

Controlling indoor pollutants

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In my job as a home inspector, I am getting questions about indoor air pollutants with increasing frequency. Often people have heard about substances like radon and mold and simply want to know if they should be concerned.

Unfortunately, there are no simple answers to these questions. It is only through a better understanding of indoor air pollutants and their causes that we are able to make informed decisions about how concerned we should be.

The problem: We have experienced a significant increase in fuel costs. This, in addition to greater public concern for the environment, has led to building more energy-efficient houses. In most cases, energy efficiency has been accomplished by making houses tighter so the air we pay to heat in the winter does not escape, and the hot exterior air in the summer does not get in. In both cases, we save money and help the environment by using less energy. The decrease in air changes between the interior and exterior air, however, has the unfortunate side effect of trapping moisture and pollutants inside our houses.

Pollutants

Indoor air pollutants come from three general sources:

- 1 The pollutants that get into the house from outside. Examples are pollen, radon, exhaust fumes from cars and yard equipment, and herbicides and fertilizers used on our lawns.
- 2 The pollutants inside the living space. Examples are cleaning solvents, volatile organic compounds from building products and furniture, and chemical treatments of clothing.
- 3 The pollutants produced by people. These are the many chemicals given off by our normal metabolism. When these chemicals are allowed to build up, the air in your house can get stale.

Solutions

Each source of indoor air pollution has a different solution. The trick is to make the solutions work together and not against each other. For example, building tighter houses is the best way to reduce the infiltration of pollutants from outside the home; however, as we have already seen, a house with few air changes allows an increase in the buildup of pollutants from the other two sources. The solution to the buildup of pollutants from people and the interior of the house is controlled ventilation. Controlled, or "general," ventilation systems bring fresh air into the house while exhausting the same amount of stale air out. Typically, these systems are installed in conjunction with the heating and air-conditioning systems.

Ultimately, how concerned we should be about indoor air pollution is an individual choice. Naturally, those who are more sensitive to pollutants will be more concerned.

For additional information about indoor air pollution, contact your county Extension Service or your local health department.

Do you have a home repair question? Send e-mail to Ask the Inspector at H&G@ajc.com.