# Seven Steps to a Healthier Habitat in the Home

by Jim LaRue

#### 1. Keep It Dry



A house with a damp basement, unattended leaks from plumbing fixtures or roofs, and baths or kitchens without fans, or those not in regular use, can harbor the moisture it takes to support significant mold growth. Mold has become the nemesis of many houses. In addition to damaging a house's structure, mold can be a trigger for

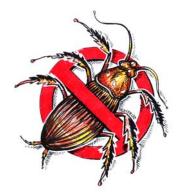
those suffering from asthma. Properly grading the landscape surrounding the house, as well as clearing gutters and downspouts can help reduce moisture entering a house through its foundation. Keeping anything made out of wood, paper or cardboard away from potentially damp surfaces can also reduce the chance of mold growth.

# 2. Keep It Clean



Carpeting is a depository for all kinds of things tracked in from the outside. Studies show that lead dust is commonly found in carpets in inner-city neighborhoods, and residue from pesticides and herbicides is found in carpets in suburbia. A hard-floor surface that has lead and pesticide residues that have been tracked in may present an even greater health hazard. To prevent tracking in pollutants from the outside,

remember to remove shoes at the door or use "walk-off mats" on the outside and inside of entryways.

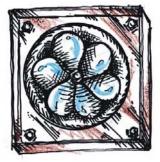


## 3. Keep It Pest-Free

Droppings from pests as well as their body parts are major triggers for people with asthma. Eliminating pests eliminates this threat. Maintaining a dry home and keeping it clean are two of the most important ways to reduce pest infestations. A method called Integrated Pest Management (IPM) avoids introducing toxic chemicals into the home environment to abate pests. One hundred percent roach removal, without ever spraying, is one of the most dramatic

fruits of this new and healthier pest-control methodology.

# 4. Keep It Well Ventilated



As homes become more air-tight in an effort to reduce energy costs, air exchange in most homes has become a very important issue. A house needs a certain number of air changes each hour in order to circulate fresh air to both the people living there and the combustion appliances (such as gas furnaces, hot water tanks, dryers and stoves). Building scientists feel a need to install not only fans to help avoid moisture and control pollutant exhaust, but fans that

bring fresh air into the entire structure on a continuous basis. As a result, numerous ventilation strategies and equipment are coming to the new-home market. It is very important that ventilation for the purpose of bringing in fresh air does not conflict with the exhausting of the combustion by-products of gas or oil-burning appliances. Modern appliances now commonly use sealed-combustion. They get their fresh air directly from the exterior of the house and they exhaust directly to the outside. Thankfully, the remaining ventilation needs of the home are not compromised.

#### 5. Avoid Contaminants



Radon is naturally occurring, colorless, odorless, radioactive gas emitted from the earth's crust. This gas, which forms a minute constituency of air near the ground, can seep into a home from the ground and can lead to lung cancer. Homes in high-risk areas should test for radon and take appropriate steps if air levels exceed EPA standards.

Building materials and furnishings in homes often release volatile organic compounds (VOCs) that over time can cause health conditions that range from respiratory distress to

cancerous conditions. The presence of fire-retardant chemicals in many furnishings has become a recent consumer concern. Some of these chemicals are known to be hazardous to health, even though their purpose is to retard the spread of fire. There is also a concern over the spraying of personal-care products used in homes. Of course, smoking is an obvious indoor air-quality problem.

It is critical to understand that even the best ventilation system may not effectively remove all airborne contaminants. Additionally, some air-cleaning devices now on the market may actually make things worse. The key to reducing contaminants is being aware of them and removing their source. Consumers need to be educated about materials that should be avoided in homes.

## 6. Keep It Safe



A multitude of hazards in a home can cause injury or even death. Extension cords under a rug is a fire hazard, no railings on stairs and rugs that slide easily can cause falls, unlocked cabinets with drugs or chemicals can lead to the poisoning of a child - to name just a few. There has even been a rash of children falling through window screens from two-story heights and higher. Window guards that provide protection, yet can be opened by an adult in case of a

fire, can be installed.

## 7. Keep It Well Maintained



Occupants in a home play a critical role in maintaining it in a healthy manner. The best systems and materials can be put in place, but the homeowner must be able to use the equipment or materials effectively in order to prevent matters from growing worse. An unused bath or kitchen fan is an invitation to mold growth. An unattended sink trap that leaks for any duration can result in mold growth in the cabinets beneath it. Poor food waste handling can

lead to pest infestation. Pets that are not properly groomed can become the source of allergens that can trigger asthma.

Creating a healthier home environment is hardly a new subject, but each generation builds houses with new materials, modern mechanical systems and newly invented domestic goods. Maintaining an awareness of possible threats to our safety and health at home is an ever-present challenge. For more information about these steps to creating and maintaining healthier living spaces, visit the website of the National Center for Healthy Housing <a href="https://www.centerforhealthyhousing.org">www.centerforhealthyhousing.org</a>.

Jim LaRue has been a technical consultant to The Cleveland Green Building Coalition, Environmental Health Watch and the National Center for Healthy Housing. He provides experience and information regarding "green" or environmentally-friendly residential housing, which is also healthier housing. Jim's website is the Green Building Cookbook <www.greenbuildingcookbook.info>.