

The Most Relevant Mold Species



Penicillium/Aspergillus

The most common mold species to show up in Indoor Air Samples. Most of the hundreds of sub-species are allergenic with only a few that are toxic. This group of species will grow with only the humidity in the air as its water source. An A/C failure will allow this mold to start growing on walls, furniture and clothing.

Cladosporium

The most common mold species and is considered to be an allergenic.

Curvularia

This is another common allergenic mold.

Chaetomium

This is a common water marker that usually indicates wet paper and/or drywall.

Stachybotrys

An excellent water marker and the most common toxic mold species. *Stachybotrys Chartarum* is the sub-species that's the subject of all the "60 Minutes" type news programs and all of the internet hype. Not all sub-species are toxic. These species need a direct water source to grow. This includes a window, roof or plumbing leak.

Memnoniella

A sister mold to Stachybotrys. The two species will grow together. It is also considered toxic.

Mold Spore Level Guide

For years there have been debates over how to set a standard for mold spore levels in homes. Because mold spore species and levels differ from state to state, no one has been able to agree. So, a comparison to an outdoor air sample has been the rule of thumb. This is because you are letting mold spores into a home every time you open a door or window. It is not a perfect method and can lead to false positives. The following mold spore ranges are my opinion and are based on thousands of samples performed by me in the Collier, Lee & Charlotte county area during a Mold Inspection. For this guide use the spore/m³ number and not the raw count for each species when you interpret an Air Sample Report from a Lab. There are exceptions at every level. False positives can be caused by a number of different issues. Normal life examples are dust and dirt on fan blades or other surfaces of the home, something in a garbage can or household pets that have been playing outside. When a general home or termite inspection is performed at the same time as the mold inspection it can inadvertently raise the spore counts. This can happen if an interior attic access is opened or the A/C filter is removed from the return before the air sample is performed.

0-50 spores - These are only trace levels and are not an issue. Even Stachybotrys is not considered an issue at these levels if the sample does not also contain water markers like Chaetomium and Fusarium or high levels of Penicillium/Aspergillus.

50-200 spores - These are still very low levels. The toxic mold species Stachybotrys and Memnoniella are just about the only species that are considered an issue at this level.

200-500 spores - Up to this point, the most common species (Penicillium/Aspergillus, Cladosporium and Curvularia) are still not an issue and are in the normal range.

500-1500 spores - Sometimes the Penicillium/Aspergillus & Cladosporium levels are in this range and there is not an issue that needs to be remediated. If no water intrusion or mold issue is found during the inspection, these levels can be caused by normal life in an enclosed environment.

1500-3000 spores - This is where the grey area begins. When levels reach this point there may be an issue that needs to be addressed unless there is a corresponding number in the outdoor sample. If no water intrusion or mold issue is found during the inspection these levels can be achieved by a dusty home or A/C system.

3000-10,000 spores - Unless there is a corresponding number in the outdoor sample, this is the point where some remediation may be necessary. If a mold spore source has been identified, then clean-up of that area is needed. If there was no water intrusion or mold issue found, the home may need to be cleaned and the duct system should be evaluated.

10,000-25,000 spores - Unless there is a corresponding number in the outdoor sample, a mold spore source has usually been identified and remediation of the area is needed. If there was no water intrusion or mold issue found, the duct system may need to be cleaned and/or a general "Spring Cleaning" of the home.

25,000-75,000+ spores - When spore levels are at this point, a mold issue will be easy to identify. Clean up will be required and should be performed by a Professional Mold Remediator.

75,000-1,000,000+ spores - When spore levels are at this point a mold issue will be evident. Remediation will be required and needs to be performed by a Professional Mold Remediator.