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# 1999 Technical Bulletins

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## THE FACTS ABOUT KAWASAKI SYNDROME AND CARPET CLEANING

Beyond a doubt, we are faced with many problems in the world. We, at times, seem to be bombarded by various sources of stress. It may come from our work, our families, or our finances. But nothing concerns us more than a threat to our health. Understandably, without our health and the health of our loved ones, we easily become disheartened. When that threat is voiced to be a disease that strikes infants and very young children, it demands and gets our immediate attention.

Is it any wonder, then, that when a subject such as Kawasaki Syndrome is mentioned, it strikes fear. Fear can only be dispelled by knowledge that there is a cause and a cure. But in the case of Kawasaki Syndrome, there is no established causal agent. The result is fear that often gives way to over reaction and even paranoia. In an effort to find some sort of an answer, people are prone to jump to conclusions about its source. This concern is absolutely shared by the professional carpet cleaning industry because we, along with millions of other families in the United States, have children that may be affected. As an industry, we are also concerned because much of the unfounded paranoia has been directed to an association between Kawasaki Syndrome and carpet cleaning. This brief report is designed to give anyone who will read it the honest and accurate information they need to make a decision, at least about this particular implication.

The first thing we would like to do is quote the sources of the professional people and institutions that have extensively researched Kawasaki Syndrome, and then make a reasonable conclusion from what they said:

FROM: CENTERS FOR DISEASE CONTROL  
U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES  
ATLANTA, GEORGIA

**QUOTE:** "In several studies, investigators have examined a possible association between Kawasaki Syndrome and shampooing or spot cleaning rugs or carpets. In 1982, investigators in Denver, Colorado, first observed a statistically significant association between rug or carpet cleaning in the home within 30 days and subsequent onset of Kawasaki Syndrome. Four subsequent investigations, as well as studies conducted by the Maryland State Department of Health and Mental Hygiene and by investigators in eastern Ontario and western Quebec, did not reveal any trend toward the association."

**OUR CONCLUSION:** The "shampooing", first of all, was not in direct connection to professional cleaning, but more from a spotting or shampooing of the carpet by maids and homeowners or "do-it-yourself" methods. These methods are far from professional and leave residues in the carpet. But, even under these undesirable home cleaning conditions, four intensive studies, as well as others that followed, showed no relationship between carpet cleaning and Kawasaki Syndrome. This statement was reinforced by the Center for Disease Control over the telephone.

- The New York Hospital

CORNELL UNIVERSITY MEDICAL CENTER - New York, New York

THE DIVISION OF BIostatISTICS, NORTH SHORE UNIVERSITY - Manhasset, New York

(Concerning the study of 16 attacks, 15 patients, 14 families, that were exposed to rug shampoo)

**QUOTE:** "Shampoo was applied by a professional in two cases and by the parents as part of a routine housekeeping in twelve families."

"Methods of application that preceded the sixteen episodes included liquid type of shampoo (three cases), foam type (four cases), steam machine (three children with four attacks), an professional methods (two cases), one at home and one at school."

"Among 63 control families in which children we pared for race, age, and sex, only 2 families had a history of rug shampoo in the home within one month of the visit to the hospital...of the 22 control families who shampooed their rugs, most (13) did so annually and six, twice a year."

"In the 1960's when Dr. Kawasaki first described the patients with this syndrome, traditional Japanese houses had tatami mats instead of rugs...it seems unlikely that these nationwide epidemics in 1979, 1982, an 1985 to 1986 would be related to rug shampoo."

**OUR CONCLUSION:** Here, the only remote association of carpet cleaning by a "professional" and Kawasaki Syndrome had to do with a janitorial cleaner an one unidentified method of in-home professional cleaning. All the rest of this study was do-it-yourself and even then the conclusion was that there is no evidence of a connection between carpet cleaning and Kawasaki Syndrome.

