

Where Can Mold Spread In My Home? Why Should Mitigation Of Mold In My Home Be A Serious Concern?

Whitepaper By

Arbis L. McMahon

Forensic Construction Investigator

Over 30 years experience and study of mold infected homes.

If you can answer... Where can air go? Then you have answered ...“Where can mold spread in my home?” Mold spores are microscopic and cannot be seen with the naked eye. Only after mold has propagated to a colony of millions of spores gathered together, do they become visible to us without a microscope. Sometimes we can smell mold long before we can see it. Mold spores are so tiny that we ingest them through normal breathing on a minute to minute basis. (*Just one of the millions of places mold can spread in your home if you are at home.* We will explore some more.)

First, it is helpful to understand that mold needs three things to help it grow, moisture (or high humidity), warmth and darkness. The perfect incubator has just been described. It is quite common to find mold in the corners of the bathroom where all these factors exist. Simply put, if you remove any of these factors, the mold simply cannot grow.

OK - Let's Remove the Moisture

Moisture can be in the form of excessive humidity commonly found on a hot day. However, it may be a roof leak, a basement leak, or a leak anywhere in the home from any cause including plumbing. Most new homes are showing an increase in mold due to the tight construction that did not exist in the older homes. Tight construction traps moisture indoors from normal living like bathing, showering, dishwashing and even evaporation from our bodies. Building codes over the last three decades have reduced our heating and cooling utility bills and have created the “Sick Buildings” we hear about in the media. As you can see, we can stop the leaks but stopping normal living is not quite what we would like to do.

So Let's Remove the Warmth

Some like it hot. Most of us like it warm. It just seems more comfortable than cold. Even though some are fortunate and have air conditioning, our basements, crawl spaces and attics still stay warm. So removing all warmth especially in the summer months is not an option.

Let's Remove the Darkness

Most of us have a problem with this one. It seems that no sooner than the sun gets up, it goes down. Down far enough to get awfully dark and we don't like sleeping with all the lights on, even though the electric company may love us. Even if we could keep the sun up and the lights on, our homes still have areas of darkness. Hundreds of them like all the wall cavities, heating ducts, inside appliances, switch boxes and many more. Removing the darkness is not an option.

According to the EPA, Centers for Disease Control, National Institutes of Health, U.S. Department of Health and Human Services internet sites, small patches of mold (one to two square feet) can be safely removed by common household cleaners. Anymore than that, the mold should be tested for type for health safety reasons. If the mold is toxic, (toxic mold is a type of mold that produces hazardous by-products called mycotoxins that is health hazardous to humans) professionals should be called in to mitigate the mold.

Now that word “*mitigate*” scares me. To mitigate means to lessen, ease or diminish. That means that many mold spores will remain after the removal process. They don’t say decontamination or full 100% get rid of the mold. Every price I have heard for mitigation is terribly expensive for what one can expect to be a partial jog. In reviewing the aforementioned sites, some state that some people have burned their homes and rebuilt them because they considered it more feasible and a better guarantee of getting rid of the health hazardous mold. Many court cases have been awarded for mitigation... The term “Mitigation” is real serious when we talk of the more deadly molds like *stachybotrys* that can repopulate. If this is on your mold test, BEWARE!

Now... **Why Is Mitigation Of Mold In My Home A Serious Concern?**

Mitigation contractors are aware of what is to follow. Many unsuspecting homeowners think mitigation is a 100% kill of mold. NOT SO! Again, mold is microscopic and will go anywhere air goes. Once there, if it can find humidity/moisture, warmth and darkness it can grow. Mold feeds on glues, wallpaper, cellulose, insulation, wood, wood products like paper, boxes, some textiles, and many other things found in the construction of a home.

Just to name a few places that qualify for propagation and feeding... How about under your floor space? Under the floor covering and carpet, behind the baseboards or any woodwork trim anywhere, in all the wall cavities, in insulation, your attic, ductwork, furnace filters, air conditioners, in your appliances, in the commode, or tanks, between any wood joint of the framing or floorboards, between plywood joints, in roofing materials.

It is not uncommon to find mold on the underside of roof sheathing in the attic. Usually this is the result of insufficient venting, such as venting bathroom or laundry exhaust into the attic and/or insufficient peak or soffit vents. Moisture-laden warm air that enters the attic rises, and condenses on the wood. If this happens it can start mold colonies that consume the wood. This weakens the structural integrity of the roof through warping or rot. Now it becomes possible for mold-contaminated attic air to enter the home and occupied environment. In some cases the function and structural integrity of the roof structure should be the equal concern.

When all the above is considered, mold mitigations cannot possibly access every joint and point in your home.

As a result, they lessen, ease or diminish the mold but cannot get rid of 100% of it. Just a few mold spores propagating in one ideal wood joint can start the whole problem over again. Now it is easier to see why some people feel it more feasible to burn their home and reconstruct.