Mold grows from spores which are everywhere in our environment. Usually these spores are inactive, but will germinate when the relative humidity exceeds 70 percent. Mold attacks organic materials such as paper, books, cloth, photographs, and leather. Mildew is more a surface concern, growing on walls, siding, and other surfaces covered with a film of dirt containing organic matter that has been exposed to moisture. Temperatures above 65°F (18°C) increase the likelihood of mold or mildew. Signs of mold and mildew include growths, discolored surfaces and odors. Homes exposed to flooding, water penetration or leakage problems, and/or high humidity conditions are especially susceptible.

Bacteria, another microorganism, can contaminate an air conditioning system or other moisture-laden areas. Bacterial growths account for most of the slime that clogs air conditioner drain pans and drain lines. Bacteria create the initial tacky coating on heat transfer surfaces that catch and hold dust and fibers, which can eventually lead to clogged coil passages.

There are no simple, inexpensive methods of uncovering fungi or bacteria conditions in a home. But once a biological pollution condition is discovered, there are means to identify its cause and to eliminate it. Certain catastrophic events, such as flooding or serious water intrusion, are certain to quickly lead to mold conditions unless prompt remedial action is initiated.

A home inspection does not include a specific investigation or identification of any environmental concerns including mold, mildew and bacteria. If there are concerns about the presence of molds, particularly if related to personal health factors, a qualified environmental specialist should be consulted for information on available inspection services.
Mold, Mildew, and Bacteria (continued)

Fungi and bacteria require moisture to survive. To minimize the chances of your home becoming a breeding ground for any fungus or bacterium, you must address conditions that contribute to water penetration and high humidity conditions. Here are some general recommendations to control moisture and help prevent the growth of fungi or other biological pollutants:

- Humidifiers (particularly reservoir, non-misting types) can promote mold and mildew growth and help spread spores throughout the house if not properly maintained. These units must be serviced regularly.

- Condensate collection pans under the indoor coil for air conditioning units provide a perfect environment for bacteria. Check and, if accessible, thoroughly bleach-clean them as needed.

- Ground water that is not directed away from your home may penetrate the foundation and/or the crawlspace walls and will provide mold and mildew spores with the moisture they require to thrive. Pipe downspouts away from the house, maintain a positive grade around your foundation, and address any water penetration conditions immediately.

- Faulty or missing flashings allow rainwater to enter your home and settle in hidden areas such as attics and insulated roof or wall cavities. Check and maintain flashings annually.

- Unfinished, dirt-floor crawlspace allow ground moisture to rise and permeate house framing and insulation. Such crawlspace surfaces should be sealed by placing polyethylene sheeting over them and taping all seams and edges. Keep crawlspace well ventilated.

- Bathrooms and laundry areas, particularly if unventilated or poorly ventilated, encourage the growth of mold and mildew. Venting (including bathroom exhaust vents as well as dryer vents) should be piped to the outside and not to an interior area such as an attic or garage.

- Improperly vented fuel-burning appliances can raise the relative humidity in a room. Shut off offending appliances at first signs of condensation on windows or other surfaces and check venting systems to ensure all potentially harmful flue gas exhausts to the exterior.

- Dehumidifiers and air conditioning can be used, especially in hot, humid areas, to draw moisture out of the air. Be sure these appliances don’t themselves become sources of biological pollutants.

- Major systems, such as furnaces, heat pumps and central air conditioners, should be inspected and cleaned annually before seasonal use.

- Before using duct cleaning services, confirm there is a need and verify that the contractor will provide protection from dislodged pollutants and chemicals used in the cleaning process.