



Mold in the Home and School

Guidance for parents, families and school personnel

What is mold?

Molds are fungi, such as mildew, mushrooms and yeast that can be found both indoors and outdoors. No one knows for sure how many species of fungi exist but estimates range from tens of thousands to perhaps three hundred thousand or more. They have been known for centuries.

How does mold grow?

Mold needs water and food. Mold can grow almost anywhere there is water, high humidity, or damp conditions. Molds are often found in homes and schools that have been flooded or have had water leaks. Mold grows faster in warm temperatures and high humidity. Molds can even grow in desert areas if evaporative (swamp) coolers are used. Mold can feed on paper, fabric, wallpaper glue, sheetrock, wood, soap scum, leather, and many other surfaces. Molds grow by producing very small spores that can settle on wet surfaces and grow to the visible forms of mold common in the bathroom of most homes and schools.

How are children exposed to mold?

Children can be exposed to molds in the home as well as at schools. The most common areas in a home are where water is present, such as bathrooms. In schools, bathrooms, shower rooms and laboratories are environments suitable for mold growth. Mold exposure can also occur in any area where water from a leak comes in contact with paper, fabric, wallpaper glue, sheetrock, wood, and other surfaces. In addition, mold can grow on cold surfaces due to condensation of water on cold surfaces, particularly if these surfaces can serve as "food" for molds. There have been cases of children with health effects from mold growth in gyms with wet walls due to condensation.

You can breathe the mold particles if mold is disturbed. You can breathe in mold spores (usually not visible) that mold releases in the air. You can touch mold and get it on your skin. You can also swallow mold if you eat moldy or spoiled food like moldy bread.

What are the health effects of mold?

Some people are allergic to molds. Mold exposure may worsen asthma symptoms, hay fever, or other allergies. The most common symptoms of mold exposure are cough, congestion, runny nose, and trouble breathing. Symptoms usually disappear after the mold contamination is

removed. Exposures to very large mold growth from flooded buildings presents more potential for respiratory problems than common exposures found in homes and schools, particularly if ventilation is on as this may disperse mold spores throughout the building.

Should I have my home/school tested for mold?

Generally, it is not necessary to identify the species of mold growing in a residence, and the Centers for Disease Control and Prevention (CDC) does not recommend routine sampling for molds. Current evidence indicates that allergies are the type of diseases most often associated with molds. Since the susceptibility of individuals can vary greatly either because of the amount or type of mold, sampling and culturing are not reliable in determining your health risk. If you are susceptible to mold and mold is seen or smelled, there is a potential for health effects; therefore, no matter what type of mold is present, you should arrange for its removal. Mold testing is expensive and the results are not always related to health risk.

Should I see a doctor if my child has been exposed to molds at home or at school?

If you think that your children have symptoms related to mold exposure in your home, you should see a doctor. If the exposure was from school, you should also notify the school nurse or administrators. Keep in mind that many symptoms associated with mold exposure are also caused by many other illnesses. The extent of mold exposure (small spot in bathtub versus large area of extensive mold growth due to flooding) is also a factor in seeking medical attention.

How can you reduce mold in your home or school?

The best way to reduce mold exposure in your home is to remove water and moisture sources. Fixing leaks, drying damp areas, and removing humidity from the air (e.g., using a dehumidifier in basements; opening a window while taking a shower in bathrooms with no exhaust vent) will help limit mold growth and keep it from coming back. In schools, administrators and maintenance personnel must be notified to correct leaks and remove moisture sources as well as remove moldy ceiling tiles and similar materials.

How do you clean up mold on a surface in your home?

The best way to clean mold from surfaces such as shower walls is to use detergent and water. Diluted household bleach (no more than one cup of bleach in one gallon of water) may be used to clean hard surfaces; however, you should avoid its use in confined areas (showers and closets) and should never mix bleach with other household cleansers. If you have breathing problems (asthma, emphysema, COPD), you should avoid the use of bleach altogether. If large areas of a home have mold growth, such as might occur from flooding, then a professional mold remediation contractor should be contacted.

In schools, maintenance personnel may be able to clean up small areas of mold and remove stained, wet ceiling tiles and other moldy surfaces. The best way to eliminate mold is to make sure that the source of water is stopped.

Mold spores are difficult to kill and some will remain in a home or school even after a cleanup. It is very important to reduce or eliminate moisture in areas prone to mold growth. This can be done by use of exhaust fans in bathrooms and increased ventilation in school rooms. If moisture remains, mold will grow again from the microscopic spores.

Resources

Pediatric Environmental Health Specialty Units (PEHSU), a local and national resource at www.pehsu.net.

Centers for Disease Control and Prevention. <http://www.cdc.gov/mold/default.htm>

U. S. Environmental Protection Agency <http://www.epa.gov/mold/index.html>

U.S. Environmental Protection Agency, Fact sheet, molds in schools

<https://www.epa.gov/sites/production/files/2014-08/documents/moldfactsheet.pdf>

U.S. Environmental Protection Agency, Interactive mold house tour

<https://www.epa.gov/mold/interactive-mold-house-tour>

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