CLEANING MOLD AND MILDEW

Mold and mildew are natural organisms that grow in damp or wet environments. The best method to clean mold and mildew is to **remove the moisture source**, and use a product that kills the organisms. According to the Centers for Disease Control and Prevention (CDC) website, mold spores can be harmful to respiratory health and irritate existing problems such as allergies and asthma. Take care when cleaning mold and mildew to prevent inhalation of the spores. Keep the area clean and as dry as possible to prevent future mold growth.

It is a common misconception that all black mold is dangerous. **There are approximately 400,000 types of mold**, of which less than 100,000 have been named. Approximately 1,000 types of mold are found indoors across America. Less than 80 molds are suspected of causing some form of illness, and only a few of them are considered toxic. Descriptions from the Glossary below are included in your test results.

THREE MAJOR MOLD GROUPS:

Molds are organized into three groups according to human responses: **Allergenic, Pathogenic** and **Toxigenic**.

Allergenic Molds

Allergenic molds do not usually produce life-threatening health effects and are most likely to affect those who are already allergic or asthmatic. The human system responses to allergenic molds tend to be relatively mild, depending on individual sensitivities, typically producing scratchy throats, eye and nose irritations and rashes.

Pathogenic Molds

Pathogenic molds usually produce some type of infection. They can cause serious health effects in persons with suppressed immune systems. Healthy people can usually resist infection by these organisms regardless of dose. In some cases, high exposure may cause hypersensitivity pneumonitis (an acute response to exposure to an organism).

Toxigenic Molds

Mycotoxins can cause serious health effects in almost anybody. These agents have toxic effects ranging from short-term irritation to immunosuppression and possibly cancer. Therefore, when toxigenic molds are found further evaluation is recommended.

COMMON INDOOR MOLDS

The most common types of mold found indoors include:

- **Aspergillus** and its subspecies (A. flavus, A. versicolor);
- **Cladosporium**
- **Penicillium**
- **Alternaria**
- **Stachybotrys atra** (S. atra), also known as "Black Mold."

Often, mold spores, whether dead or alive, cause adverse health effects, primarily of a respiratory nature, including hay fever-like allergic symptoms.

Stachybotrys is a specific family (genus) of mold that is present in the environment. Out-of-doors stachybotrys molds help to decay organic matter. One particular species known as stachybotrys atra (sometimes known as stachybotrys chartarum) is prone to growth indoors. This mold is normally dark brown or black in color. It can look slimy, sooty, or even like grayish white strands depending on the amount of moisture available and the length of time it has been growing. **It is important to remember that many other common indoor molds can look similar to stachybotrys** (including cladosporium, aspergillus, alternaria, and drechslera), so testing is critical to conclusively identify stachybotrys in a building. Stachybotrys mold needs the proper conditions in order to grow, including moisture, a nutrient source, temperature, and time. Standing water or a relative humidity of 90% or higher is necessary for stachybotrys to start germination and grow. However, once the stachybotrys begins to grow it can continue to propagate even if the surface water source dries up and the relative humidity falls to 70%. The nutrient sources that best support stachybotrys are those with a high cellulose content. As such, stachybotrys thrives on natural materials such as hay, straw, and wood chips, as well as building materials such as ceiling tile, drywall, paper vapor barriers, wallpaper, insulation backing, cardboard boxes, and paper files. Stachybotrys survives a wide variation in temperature and grows most proficiently in temperatures that humans consider warm to moderately hot. It tends to develop more slowly than many other molds—one to two weeks after moisture intrusion as compared to one to two days for molds like aspergillus, penicillium, or cladosporium. Despite its slow start, stachybotrys usually develops into the dominant mold if the conditions are favorable, eventually crowding out other mold types that may have colonized the material first.