

# The Truth About Mold

## *There's Good Mold and There's Bad Mold*

Molds are the “bleu” in bleu cheese and Roquefort. Molds improve our wine. They produce penicillin and antibiotics and are used widely in the food and beverage industry. Without mold and mold’s decaying mechanism, the natural environment would be overwhelmed with large amounts of dead organic matter.

Despite many harmless and beneficial molds, some molds can be toxic and pose health threats to humans. The Environmental Protection Agency (EPA) cautions that all molds can cause health problems under the right conditions. The word “toxic” refers to mold that produces hazardous compounds, or mycotoxins.

Often included in the list of toxic molds is *Stachybotrys Chartarum*, a greenish-black mold, which can grow on high-cellulose, low-nitrogen materials such as fiberboard, drywall, paper, dust, and lint – all of which are found in homes – when these materials become wet.

## **There is evidence that mold exposure can cause the following symptoms:**

- Allergic reactions, including irritation of the eyes, nose, or throat.
- Flu-like symptoms, including fatigue, dizziness, headaches, and diarrhea.
- Worsening of asthma.

## **How to Minimize Mold Growth**

Mold is a natural byproduct of the fungi family that thrives when organic substances and water combine under certain circumstances. Mold reproduces via spores that can remain dormant, yet viable, for years. They “come alive” again in the presence of moisture.

HVACR mechanical systems are not generators of mold; their metallic surfaces do not provide the organic matter mold needs to grow. However, systems that are not well maintained could support mold growth. It's important that your system:

- Is designed and installed correctly.
- Is properly and regularly maintained.
- Controls the moisture in your building.
- Uses good filtration methods to keep your air clean.

## **Preventing Mold**

- Consider augmenting your air conditioner with a dehumidifier. These systems pull the moisture from the building, thus minimizing growth.
- Don't turn your air conditioner off for long periods of time during the summer. In humid climates, especially, moisture levels can become quite high in buildings, which can permit mold to gain a foothold.
- Install insulation and vapor barriers to prevent condensation on cold objects such as water pipes, beams, and plumbing fixtures.
- Keep sinks, showers, tubs and other wet areas free of standing water.
- Demand architectural, design, and construction methods that prevent water from entering your home in the first place. Areas of concern include improperly pitched roofs, poorly designed balconies, windows, doors, improperly installed flashing, inadequate vapor barriers, and thin stucco.
- Inspect the building exterior at least once a year and repair caulking, roof flashing, and all breaches in the building envelope.

- Purchase a preventive maintenance agreement (PMA) from your trusted contractor. A technician will thoroughly inspect the HVAC system, including duct work and filters, twice a year and make any repairs or adjustments necessary. A PMA will save you money in the long run by reducing major repairs, extending the life of the equipment, helping to inhibit mold growth, and ensuring that the system is working at optimum efficiency. If you notice any water pooling or dust in between semi-annual PMA visits, call your professional contractor at once.
- Inform your HVAC contractor of your mold concerns and point out locations of suspicion or evidence of mold.
- Educate your family or building occupants about mold, its dangers, and prevention.

### **If You Suspect Mold in Your Home or Building**

The first step is to alert your HVAC contractor and the builder (if the building is relatively new) regarding your concerns. The contractor or builder will inspect for mold. If there is mold, the next step is to identify its type and establish whether it's toxic. If so, evacuation, abatement, and remediation may be necessary.

The identification of mold requires specialized testing and laboratory analysis. Partly because of media attention to mold issues, mold abatement has become a growth industry, often attracting less than reputable people who may cause more harm than good by not identifying toxic mold, improperly removing it, or charging you for work you don't need. Check with your state environmental protection or public health agency to find out if mold remediation contractors are required to be certified and licensed.

**Home Inspectors** are concerned about the quality of the air you breathe, too, and many have added indoor air quality services to their offerings. If your HVAC contractor does not perform mold analysis, abatement, and remediation, he or she may be able to refer you to a reputable company that is a trained and certified in this kind of work.