MOLD

Why is mold growing in my home?

Molds are part of the natural environment. They play a part in nature by breaking down dead organic matter such as fallen leaves and dead trees, but indoors, mold growth should be avoided. Molds reproduce by means of tiny spores; the spores are invisible to the naked eye and float through outdoor and indoor air. Mold may begin growing indoors when mold spores land on wet surfaces. There are many types of mold, and none of them will grow without water or moisture.

Can mold cause health problems?

Molds are usually not a problem indoors, unless mold spores land on a wet or damp spot and begin growing. Molds have the potential to cause health problems. Molds produce allergens (substances that can cause allergic reactions), irritants, and in some cases, potentially toxic substances (mycotoxins). Inhaling or touching mold or mold spores may cause allergic reactions in sensitive individuals. Allergic responses include hay fever-type symptoms, such as sneezing, runny nose, red eyes, and skin rash (dermatitis). Allergic reactions to mold are common. They can be immediate or delayed. Molds can also cause asthma attacks in people with asthma who are allergic to mold. In addition, mold exposure can irritate the eyes, skin, nose, throat, and lungs of both mold-allergic and non-allergic people. Symptoms other than the allergic and irritant types are not commonly reported as a result of inhaling mold. Research on mold and health effects is ongoing. This information provides a brief overview; it does not describe all potential health effects related to mold exposure. For more detailed information consult a health professional. You may also wish to consult your Base Public Health Department.

How do I get rid of mold?

It is impossible to get rid of all mold and mold spores indoors; some mold spores will be found floating through the air and in house dust. The mold spores will not grow, if moisture is not present. Indoor mold growth can and should be prevented or controlled by controlling moisture indoors. If there is mold growth in your home, you must clean up the mold and fix/remove the source of moisture. If you clean up the mold, but don't fix what generated moisture, then, most likely, the mold problem will come back.

Is mold related to humidity?

European and Italian homes are typically built with reinforced concrete frames and brick walls. Walls and ceiling surfaces are finished with mortar/plaster and water base paint. As water base paint is not waterproof, plaster finishing tends to absorb and retain humidity. These areas can become damp or wet as a result of a water leak or condensation of vapors produced by appliances and normal household activities. Humidity is generally distinguished in two categories:

- EXTERNAL (Construction Defect)
- INTERNAL (Condensation)

Assuming that in your case the humidity is not due to construction defect, we are interested mainly in internal humidity/condensation. Humidity is created by cooking, taking a shower, doing the laundry, watering the flowers and also by the inhabitants' breathing and perspiring. A family of four delivers to the air an average of 10 to 12 liters (3 to 4 gallons) of water per day. In situations of poor ventilation or high relative humidity, vapors will condensate on walls which are colder than internal air making it damp and creating the ideal environment for mold growth. The humidity condensing indoors is a natural phenomenon and absolutely harmless, provided that surfaces able to absorb water are constantly dried. However, in corners lacking of proper ventilation (e.g. behind wardrobes, beds, etc.) the build-up of constant humidity on the walls can occur creating,

as a consequence, the presence of mold. It is advisable to keep wardrobes and other furniture about 4 inches away from walls to allow ventilation.

How do I control moisture which is the key to mold control?

Keep indoor humidity low. If possible, keep indoor humidity below 60 percent (ideally between 30 and 50 percent) relative humidity. Relative humidity can be measured with a moisture or humidity meter (Hygrometer), a small inexpensive (\$10-\$50) instrument available at many household stores. If you see condensation or moisture collecting on windows, walls or pipes - <u>ACT QUICKLY</u> to dry the wet surface and reduce the moisture/water source. Condensation can be a sign of high humidity.

How can I reduce humidity?

- Vent appliances that produce moisture, such as clothes dryers, stoves, and kerosene heaters to the outside where possible. (Combustion appliances such as stoves and kerosene heaters produce water vapor and will increase the humidity unless vented to the outside.)
- Use air conditioners and/or de-humidifiers when needed.
- Run the bathroom fan or open the window when showering.
- Use exhaust fans or open windows whenever cooking, running the dishwasher or dishwashing, etc.

How can I prevent condensation?

- Reduce the humidity.
- Increase ventilation or air movement by opening doors and/or windows, when practical.
- Use fans as needed.
- Cover cold surfaces, such as cold water pipes, with insulation.
- Maintain temperature at 20 Celsius (68 F) throughout the house (helps dries moisture in air)

What should I do when mold appears?

<u>ACT QUICKLY</u> as mold damages what it grows on. The longer it grows the more damage it can cause.

- Fix leaks and other water problems as soon as possible.
- Scrub mold off hard surfaces like tiles, window pan and frames, and clean using bleach based detergent and water.
- Dry all items completely.

Places that are often or always damp can be hard to maintain completely free of mold. A good remediation to kill or to manage mold growth is to spray affected areas with a 20% solution of bleach and water. Avoid wiping/rubbing affected walls as it will spread mold spores enlarging the affected areas, just spray and leave it alone. Wear gloves and goggles when spraying/cleaning mold affected surfaces/areas.

Usually mold will disappear after few hours following treatment, and if rooms are kept warm and ventilated to allow walls to dry, mold will not return as you've eliminated the growth conditions. Water/bleach solution will not ruin the paint.

If there's some mold in the shower or elsewhere in the bathroom that seems to reappear, increasing the ventilation (running a fan or opening a window) and cleaning more frequently will usually prevent mold from recurring, or at least keep the mold to a minimum.