

# CLEARING THE AIR ABOUT CLEAN CARPET

Studies Show No Links between Carpet, Asthma and Allergies

“Based on the available science, carpet does not cause asthma or allergies and does not increase the incidence or severity of asthma or allergies symptoms. In fact. . .multiple studies have reported fewer allergy and asthma symptoms associated with carpet.”

– Mitchell Sauerhoff, Ph.D., DABT

## ABOUT MITCHELL SAUERHOFF

Dr. Mitchell Sauerhoff is a board certified toxicologist and a member of the Society of Toxicology. He holds a Ph.D. in toxicology from the University of Cincinnati College of Medicine and is an independent consultant focused primarily on safety evaluation, drug development and occupational/environmental health. Dr. Sauerhoff has published extensively in toxicology and assists in the training of emergency room physicians in principles of medical and industrial toxicology. Dr. Sauerhoff serves on the Connecticut Poison Control Center Medical Advisory Board and lectures at the University of Connecticut School of Law.

Dr. Sauerhoff's report, "Carpet, Asthma and Allergies — Myth or Reality," is available at <http://www.flooringsciences.org/e-journal/title.cfm>



[carpet-rug.org](http://carpet-rug.org)



## Is there a relationship between carpet and asthma and allergy symptoms? No, the weight of evidence does not support a link.

Author and toxicology expert Mitchell Sauerhoff, Ph. D., DABT, reviewed U.S. and international scientific studies on this issue and concluded in “Carpet, Asthma and Allergies — Myth or Reality,” that the long-held beliefs on carpet’s alleged negative characteristics are not consistent with current research. Indeed, the significant literature on carpet and asthma or allergies confirms that children and adults living with carpet do not have an increased incidence of asthma or allergy.

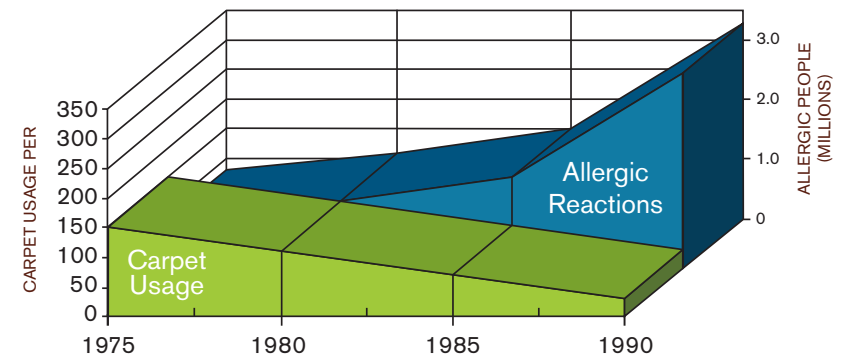
While carpet may contain a higher level of biocontaminants compared to hard-surface flooring, studies have shown that airborne levels of these biocontaminants are similar or lower than over carpet than hard surfaces. Carpet appears to trap biocontaminants keeping them out of indoor air. Also, studies have found that the levels of volatile organic compounds from emitted from carpet are too low and short-term to act as asthma triggers.

## STUDY HIGHLIGHTS

### CARPET IN BEDROOMS PROVES NO PROBLEM

A study titled “European Community Respiratory Health Survey” examined the association between adult asthma and housing characteristics related to dampness, mold exposures and house dust-mite levels.<sup>1</sup> A negative relationship between bedroom carpets and asthma seemed to be apparent in nearly all the 38 study centers, including counties where carpet is uncommon and areas with a low prevalence of house dust mite sensitization. Perhaps the most important conclusion drawn from this study was that mold exposure — and not carpet in homes — had an adverse effect on asthma symptoms and bronchial responsiveness.

### CARPET USAGE & ALLERGIC REACTIONS IN SWEDEN



When carpet use in Sweden decreased by 70 percent, allergy reactions in the general population increased by 30 percent.

Source: Swedish Statistical Central Bureau

### CARPET AND SCHOOLS

A Dutch study followed a group of asthmatic children from carpeted and uncarpeted classrooms and concluded that carpeted classroom floors did not contribute to asthma symptoms or severity.<sup>2</sup> A 2003 study examined more than 4,000 U.S. elementary students and their parents and found that not only did carpet in classrooms have no effect on student health, but that carpet in a child’s bedroom was associated with lower rates of asthma medication use and school absenteeism.<sup>3</sup>

### WHAT HEALTH ORGANIZATIONS SAY

In 1993, a study titled “Global Strategy for Asthma Management and Prevention” was published collaboratively by the U.S. National Heart, Lung, and Blood Institute and the World Health Organization. The 2007 update to the original report states that there is no evidence that replacing carpet with hard-surface flooring has a health benefit.<sup>4</sup>

<sup>1</sup> *Journal of Allergy and Clinical Immunology*: Vol. 110(2), pp. 285-292, 2002

<sup>2</sup> *Allergy*: Vol. 49(9), pp. 724-729, 1994

<sup>3</sup> *Journal of Exposure Analysis and Environmental Epidemiology*: Vol. 13 pp. 169-176, 2003

<sup>4</sup> *National Heart Lung and Blood Institute Global Initiative for Asthma – Global Strategy for Asthma Management and Prevention*; 2007 Annual Report