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LEAKS & MOLD: NATURALLY HAND-IN-HAND

Now that warm and humid weather is upon us, and many buildings such as schools are less frequently used, a few words about mold are in order. Yes, “mold” and “leak” are four-letter words that go hand-in-hand and can strike fear in the hearts of building managers, but with a few precautions, they need not be spoken again.

There are many mold types, and they are found in every U.S. region. Under typical ambient conditions, mold spores exist at safe levels; it is only when living conditions for mold are enhanced, primarily through the presence of water, that spores proliferate to a degree that they could threaten health or cause property damage.

As long as moisture is present, fungi will reproduce. If a building is dry, mold will not proliferate. To stop mold growth, the source of water intrusion must be stopped and existing mold must be cleaned. Most observed mold growth is associated with leaks and condensation problems in roofs, windows or walls. Studies also have found that condensation from an improperly installed vapor barrier, foundation leaks, sewage backups, improperly sized air-conditioning units that do not remove enough humidity from the air, and improper landscaping can lead to mold development.

Any cellulose-containing material coupled with moisture and an air temperature between 40°F and 100 °F is ideal for mold growth. Drywall or gypsum wall board, all types of wood, adhesive, ceiling tiles, insulation, paint, plywood, paper and cardboard are potential sources of nutrition that spur mold growth. Wallboard is an ideal food source for mold and if left unchecked can foster a large colony that can be seen with the naked eye. Vinyl wallcovering can conceal and promote mold growth if moisture infiltration occurs behind the surface; and in fact, the wall covering adhesive can be a favorite food for mold.

Once mold begins to grow, it does not require much moisture to continue growing. Humidity may be enough to keep a colony of mold multiplying. Some molds can get a foothold in a structure in less than 48 hours.

WHAT'S THE SOLUTION?

During times of low building occupancy, your efforts should be focused on minimizing conditions which cause or contribute to mold growth. **Regularly** inspect a building's interior to determine whether any visible mold is present. Examine roof joists, ceilings, walls and areas directly below flashings and penetrations for signs of water entry and mold. Maintain adequate temperature and humidity levels and air movement within the building.

When mold growth occurs on interior surfaces, interior air quality (IAQ) will be affected. Even though most people are exposed to mold daily and suffer no adverse health effects, other persons with respiratory problems, those suffering from allergies, asthma or a compromised immune system; or the elderly or very young, are likely to be susceptible to the effects of mold.

The EPA has developed the *Indoor Air Quality (IAQ) Tools for Schools (TfS)* Program to reduce exposures to indoor environmental contaminants in schools through the voluntary adoption of sound indoor air quality management practices.

The *IAQ Tools for Schools* Program is a comprehensive resource to help schools maintain a healthy environment in school buildings by identifying, correcting, and preventing IAQ problems. The *IAQ Tools for Schools* Program provides a variety of products, materials, and tools at no cost to help schools implement an indoor air quality management program. More information may be found at:

<http://www.epa.gov/iaq/schools/actionkit.html>

A little planning and routine inspection can eliminate those four-letter words from your building's vocabulary.