FROM: THE CHILDREN'S HOSPITAL, KEMPE RESEARCH CENTER, AN UNIVERSITY HOSPITAL. Published by the Kawasaki Research Team, Denver, Colorado, Volumes 1 and 2 (1988, 1989)

**QUOTE:** "The cause is still unknown...we remain frustrated that we still do not know the cause of Kawasaki Syndrome." (Vol. 1, 1988)

"Additional studies were also done that examined cleaning methods and product used in homes of Kawasaki patients and controls. None of these studies were able to show an association between a single product or cleaning method and Kawasaki Syndrome."..."Indeed, most outbreaks probably have nothing to do with carpet cleaning."

"Over 80,000 cases have occurred in Japan."

**Our Conclusion:** The cause is still unknown. There is no connection between carpet cleaning and Kawasaki Syndrome! Besides this, the highest count of the syndrome comes from Japan where residential caret is rare, let alone carpet cleaning in homes.

FROM: PEDIATRIC NEWS MAGAZINE, DECEMBER 1990, Article Entitled "next Kawasaki Epidemic Due In 1991, Page 1, 29)

**QUOTE:** Dr. Donald Y.M. Leung, National Jewish Center For Immunology andRespiratory Medicine, one of the nations leading research doctors on Kawasaki Syndrome,

"Even though the cause of Kawasaki disease remains unknown, it seems to be infectious in nature and - contrary to headlines in supermarket tabloids - is almost certainly not caused by such "hazards" as recently shampooed carpets"

**Our Conclusion:** The cause is still unknown. There is likely no connection between carpet cleaning and Kawasaki Syndrome!

FROM: LANCET, BRITISH MEDICAL JOURNAL, December 4, 1993. Article : "Toxic shock Syndrome toxin-secreting Staphylococcus aureus in Kawasaki Syndrome", Pages 1385-1388, Dr. Leung and Associates.

**QUOTE:** "Our study suggests that Kawasaki Syndrome may be caused by a super antigen - a staphylococcal or streptococcal toxin."

**Our Conclusion:** A super antigen has been identified as a cause of K.S. The causal agent of the bacteria producing this toxin is not yet known.

Our sense of reason will also dictate a few more things. If carpet cleaning is dangerous, is leaving your carpets tracked and laden with dirt, dead skin, bacteria, and soils, the healthy alternative? Absolutely not! Our health is protected by a respect for cleanliness, not by a sloven disregard for the way we live.

Recent studies by the United States Environmental Protection Agency, in conjunction with Research Triangle Institute in Chapel Hill, North Carolina have focused on the relationship between carpet cleaning and its effects upon indoor air pollutants, including bacterial agents.

FROM: Indoor Environment Characterization of A Non-Problem Building: Assessment of Cleaning Effectiveness. US EPA and Research Triangle Institute. EPA Cooperative Number CR-815509-02-1. RTI Project Number 94U-4479-014, Page 182.

**QUOTE:** "Total Bacteria and Bio-pollutants were REDUCED 40% by a carpet cleaning program using professional hot water extraction."

**Our Conclusion:** Professional hot water extraction reduces bacteria and Bio-pollutants. No evidence was found that it causes or activates any bacterial causal agent.

Notice what Dr. Michael Berry, the deputy Director of the Environmental Criteria and Assessment Office of the United States Environmental Protection Agency (EPA), says:

"Based upon what I have learned in recent months from researchers working in the United States, Canada, and Western Europe, I have reached the conclusion that carpeting and fabrics not cleaned and properly maintained have the potential to cause a variety of health problems inside the building environment. From a public health perspective, I would find it impossible to justify the installation of carpets indoors without the existence of effective cleaning methods using environmentally-sound cleaning technology by individuals properly trained in the application of those methods and technology. I am very certain in my statement that carpets do serve as 'sinks' and collect pollutants of all kinds both from the indoor environment as well as the ambient environment. Humans, in turn, are exposed to those sinks through direct contact, such as children on the floor, or by release of a contaminant from the sink. The 'sink' when loaded or filled becomes a releasing 'source'."

Is carpet itself a poor investment? Absolutely not! Carpets provide a clean, healthy, and attractive environment that millions of households enjoy and have enjoyed for hundreds of years.

