

Joe Smith
2700 SW Arnold St.
Portland, Oregon 97219

Dear Joe:

This is a report on the single tapelift sample that we received from you today. We found the following molds in this sample.

Chaetomium murorum (dense)

Stachybotrys sp. (dense)

Ulocladium sp.

Unknown, possible Zygomycete with large colorless oblong spores.

No cultures were made.

General comments

This sample comes from a very wet site. All of the molds seen are wet wall molds which usually flourish only where water intrusion has occurred. *Stachybotrys* requires a relative humidity of 95% in the substrate just to grow.

Do any of these molds pose health risks for your home? If the *Stachybotrys* infestation is extensive, it may well. The whole issue of stachybotryosis, trichothecene mycotoxins, and infant deaths is reviewed in a new book by Nicholas Money (Carpet Monsters and Killer Spores, Oxford University Press). He concludes that *Stachybotrys* should be taken very seriously indeed. Here is what the findings of the last 5 years suggest:

Stachybotrys toxins include a very potent trichothecene which may seriously damage lungs and internal organs. It is probably the agent responsible for the burning sensation when active strains are inhaled (not advised). In addition there are several other categories of nasty substances made by the fungus, including several which are immune system depressants and may account for vulnerability of people who are chronically exposed to the toxin to respiratory illness – colds, etc. The fungus also makes stachylysin, which causes leakage of blood from the small capillaries and breakdown of the red blood cells and may be responsible for bleeding lungs in infants.

There are two species of *Stachybotrys* commonly recovered from interior habitats, *S. chartarum* and *S. chlorohalonata* (formally described just a couple of months ago). These two species can be distinguished on a special culture medium, and I did this routinely in the past. However, after discovering several instances in which both species were present in the same sample, I thought it prudent to consider any *Stachybotrys* infestation as potentially hazardous. Only about half of *S. chartarum* strains make trichothecenes, but they may make the other kinds of toxins mentioned above. *S. chlorohalonata* does not make trichothecenes, but it does make other mycotoxins known to be mutagenic.

It has been claimed that the spores of *Stachybotrys* are too large to get far into the respiratory passages. However, it is now suggested that some of the toxins are localized in the cells walls and that colonies can somehow generate aerosols of fragmented cell walls in which the particulates are many times smaller than the spores themselves, creating the possibility for a very dangerous situation.

Given this information, it would be prudent to regard any *Stachybotrys* infestation as a potential danger and treat the site with respect. Early on I found myself getting unexplained nosebleeds after dealing with bulk samples of this mold. I now attempt to limit my exposure to the fungus as much as possible. You and your family would be well advised to do the same.

Due to the seriousness of this infestation, we recommend further investigation by a trained mold inspector. Eric Johnson and CSI Mold Inspections in Camas, WA. has partnered with our lab to provide the highest quality service to homeowners needing professional inspections. We have worked with Mr. Johnson many times in the past and have found him to be both honest and effective in finding hidden mold. You can contact Eric via email: CSImoldk9@msn.com

This report is not accompanied by any warranty of any kind (express or implied); and is intended only to identify micro-fungi present in the sample submitted. The report is based on microscopic examination of samples as well as information provided by cultures, if cultures are required. MouldWorks stands behind its identifications of fungi in the report to the extent permitted by our current understanding of fungal systematics.

Sincerely yours,

George Carroll, Ph.D.
MouldWorks Mycologist