

# Western Pennsylvania Guide to Good Health

*Health News You and Your Family Can Use to Achieve Optimal Health*

## Healthy Home Living

### *The Air We Breathe*

According to the EPA, indoor air pollution can be 2 to 5 times higher than outdoor air<sup>1</sup>. Given that the average person breathes approximately 10,000 to 20,000 liters of air each day and can spend up to 90% of his or her day inside the home, minimizing sources of indoor air pollution is important in maintaining a healthy environment. Sources of toxic chemicals in the home can include building materials, paints, cleaning products, air fresheners, and fuel-burning appliances. Over time, these pollutants can contribute to health problems such as asthma, fatigue, headaches, and even cancer.

Several laboratory and home tests are available to determine the levels of pollutants commonly found in your home. Formaldehyde, a probable carcinogen, is a chemical found in pressed wood, adhesives, and as a preservative in some paints. Formaldehyde has recently been in the news as elevated levels were measured in the FEMA trailers set up for Gulf Coast hurricane evacuees<sup>2</sup>. Residents experienced eye and throat irritation, headaches and other symptoms attributed to elevated levels of formaldehyde arising from building materials used in the trailers.

Carbon monoxide can occur from improperly maintained stoves, furnaces, and fireplaces. Headaches and nausea can occur at low concentrations, and high levels can be life threatening. Carbon monoxide detectors in the home can alert you when unsafe levels are reached.

Benzene, a known carcinogen, can enter the home through vehicle emissions in attached garages and by storing fuels and



paint supplies. Another volatile organic chemical (VOC) pollutant commonly found in indoor air is perchloroethylene, a chemical known to cause cancer in animals. Perchloroethylene is used as a solvent in dry-cleaning, and vapors can be introduced into the home through storage of dry-cleaned materials. These are just a few of the indoor air pollutants homeowners may be exposed to in their homes.

#### WHAT CAN YOU DO TO KEEP THESE AIR POLLUTANTS OUT OF YOUR HOME?

- Choose low-VOC products
- Maintain your fuel-burning appliances
- Buy limited quantities of household chemicals
- Minimize storage of chemicals in the home
- Follow product label directions when using hazardous chemicals
- Make sure your dry-cleaner properly dries clothes to minimize perchloroethylene or find a perchloroethylene-free dry cleaner

Following these steps can help you breathe easier in the comfort of your home.

#### References:

- The Mahfood Group LLC in cooperation with Ms. Heidi Hayes of Air Toxics, Ltd.
1. The total exposure assessment methodology (TEAM) study: Summary and Analysis. Volume 1. EPA 600/6-87/002a. U.S. Environmental Protection Agency, Office of Air and Radiation. 1987
  2. Final Report on Formaldehyde Levels in FEMA-Supplied Travel Trailers, Park Models, and Mobile Homes from the Centers for Disease Control and Prevention, July 2, 2008



**The Mahfood Group's Healthy Roots Project** is designed to help homeowners concerned about indoor air quality and provides a basis for rational decision making. For more information on **The Mahfood Group** and the **Healthy Roots Project**, visit the website at [www.thehealthyrootsproject.com](http://www.thehealthyrootsproject.com) or call (412) 221-5056.