

(Continued from page 11)

come up with a good warning label but also suspend the green tag program. Number three: The water that trapped the carpet fumes must be tested to find what the toxins are so the manufacturing process can be changed."

CRI has agreed to work on a new additional warning label with the New

York attorney general's office, which recently published a report: "Carpet and Indoor Air: What You Should Know." The report counteracts the EPA brochure by warning about the possible hazards of carpet and calling for the suspension of the green tag program.

"Our focus has been to get the

right information to the public. EPA and CPSC have been totally unresponsive to all of our requests to get that information out to the public, which is why we wrote the report," stated Gail Suchman of the New York attorney general's office. "We are willing to work with CRI to establish a new consumer information program, including some sort of warning or informational campaign so the public can make an informed decision."

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Answers To Chemical Trivia

1. (d) 50 percent.

This figure is based on a systematic review of studies between 1938 and 1990 covering twenty-one countries and 14,947 men. Seminal volume has also decreased significantly. The authors suggest that environmental factors may be the cause.

Carlsen, E.; Giwercman, A.; et al. "Evidence for Decreasing Quality of Semen during the Past 50 Years." *British Medical Journal* 305: 609-13 (1992).

2. (f) All of the above.

Lowengart, R.A.O.; Peters, J.M.; et al. "Childhood Leukemia and Parents' Occupational and Home Exposures." *Journal of the National Cancer Institute* 79 (1): 39-46 (1987).

3. Corticosteroids (such as synthetic cortisone).

Casarett and Doull's *Toxicology, The Basic Science of Poisons*. Edited by M. O. Amdur; J. Doull; et al. New York: Pergamon Press. p. 502 (1991).

4. (c) Boris L. Kachura, U.S. General Accounting Office.

Kachura, B.L. "Federal Regulation of Chemicals that Can Affect Reproductive and Developmental Health." *Pesticides and You* (Winter 1993 pp. 10-11).

"Reproductive and Developmental Toxicants - Regulatory Actions Provide Uncertain Protection" (GAO/PEMD-92-3, October 1992).

5. (a) True. (b) True. (c) True. (d) False.

Except in extreme cases wherein documentable overexposure has occurred, the benefits of breast-feeding are considered to outweigh the risks of pesticide poisoning. Pesticides in breast milk are a direct result of exposure to pesticides in the air, water, and food and direct contact through skin absorption. All reductions of exposure from use in homes, offices, and lawns as well as from other routes will decrease the amount taken in by the mother, thereby decreasing pesticide exposure to the infant.

Calabrese, E.J. "Human Breast Milk Contamination in the United States and Canada by Chlorinated Hydrocarbon Insecticides and Industrial Pollutants: Current Status." *Journal of the American College of Toxicology* 1 (3): 91-98 (1982).

Heifetz, R.M., and Taylor, S.S. "Mother's Milk or Mothers Poison? Pesticides in Breast Milk." *Journal of Pesticide Reform* 9 (3): 15-17 (1989).

Rogan, W.J. "Pollutants in Breast Milk." *New England Journal of Medicine* 302: 1451 (1980).

Savage, E.P., et al. "National Study of Chlorinated Hydrocarbon Insecticide Residues in Human Milk." *American Journal of Epidemiology* 113: 413-22 (1981).

6. Flame retardants (TRIS and polybrominated biphenyls).

Casarett and Doull's *Toxicology, The Basic Science of Poisons*. Edited by M. O. Amdur; J. Doull; et al. New York: Pergamon Press p. 506 (1991).

7. a) One mile.

"Children Born to Women Living near Old Dumpsites Have Higher Risk of Birth Defects." *Rachel's Hazardous Waste News* 313 (November 25, 1992).

Feschwind, S.A., et al. "Risk of Congenital Malformations Associated with Proximity to Hazardous Waste Sites." *American Journal of Epidemiology* 135: 1197-1207 (1992).

8. Styrene.

Bardodeg, Z. "Styrene, Its Metabolism and the Evaluation of Hazards in Industry." *Scandinavian Journal of Work Environment and Health* 4 (Suppl. 2): 95-103 (1978).

"Styrene." *NIOSH Pocket Guide to Chemical Hazards* (National Institute for Occupational Safety and Health, June 1990).

