

## Scientific Study

# Formaldehyde Linked to Asthma

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There is a significant association between formaldehyde exposure and childhood asthma according to a recent scientific literature review by researchers Gerald McGwin, Jr., Jeffrey Lienert, and John I. Kennedy, Jr.

Roughly 7% of adults and 9% of children suffer from asthma in the U.S. Seven peer-reviewed studies examined data showing an association between formaldehyde exposure and asthma in children.

Many products in the indoor environment emit formaldehyde, including particle board, urea formaldehyde insulation, carpeting, and furniture. Clothing is also treated with formaldehyde. Mobile travel trailers provided by the Federal Emergency Management Agency (FEMA) to displaced Gulf Coast residents have also been shown to contain excessively high levels of formaldehyde.

Exposure to formaldehyde can cause irritation of the eye, nose, throat and skin. Chronic exposure, such as that experienced in the home from treated furniture and carpets, has been linked with cancer and asthma.

“The results of this study provide important evidence regarding the potential causal link between formaldehyde and asthma in children, says McGwin.

Protect children from formaldehyde exposure next to the skin by buying organic and untreated clothing. Wrinkle resistant, stain resistant, and permanent

press clothing are treated with formaldehyde and other potentially toxic chemicals. As a simple test on new clothing, fill a spray bottle with water and spray a bit on the garment. If it absorbs, the formaldehyde level is low. If it beads up and does not absorb, the formaldehyde level is high.

Most furniture is sprayed with potentially toxic chemicals to resist mold, wrinkles, and stains. Fire retardants are applied as well. Look for organic and untreated furniture. Press wood generally contains a high amount of formaldehyde. Consider metal and stainless steel options and sew your own cushions.

Bedding which has not been treated with fire retardants can only be purchased in the U.S. with a prescription from a doctor or chiropractor. If a prescription is not obtainable, consider an untreated mattress wrapped in wool, which meets the fire retardant laws in most states.

Formaldehyde can also be found in some childhood vaccinations. Check the ingredients before vaccinating. There are often other brands which may have little or no formaldehyde.

**Reference**

Gerald McGwin, Jr., Jeffrey Lienert, and John I. Kennedy, Jr. Formaldehyde Exposure and Asthma in Children: A Systematic Review, *Environmental Health Perspectives*. doi: 10.1289/ehp.0901143 . 6 November 2009.

