



PATERSON PUBLIC SCHOOLS



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Note: All circulars should be kept in a permanent file.

To: All Facilities Personnel

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Subject: What Do Lab Test Results for Mold Really Mean?

Overview

Interpreting lab test results for indoor mold is currently not standardized. Therefore, it would not be surprising if you give 10 different people the same copy of lab test results, you get 10 different opinions. However, if you also give them visual assessment results and the history of the building, you are likely to get most of the people arriving at the same conclusion.

The 3 common objectives for collecting mold samples are:

1. **To determine if building materials or contents are colonized by mold.** Mold may or may not be readily visible with unaided eyes depending on the stage of growth and the color of the mold against that of the material it's growing on.
2. **To determine whether the indoor environment has "normal and typical" types and amounts of airborne mold spores.**
3. **To determine if mold removal was effective.** This is sometimes referred to as "**Clearance testing**". Mold removal or remediation is meant to bring the mold levels to normal condition.

Air Samples, What do they really mean?

There are currently **NO** standards and guidelines to interpret the results of mold air samples. We compare the indoor vs. outdoor results. There are three primary sources of mold spores found in indoor environment. These are outdoor air carried in through doorways and windows; spores carried in on people, or items brought into the building; and mold that grow and produce spores indoors as a result of excess moisture.

Should a School take Surface Samples?

Surface samples determine whether building materials are colonized and by what type of mold. Data obtained from these samples is usually not a good gauge of the actual contamination level in the building. It cannot be used to determine risk of mold exposure and therefore has no practical use in determining health risk.

So, What Do Your Mold Lab Test Results Mean?

Mold lab test results should never be interpreted on their own. Experienced facility personnel should use their own visual assessment during school inspections and the building history should be given more weight. Labs offer help with results interpretation, but for them to provide meaningful interpretation, facility personnel should provide them with building assessment data and what you were trying to determine through lab testing.

School air sampling is the most appropriate way to determine whether the indoor environment has “normal and typical” types and amounts of airborne mold spores. “Normal and typical” types and amounts of airborne mold spores would be defined as the average amount and types of mold spores found in buildings with no history of water damage or ventilation problems. A building with normal and typical amounts of mold spores may have several spore types at levels that are lower than those found outdoors. Even in buildings with no history of water damage, spores of *Penicillium*/*Aspergillus* may be prevalent exceeding the absolute levels and relative percentages of these spores outdoors. Moisture-indicator molds such as *Chaetomium*, *Stachybotrys*, and *Ulocladium* species should be absent.

When the relative airborne spore concentration is greater indoors than outdoors, it indicates that the source of spores is not outdoor air alone, but also an indoor source, such as mold growth associated with a leaky roof, leaky foundation, plumbing leak, or any significant moisture source that is sustained over a long period.

Determining if mold removal was effective:

To determine if mold removal was effective, visual inspection of the surfaces that have been remediated is fundamental in assessing the effectiveness of the remediation effort. The remediated surfaces should show no visual evidence of present or past mold growth.

Presence of a few airborne indicator mold spores after mold removal does not mean remediation was not effective.

Some professionals believe air sample lab test results are not reliable and “**clearance testing**” performed after mold removal should just be visual. However air testing although not required, is an additional tool to address concerns of building occupants that they are not being exposed to elevated levels of airborne fungal spores and spores were not spread during the remediation process.