And even on top of it all, are all cleaning methods alike? Again, absolutely not! We in the true "professional carpet cleaning industry" maintain high standards that provide exceptional benefits for the millions on millions of people that enjoy the benefits of carpeted

homes, businesses and other areas of our lives. Literally, millions of homes are being professionally cleaned each year and the result is far from unhealthy! Professional cleaners have been taught and still support the stand that pets and children be kept off a freshly cleaned carpet for 4 to 6 hours. This has been a common sense suggestion far before the discovery of Kawasaki Syndrome. Associated with these cleaners is a highly technical manufacturing and supply industry that offers methods and cleaning compounds that product highly effective cleaning with almost no residues.

We support the hard work of the concerned doctors involved in the identification of Kawasaki Syndrome. We do not agree with those in the media, in the medical profession or in the cleaning industry who ignore the facts and promote paranoia for the sake of sensationalism.

The following is a consumer update that we recommend our customers give to consumers who inquire about Kawasaki Syndrome:

## **KAWASAKI SYNDROME**

Perhaps you have heard about Kawasaki Syndrome, an extremely rare disease that primarily affects children under five years of age. There have been a few media reports that have talked about a potential statistical link between the occurrence of carpet spotting or cleaning and the onset of Kawasaki Syndrome. Unfortunately, these reports have most often been grounded in paranoia rather than fact.

According to the Center For Disease Control in Atlanta, Georgia, there is no known cause for Kawasaki Syndrome. Most children who contract Kawasaki Syndrome have not had their carpeting cleaned recently. A study done on Kawasaki Syndrome in Denver, Colorado in 1982 and subsequent studies done through 1986, showed a statistical link between some of the children who contracted Kawasaki Syndrome and the fact that some sort of cleaning or spotting activity took place in their home within the prior six weeks. Out of all the cases of Kawasaki Syndrome, where cleaning or spotting had taken place, only two had their carpet cleaned professionally. Many doctors believe the cause of Kawasaki Syndrome has nothing to do with carpet cleaning or spotting. Dr. Donald Y. M. Leung of the National Jewish Center for Immunology and Respiratory Medicine in Denver, Colorado, has stated, "The cause of Kawasaki Syndrome is unknown...and is almost certainly not caused by such hazards as recently shampooed carpets."

No medical doctors who are involved in studies concerning Kawasaki Syndrome have suggested that people should not have their carpets cleaned. In fact, Dr. Michael Berry of the United States Environmental Protection Agency has stated, "From a public health perspective, I would find it impossible to justify the installation of carpets indoors without the existence of effective cleaning methods using environmentally sound cleaning technology by individuals properly trained in the application of those methods and technology." Carpets that go uncleaned contain dirt, dead skin, dust mites and related feces, bacteria, germs, allergens, pollutants, and other known health threats.

In 1993, Dr. Donald Y.M. Leung, working in conjunction with colleagues at the University of Minnesota and the New England Medical Center, reported in the British Medical Journal, Lancet, that they had identified two forms of bacteria that were the cause of Kawasaki Syndrome. Further research will hopefully find better treatment, cures, and prevention mechanisms for Kawasaki Syndrome. Recent studies by the United States Environmental Protection Agency indicate that professional hot water extraction carpet cleaning reduces bacterial levels that pre-exist in carpeting by up to 91% (The average overall bio-pollutant reduction level was 40%). These studies do not support the theory that carpet cleaning would be the causal agent of any bacteria.

So what should a concerned parent do? Doctors, health experts, and professional cleaners alike, concur. Children and pets should be kept out of the cleaning area during the cleaning itself. In addition, they should be kept off of freshly cleaned areas for 6 to 12 hours or until the carpet is completely dry. This is prudent action for many reasons. For more information about Kawasaki Syndrome, contact: Division of Viral Diseases, Center For Disease Control, Atlanta, GA 30333. Rest assured that a clean carpet contributes to a healthier indoor atmosphere.

About the author:

This report is a compilation of information received from various identified sources. The faculty of the Steam Way Technical Training Schools as well as the Technical Staff of Steam Way International, Inc. in Denver, Colorado have contributed to this report. For more information, call 1-800-447-8326.