

U.S. Army Biowarfare Research and How it Impacts Mold Illness

First of all, it is important to understand that molds produce neurotoxic substances. Most people are familiar with poisons from a black widow spider or scorpion – mold neurotoxins are very similar. Another familiar neurotoxin is the cause of “Red Tide”, which comes from marine bacteria. Mushrooms, a close relative of mold, produce a well-known neurotoxin: acid, or LSD. A little bit of LSD makes one hallucinate while a lot can kill a person.

The most toxic neurotoxins from mold are called trichothecenes; they are known to be neurotoxic and are produced by more than 60 molds, especially the common indoor molds *Stachybotrys*, *Fusarium* and *Trichoderma*.

The Fungal Research Group (www.fungalresearchgroup.com) has sponsored two recent conferences that showcased peer-reviewed, thorough work from an abundance of reliable sources establishing the connection between mold neurotoxins and human illness. The research from the conferences is published on the website for the FRG.

In addition, the U.S. Army has studied mold toxins for nearly thirty years, since it had suspected the use of trichothecene as a biological warfare agent in Southeast Asia during the ‘yellow rain’ attacks. This resulted in a plethora of Army research into neurotoxins and their effect on humans. This research is now declassified and available from the Surgeon General’s office. The research is significant because it involved human subjects.

The Army’s research helps to dispel some common myths: that mold poisoning is a fad or scare tactic, and that mycotoxins affect only the respiratory system and that there is no evidence that mycotoxins affect other parts of the body, such as the human brain.

Mycotoxins can enter systemic circulation through the skin, mouth, and lungs. The Army research showed that exposure can include:

- Swallowing mold via nasal mucous or saliva as a result of being in contaminated air;
- Absorption of mycotoxins through the skin (such as from sitting on a chair with mold spores on it);
- Breathing contaminated air

The Army found that any of these routes of mycotoxin exposure can cause severe effects such as vomiting, nausea, diarrhea, dizziness and central nervous system toxicity, which can lead to memory loss, lassitude, sexual dysfunction, vision impairment and low blood pressure. In addition, skin exposure can also lead to painful inflammation, rash and even tissue destruction. Inhalation of trichothecene can lead to severe respiratory disease and even death.

Cleansing the Body of Mycotoxins

The human body begins detoxifying itself soon after mycotoxin exposure unless the exposure is too high and results in death. European studies have shown that taking activated charcoal tablets helps bind the toxins and they are excreted. Some physicians are now prescribing cholestyramine, which is a toxin-binder, in treating mold illness, and some mold remediators take this drug as a preventative measure.

Condensed from an article by Gary Rosen, Ph.D. published in *Indoor Environment Connections*, 10/05