# MOLD MANAGEMENT

### Mold Hazards:



Molds can be found almost anywhere on the interior and the exerior of any commercial or residential structure regardless of when it was built or where it is located geographically. Mold can grow on virtually any organic substance, as long as moisture and oxygen are present. There are molds that can grow on wood, paper, carpet, foods, and insulation. When excessive moisture accumulates in buildings or on building materials, mold growth will often occur. It is impossible to eliminate all mold and mold spores in the indoor environment. However, mold growth can be controlled indoors by controlling moisture indoors.

What is Mold? Unlike the other environmental hazards we are concerned about, molds are living organisms. They reproduce by producing spores that are tiny, string like organisms that grow and yield bacteria, fungi and algae. These spores can remain airborne for long periods of time and drift into houses onto clothing and other surfaces. In fact they are dispersed though out homes and office and any indoor space.

Mold can be recognized visually and from the odor. The odor is usually pungent or musty. Smells such as this should alert you to mold conditions. Toxic mold is greenish black in color and can emit mycotoxins. This can have toxic effects in humans and animals.

There are over 400,000 different types of mold. Most are black in color and require only moisture to breed more mold spores and mold colonies.

#### Control Moisture - Control Mold:

The key to controlling mold is to control the moisture in your building. You should check for and fix any leaks or seepage in pipes and drain. Also be aware that moisture can build up as the result of moisture condensing due to changes in temperature. HVAC air ducts and air conditioning units can generate condensates and often stain walls and ceiling tiles.

Use exhaust fans and dehumidifiers. Use fans and ceiling fans to circulate air and to help keep condensation off of windows. Use storm windows and caulk around windows and doors. Use a humidity indicator to measure the relative humidity in your house.

There are basically two categories of mold: toxic and non-toxic. Most are non-toxic and can be easily cleaned up with a solution of bleach in water. If you do the clean up yourself, you need to remember that **bleach is only good for cleaning mold off of a surface**. Bleach cannot reach the deeply embedded mold since it dries too fast. You need something to penetrate and kill the mildew and disinfect. Be sure to dry the area afterwards, any mold left behind will simply grow again.

# Should You Have the Air Ducts Cleaned?

If you believe your heating and air conditioning system contains mold, consult EPA's guide "Should You Have the Air Ducts in Your Home Cleaned?" before taking further action. Do not run the system if you know or suspect mold. Visit EPA Indoor Air Quality Information <a href="www.epa.gov/iaq/pubs/airduct.html">www.epa.gov/iaq/pubs/airduct.html</a> or call 1 (800) 438-4318.

If you see considerable mold on the interior of ducts or metal surfaces you should think about having the air ducts cleaned. First you should identify the cause of the moisture and fix the problem. Insulated air ducts that get moldy should be replaced. Be aware that only an expert can determine if a substance or stain is mold. If you have a professional inspect your system, have them point out any mold they find.

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### Mold Related Health Issues:

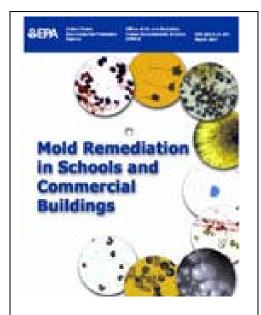
Molds are usually not a problem indoors, unless mold spores land on a wet or damp spot and begin growing. However, molds can cause health respiratory problems because they produce allergens, irritants and sometimes even toxic substances.

## Mold is Manageable:

- US Environmental Protection Agency •
   <u>http://www.epa.gov/mold/moldresources.html</u> •
   <u>http://www.epa.gov/iaq/schools/tfs/guideh.html</u>
- Carpet maintenance, restoration guidelines for water-damaged carpet, other carpet-related issues
   Carpet and Rug Institute (CRI) • www.carpet-rug.com
- To get additional information on mold:

  <a href="http://www.epa.gov/iaq/molds/index.html">http://www.epa.gov/iaq/molds/index.html</a>
   Environmental Protection Agency's information of Mold/Moisture/Mildew
- Centers for Disease Control's information on Mold under Air Pollution and Respiratory Health
   <a href="http://www.cdc.gov/mold/default.htm">http://www.cdc.gov/mold/default.htm</a>

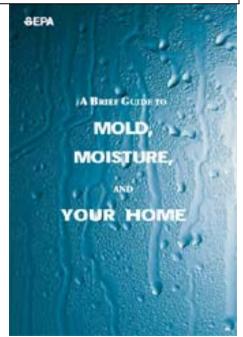
The American Red Cross has a contract with URS Corp., for environmental site assessments. This vendor can perform other types of environmental surveys. The unit may wish to use this contractor since national headquarters has favorably negotiated the contractual terms and conditions. For more information on URS' services call Scott Tobias, Senior Analyst in Risk Management, National Headquarters, at (202) 303-6777 or e-mail to <a href="TobiasS@usa.redcross.org">TobiasS@usa.redcross.org</a>. Risk Management's fax number is (202) 303-0180. If a different vendor is chosen, risk management should review the contract before it is signed.



Mold Remediation in Schools and Commercial Buildings [PDF]--54

page

http://www.epa.gov/mold/pdfs/moldremediation.pdf



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