Formaldehyde in Your Home

The Louisiana Department of Health and Hospitals has seen recent reports of formaldehyde in certain types of laminate flooring. The information below provides general information on formaldehyde and links to sources of more information for Louisiana homeowners and residents.

What is formaldehyde?

Formaldehyde is a colorless, strong-smelling, flammable gas that is produced by both human activity and natural sources. It is part of a class of chemical compounds called volatile organic compounds (VOCs). As the name suggests, VOCs volatilize, or evaporate to become a gas at room temperature. For wood products that are treated with formaldehyde, this is called off-gassing. If formaldehyde accumulates indoors, breathing high concentrations of the vapors could cause health effects.

Where is it found?

Formaldehyde is currently used in thousands of products as an adhesive, bonding agent and solvent. It is widely used to make other chemicals and a variety of consumer products including home furnishings, manufactured wood products, medicinal and personal care products, fertilizers and pesticides. Formaldehyde is also a by-product of combustion. When you burn materials such as natural gas, wood, gasoline or tobacco, formaldehyde gas is released. Formaldehyde in small concentrations is a normal part of our environment. Outdoor air levels generally range between 0.002-0.006 parts per million (ppm) in suburban areas.

What are the health effects?

The health effects of formaldehyde depend on the dose of exposure and vary from one person to another. The most common symptoms are eye, nose and throat irritation, coughing, headaches, dizziness, and nausea. These symptoms have been observed in humans breathing 0.1 to 0.5 parts per million (formaldehyde in air) and are reversible when exposure is stopped. Some products and construction materials may emit formaldehyde at levels above 0.10 ppm especially when they are new. Most products will off-gas the formaldehyde in a few weeks and usually do not pose a health threat.

Because of its strong odor, people smell formaldehyde at very low levels. The typical person can smell formaldehyde at levels less than those that might cause health effects. People who are hypersensitive or who have respiratory problems may experience effects at levels lower than what can be smelled. Health concerns should be addressed by your health care provider.

The United States Environmental Protection Agency (EPA) has listed formaldehyde as a "probable human carcinogen," while the International Agency for Research on Cancer (IARC) has classified formaldehyde as "carcinogenic to humans" based on nose and throat cancers in working populations repeatedly exposed to high levels of formaldehyde in air.

What can I do to reduce exposures to formaldehyde?

The off-gassing of formaldehyde is the greatest when the product is new and decreases over time. To minimize exposure from off-gassing, leave new products in a garage or a covered outdoor area for a few days before bringing them into the home. If the product is already indoors, increase ventilation in the home by opening windows and using fans to increase air flow to the affected areas Usually, the levels decrease and odors are gone within a few days. Keep indoor

temperatures and humidity low to decrease the amount of formaldehyde off-gassing into the indoor environment.

What regulations are in place to protect public health?
The Formaldehyde Standards for Composite Wood Products Act, also known as Title VI of Toxic Substances Control Act (TSCA) was signed into law on July 17, 2010. The final rule, expected in September 2015, will set emission limits for various composite wood products. More information about the standard for formaldehyde emissions from pressed wood products can be accessed at http://yosemite.epa.gov/opei/rulegate.nsf/byRIN/2070-AJ92

The California Air Resources Board (CARB) has established and enforces the Composite Wood Products Regulation that requires all finished goods, such as flooring, destined for sale or use in California to be made using complying composite wood products. Further information can be accessed at the following CARB website http://www.arb.ca.gov/toxics/compwood/compwood.htm

What should I do if I suspect contaminated laminate flooring?
Check the product labeling/packaging and contact the point of purchase for the product to get information on where the laminate was manufactured. Ask your supplier about the origin of the laminate and formaldehyde issues associated with the product or manufacturer. You may also contact the U.S. Consumer Products Safety Commission toll-free hot line at 800-638-2772 (TTY 301-595-7054) or http://www.cpsc.gov

If the flooring was professionally installed, the building contractor or seller may have this information. This information may inform your decisions. If you decide to remove the laminate, contact should be made with a licensed contractor certified in their field who is familiar with how to safely remove and dispose of this product. The Louisiana State Licensing Board for Contractors maintains a listing of contractors at www.lslbc.louisiana.gov. It is possible to have flooring properly tested for formaldehyde emissions, but these tests are difficult and quite expensive. Furthermore, it is not advised to test indoor air to obtain laminate flooring formaldehyde emissions, as results may be impacted by the wide variety of formaldehyde-containing sources in a home (i.e., new carpet, furnishings, and natural gas appliances).

Who can I contact for more information?
U.S. Consumer Product Safety Commission: (800) 638-2772 (TTY 301-595-7054) or http://www.cpsc.gov

United States Environmental Protection Agency: (800) 887-6063 or http://www2.epa.gov/formaldehyde/questions-and-answers-regarding-laminate-flooring-0

Centers for Disease Control: (800) 232-4636 or http://www.cdc.gov/niosh/topics/formaldehyde/

Lumber Liquidators Customer Care: (800) 366-4204 or online at http://www.lumberliquidators.com/ll/contact-us/request or by email llcustomerrelations@lumberliquidators.com