Rosen, I.; Haeger-Aronsen, B.; et al. "Neurophysiological Observations after Chronic Styrene Exposure." *Scandinavian Journal of Work Environment and Health* 4 (suppl. 2): 184-94 (1978).

Vainio, H.; Hemminki, K.; et al. "Toxicity of Styrene and Styrene Oxide on Chick Embryos." *Toxicology* 8: 319-25 (1977).

Congressman Sanders's office has been in touch with a number of doctors from a variety of specialties who all have one thing in common. They are seeing an increase in chemical injuries, including cases where people have been made ill by carpet. "Some of the doctors are in the process of drafting short statements to present to Congressman Sanders," said Pollina. "The statements will say in effect that in recent years toxic injuries have become more common, and as that has happened, their ability to diagnose chemical injuries has improved. Further, based on what they are seeing and the diagnostic procedures they are using, including objective neurological testing, patient history and a process of elimination, it is their medical opinion that their patients, both children and adults, are being affected by the chemicals offgassing from carpets and that there needs to be more research."

Sanders's staff hopes that EPA and industry will meet with some of these doctors in the near future. Pollina added, "The carpet industry has committed themselves to develop a whole array of information for consumers, retailers, and installers, which we expect to be an improvement over the earlier information they were circulating. They've also stated they will research the problem. We'll see what happens. Time will tell."

The following states have all signed the New York attorney general's petition to CPSC, which would require warning labels on carpet and an adequate public information campaign: Alabama, Arizona, Connecticut, Florida, Iowa, Kansas, Massachusetts, Minnesota, Missouri, Nevada, New Jersey, New Mexico, North Dakota, Ohio, Oklahoma, Oregon, Pennsylvania, South Dakota, Tennessee, Texas, Utah, Vermont, Washington, West Virginia, and Wisconsin. To voice concerns over carpet safety, contact your own state attorney general's office and ask the staff to contact the New York attorney general's office. Write your state

8. Name that chemical: This solvent is found in plastics and carpet glue. The general public can be exposed to significant levels of it leaching from styrofoam cups and food containers into such things as water, alcohol, and yogurt. Its metabolite has been shown to be carcinogenic and mutagenic in humans. It can cause defatting dermatitis, weakness, unsteady gait, and central nervous system problems. Exposure to this chemical can cause malformations in chick embryos. What is it?

7. Fill in the blank: Within _____ of an inactive hazardous waste dump, women have been found to have a 12 to 63 percent greater risk of bearing a child with a major birth defect (according to a study by researchers at Yale University School of Medicine and New York State Department of Health).

a. one mile b. five miles c. ten miles

6. By law they are applied to every mattress purchased in the United States, with exceptions made only by a medical doctor's prescription. Yet it is known that these chemicals can affect human female reproductive capacity adversely. What are they?

ICAL VIA

Which of these statements are true?:

Since DDT was banned in 1970, researchers over the years have found no overall decrease in average levels in human breast milk.

The levels of DDT typically found in human milk studies would be banned by the U.S. Food and Drug Administration if found in cow's milk.

Various pesticides in the environment are found in the breast milk of nearly all nursing mothers.

Pesticides in breast milk are inevitable, and therefore we should not even try to avoid pesticide exposure.

By Cindy Duehring

Answers on page 30

senators and representatives at:

[your senator]
Hart Senate Office Building
Washington, DC 20510

[your representative]
Rayburn House Office Building
Washington, DC 20515

For more information on the hazards of carpet, consult:

"Carpet and Indoor Air: What You Should Know," authored by four state attorneys general, June 1993, available free from:
New York State Attorney General
120 Broadway
New York, NY 10271

Citizens for Safe Carpet
P.O. Box 39344
Cincinnati, OH 45239
(513) 385-1111

Glenn and Sharon Beebe, authors of "Toxic Carpet III," provide a support group and information exchange.

Environmental Access Research Network (EARN)
315 W. 7th Avenue
Sisseton, SD 59645
For a list of carpet-related articles, studies, and reports available from EARN's photocopying service, send \$1.00 and request "Carpet List."

