

Some information you should know about mold and mold removal

Mold is a kind of fungus. Fungi require water and “food” and an appropriate temperature to grow.

Food is always available to mold because they use a many different sources of materials as food. They are known to grow on wood, plaster, sheet rock, drywall, carpet, tiles and grout, paper, leather, cloth, plastic, paint, concrete, food, and a large variety of other substances that are used in the building of your home or are found within the home. Different molds grow on different substances also known as substrates. It is therefore very unlikely that you will be rid of mold by removing all substances upon which they can grow.

The temperature in your home, and especially the cooler environment in the basement or crawl space, is conducive to mold growth. If it is cool, and there is moisture present, mold can and will grow.

This leaves moisture. Moisture is the best controllable factor required in mold growth that can be limited or removed. It is for this reason that virtually every recommendation for mold removal includes removing moisture. If moisture levels in the home are below 40% to 50 % relative humidity mold growth will be inhibited. Fortunately, removal of moisture also makes the home environment more comfortable for occupancy. However, even if moisture levels are below 40 to 50% relative humidity, damp or wet objects still grow mold. So it is important to remove all sources of moisture to inhibit mold growth. It is possible to test for moisture in building materials and other objects to determine where mold would be most likely to grow if it is not already growing there. Also, since temperature affects moisture levels in the home/office building, raising the temperature will help to inhibit mold growth, by reducing moisture levels.

There are certain molds, which are particularly toxic and dangerous to the health of humans. Since not all molds fall into this category, it is good to know which molds are growing, to determine the extent of remediation one might wish to achieve. Virtually all molds can produce allergic reactions, but some also produce toxins and some of these toxins are known to produce symptoms that are very serious. If such molds are found in the home, then remediation is not optional. There are a number of molds, which if present in public buildings, schools, and other places where the public will be exposed, must be removed or the buildings must be shut down. These are included in our testing, and the report we provide indicates which molds fall into this category.

Please review the report carefully, and look for indications of toxic spores. The report indicates such, with abbreviations that are explained in the rectangular box to the right. Also review the report for indications of moisture that might contribute to mold growth and where it is located in the home. Crawlspace are notorious for growing mold because of the exposure of soil, moisture, and building

materials that will grow mold. If mold is found in your crawlspace, a plastic vapor barrier can be used to cover the soil and vents can be opened to allow air circulation which generally will reduce moisture problems that contribute to mold growth. If toxic mold is present it is best to hire a remediation company that has the proper safety equipment and will restrict exposure to mold spores by sealing off the area where the mold will be removed, to avoid spreading the spores throughout the house or building. We do not perform remediation because we feel that testing and then, based on the test results, offering remediation is a conflict of interest.

We have a PhD microbiologist who performs the testing and reviews the test results and provides suggestions for what to do if there is a problem. If there does not appear to be a problem he will also tell you that there is no cause to remediate. If you can perform the remediation yourself suggestions are given here for how to do that. The choice of what to do is always yours to make. We will always take two samples, one outside the home and one inside the home. Often additional samples will be required inside the home. Especially if preliminary results suggest the presence of toxic mold. The purpose of doing this is to determine whether mold is just present because it is entering from outside sources, or mold is growing inside, and therefore more abundant in the home/building than in the outside environment.

There are many sources of information about mold. Among these, the most reliable information is a common thread through all informative articles. In other words, moisture is known to be a problem and you will find that all reliable resources will indicate this. There are sources online, which give excellent suggestions for how to perform a remediation yourself. If the task seems too large, it is time to look for a company that can remediate for you. If you know more about mold and mold removal, than a company that proposes to remove mold for you, look for another company.

Always make the first order of business, to remove moisture. If you remediate and the moisture problem still exists, mold will return.

Helpful suggestions include:

1. Reduce the humidity. A good air conditioning system can accomplish this.
2. Use HEPA (High Efficiency Particulate Air filter) air filters to remove mold spores from the air.
3. Increase ventilation or air movement by opening doors and or windows when practical. Use fans as needed, particularly if outside air is low in humidity and at a comfortable temperature.
4. Cover cold surfaces, such as water pipes, with insulation to prevent sweating
5. Increase air temperature within the building
6. Add vapor barriers where possible to prevent moisture from entering the home – ex crawl spaces
7. Remove mold that is already growing using one of several methods:

There are several products you can use to kill and remove mold. Some of the most effective mold removal products include:

1. Bleach
2. Borax
3. Vinegar
4. Ammonia
5. Hydrogen peroxide
6. Detergents
7. Baking soda

And for those who prefer to use natural products. One company that produces these natural mold inhibiting products is Amy's Green Clean at www.amysgcp.com

8. Tea tree oil
9. Grapefruit seed extract

There are also commercially available mold growth inhibitors and sealants which can be applied to surfaces where mold growth reappears. It is always important to first, for appropriate materials, remove the mold by brushing it or wiping it off the surface with soapy water. Porous surfaces may require a brush. Only then apply inhibitors, inhibiting paints, or other substances which will prevent mold growth.

You now know the general principles for identifying and eliminating mold growth. Further information can be found online and we can recommend the EPA website, the CDC website, <http://moldpedi.com> to obtain more information. Remediation may be a job you can handle yourself, in which case you should be sure to wear the proper safety equipment. For example masks, gloves, goggles, and a disposable coverall. Carpeting may be contaminated and if so may be steam cleaned by professionals and if this does not alleviate the problem, may need to be removed completely.

If you have any specific questions, Dr. Essich will be happy to answer them. If you send them by email you will be likely to get a quicker response because when we are in the field we often cannot receive phone calls. The email address is dr_e@awsa.info or you can leave a text message at 706-892-6036.