggested that they may be produced when the organisms are under stress, which could be related to competition/defense, or simply due to inhospitable environmental conditions. The mycotoxins, which are also neurotoxins (a toxin

that is determined to cause neurological damage), most commonly reach people from the air, via spores from the molds in question. They are also found in small particulates at times which may often represent mold dust, small particles of mold that has dried and turned to dust. Spores, when inhaled, can begin to colonize in the sinuses and throughout the body, including the brain, lung and gut after a period of time.

Sick buildings are one of the major causes of fungal illness, primarily mycotoxicosis, in industrialized nations today. The United States is the least developed in fungal illness research and assistament to the community due to the high costs and fear of reprisals, so sadly, most American physicians have little or no education in treating this health crisis. The average American physician knows only how to identify a mold hyphae under a microscope, at best. Mycotoxicosis, often mistakenly called "Toxic Mold Syndrome" out of ignorance, has reached epidemic proportions at a national level in the United States due to defective construction, lack of regular maintenance, shoddy and inappropriate building materials, ignorance, and lack of government involvement; all or in part due to the high costs of standard and substandard remediation.