

POOH

Scientific Facts Dispel Carpet and Asthma Myths

by Werner Braun



I can't imagine a world without carpet. Carpet improves the acoustics in my home, so I never miss a spoken word. It's soft, so I can go a round or two with my son who likes to show me the latest wrestling move he's learned on the school team. It's beautiful, comfortable, safe, healthy – and, unfortunately, losing market share.

The slowdown in the carpet category is not about style or quality. This is an exciting time in carpet design, with talented designers and technological advances creating innovations in color, texture and pattern. Carpet is a better value today than ever before, lasting for many years, as long as the carpet is matched to the proper cushion and end-use, and cleaned regularly and correctly.

So, what's not to like about carpet? In any fashion industry, tastes change and trends come and go. But beyond the inevitable ebb and flow of home fashion trends, carpet is plagued by a persistent myth that it contributes to unhealthy indoor air quality and can act as a trigger for asthma and allergies.

I visited a website recently that warned consumers, "If you must install carpet, open the windows and don't allow anyone to enter the room for at least a week." Even some physicians, consumers and patient groups buy into this supposed link between carpet and asthma and allergies. This is despite scientific evidence that disproves the correlation. Media coverage also contributes to the myth through sensational coverage, or by

simply quoting an authority who suggests carpet removal as a way to manage allergy and asthma symptoms.

One of the best ways to disprove myths is through science-based facts. A primary mission of the Carpet and Rug Institute (CRI) is to educate different audiences about carpet's positive role with respect to indoor air quality. Here are some ways to educate the carpet buyer and Mrs. Consumer.

Look for the Green Label

Because people spend about 90 percent of their time indoors, it is important to do everything possible to maintain indoor air quality, especially in new and renovation (remodel) construction.

The CRI has worked with the Environmental Protection Agency (EPA), the Consumer Product Safety Commission (CPSC), academic institutions and independent laboratories to

evaluate carpet's role in the indoor environment. The results are contained in the Green Label program and the even more rigorous Green Label Plus program.

These programs test carpet and identify products with very low emissions of volatile organic compounds (VOCs). Using scientifically established standards for low-emitting building products, the Green Label Plus program meets the exacting requirements of California's Collaborative for High Performance Schools (CHPS) testing protocol and the U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED) guidelines.

Carpets meeting the acceptance criteria carry a label indicating compliance. Over the past four years, more than 90 percent of the carpet industry's production has been accepted into the program.

In addition, the scope of the testing and labeling program has been broadened to

Facing Page: Despite some claims to the contrary, carpet remains a healthy choice for flooring for everyone in the family. Pictured is Shaw's Tuflex of California's new Friendly Old Bear carpet style from the Winnie the Pooh Collection. The new carpet style is part of a non-character based carpet line launched with Disney Consumer Products. The wall-to-wall styles include pattern and cut/loop cable and shag constructions.

Right: Salcombe Striata in British Wool by Axminster Carpets offers a modern look to patterned carpet using a design based on dyeing technique from the 15th century. Available in 3' and 11' 8" widths.



cover floor covering adhesives and carpet cushions. This extension of the program imposes acceptance limits for adhesives and cushion similar to those set for carpets.

Studies on Carpet and VOCs

Studies have proven that carpet is one of the lowest emitters of VOCs among household products, and the small amount of new carpet off-gassing dissipates within one or two days after carpet is installed.

International consultancy ENVIRON studied potentially adverse effects of VOC emissions from carpet and found “no human health concerns with components of, or emissions from, carpet.” This and other studies have demonstrated that VOC emissions from carpet are typically found in extremely small quantities (parts-per-billion), and the vast majority of these VOCs are short-lived and not harmful at the extremely low levels commonly found. In addition, ENVIRON observed that these low levels are too low to act as triggers for asthma.

Cornell University professors Rodney Dietert and Alan Hedge reviewed emissions data from several studies and concluded that emissions from new carpet were much too low to constitute any significant health risk. Air Quality Sciences has also evaluated carpet emissions and found that VOC emissions decrease following installation and pose no risk to health.

Science shows carpet remains a safe choice

Following is a sampling of the studies cited in Dr. Mitchell Sauerhoff's review of the safety of carpet:

- A Swedish study documented how, from 1975 to 1992, carpet usage in Sweden decreased by 70 percent yet allergy diagnoses increased by 30 percent.
- Multiple studies found that carpet may even be helpful to people. An 18-nation study of nearly 20,000 people found a statistical relationship between carpeted bedrooms and reduced asthma symptoms and bronchial responsiveness.
- 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 also that carpet in a child's bedroom was associated with lower rates of asthma medication use and school absenteeism.
- A 2007 update to a study done by the U.S. National Heart, Lung, and Blood Institute and the World Health Organization states that there is no evidence that replacing carpet with hard surface flooring has a health benefit.

A downloadable version of Dr. Sauerhoff's report, "Carpet, Asthma and Allergies – Myth or Reality" is available at <http://www.flooringsciences.org/>



Envy is part of Bliss by Beaulieu's new Flirtation line. Featuring a 60 oz. face weight, the textured style is made with the company's PermaSoft nylon.

Carpet Clears the Air

Studies have also shown carpet as a safe purchase for those who suffer from allergy and asthma symptoms. It is true that carpet is capable of trapping soil, dust and pet or insect dander – and may trigger allergic reactions in some people. But just because allergens may be present in carpet does not mean that they pose a hazard to human health.

An allergen must be inhaled for exposure to occur, and in order to be inhaled it has to be airborne. Careful measurements have shown that allergen particles are relatively heavy and difficult to get into the air, and fall quickly after becoming airborne. Human exposure to household allergens is much more likely to occur from mattresses and furniture than from carpets because normal use places the face very close to these furnishings.


Studies have shown that carpet acts like a filter, trapping allergens and keeping them out of the breathing zone until they can be removed through proper vacuum-

ing and deep cleaning. So removing allergens from carpet actually contributes to a better indoor environment.

Well-known toxicologist Mitchell Sauerhoff, Ph.D., DABT, reviewed more than 23 scientific studies from around the world and concluded that carpet does not increase the incidence of asthma or allergies in children or adults.

In his paper, entitled, “Carpet, Asthma and Allergies – Myth or Reality,” Dr. Sauerhoff says, “Based on the available science, carpet does not cause asthma or allergies and does not increase the incidence or severity of asthma or allergy symptoms. In fact ... multiple studies have reported fewer allergy and asthma symptoms associated with carpet.”

For more than 50 years, millions of consumers have enjoyed the benefits of carpet. Billions of square yards of carpet have been installed in the vast majority of United States homes and office buildings, with very few health-related complaints.

So, the next time someone comes in your store and asks about carpet, you can confidently state that, based on the weight of evidence available in current scientific research, carpet does not cause asthma; VOC emissions from new carpet do not act as triggers for asthma or allergies; carpet does not increase the incidence or severity of asthma or allergies in children and adults; and, most important, carpet is safe. 



About the Author:

Werner Braun joined the Carpet and Rug Institute as president in April 2000. CRI is the national trade association representing carpet manufacturers and allied industries.

He is a past president of the World Carpet and Rug Council. Prior to coming to CRI, Braun served as senior director for international affairs for the Chlorine Chemistry Council. He holds a degree in chemistry from St. Edward's University in Austin, Texas.