EPA Union NFFE 2050
P.O. Box 76082
Washington, DC 20013
(202) 260-2383

References:

1. Letter to Jocelyn McIvers from Lori Grant, Monsanto Company, July 18, 1991.
2. "Carpet Offgassing and Lethal Effects on Mice." Anderson Laboratories press release, August 18, 1992.
3. CBS "Street Stories," October 29, 1992. Transcript by Burrelle's Information Services (pp. 17-23).
4. "Chronology — EPA and Its Professionals, Union Involvement with Carpet." Compiled by Bill Hirzy, Ph.D., EPA Senior Scientist, president of EPA Union Local 2050 (1992).
5. "Carpet Policy Dialogue Executive Summary and Compendium Report." Edited by R. W. Leukrothe, Jr., Office of Toxic Substances, U.S. EPA, Washington, D.C., September 27, 1991.
6. Memorandum from Susan E. Womble, Project Manager, CPSC Chemical Hazards Program: Evaluation of Complaints Associated with the Installation of New Carpet, August 13, 1990.
7. New York State Department of Law; Abrams, R.; et al. Petition to U.S. CPSC: "To Establish Mandatory Safety Standards for

Rugs, Carpets, and Carpet Systems, and to Conduct Research to Determine Additional Safety Standards," April 10, 1991.

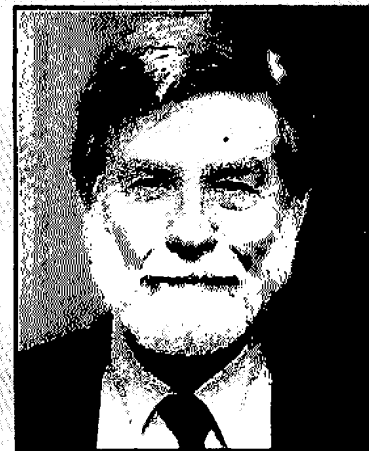
8. Letter from Jerry G. Thorn, Office of the General Counsel, U.S. CPSC, to Robert Abrams, Attorney General of the State of New York. Re: Response to Robert Abrams's April 10, 1991, Request for CPSC to Issue a Safety Standard for Carpet Systems, December 23, 1991.
9. Request from Dan Morales, Texas Attorney General, to Jerry G. Thorn, General Counsel of U.S. CPSC on Behalf of Attorneys General from 25 States that CPSC Docket the New York Attorney General's April 1991 Petition Regarding Carpet Safety Standards, December 23, 1991.
10. Testing results for Christopher McIvers from Immunosciences Lab., Inc., January 27, 1993.
11. Telephone interview with Anthony Pollina, Rep. Bernard Sanders's aide, June 17, 1993.
12. New York State Department of Law and Abrams, R. "Abrams calls Green Seal Program on the Carpet for Misleading Safety Claims." Press release, June 10, 1993.
13. "Indoor Air Quality and Work Environment Study: EPA Headquarters Buildings," Vol. 4: *Multivariate Statistical Analysis of Health, Comfort, and Odor Perceptions as Related to Personal and Workplace Characteristics.* (EPA Atmospheric Research and Exposure Assessment Laboratory, 21M-3004, June 1991).
14. Opening statement by Sen. Mike Synar, Chairman, Environment, Energy, and Natural Resources Subcommittee, Committee on Government Operations, U.S. House of Representatives. Re: carpet research, June 11, 1993.
15. "Indoor Air Quality and New Carpet—What You Should Know" (EPA/560/2-91/003, March 1992).
16. CBS "Evening News," October 29, 1992. Re: Toxic Carpet and Anderson Labs. Transcript by Burrelle's Information Services (pp. 7-9).
17. Testimony of Victor J. Kimm, Acting Assistant Administrator for Prevention, Pesticides and Toxic Substances, U.S. EPA, before the Committee on Government Operations, Subcommittee on Environment, Energy, and Natural Resources, U.S. House of Representatives. Re: carpet research, June

Bill Hirzy on Resolving Toxic Carpet Controversy

Bill Hirzy, Ph.D., speaking as president of EPA Union Local 2050, believes the carpet issue could be resolved in a rational way. He states: "Carpet is a reasonable and important part of our society. There are a lot of jobs in it and there is a lot of economic value in keeping the industry going. Certainly, nobody wants to see the industry destroyed. There is no question that the industry doesn't deliberately want to hurt people. Of course they don't. But they do have legitimate concern that their stockholders will lose a lot of money, and they may not survive if there is unlimited liability. What has to happen is that industry, EPA, and CPSC must own up to past problems and take steps to prevent future ones in an honest way.

"I think there is a way to address the issue and warn the public without bankrupting the industry. A conference needs to be held with the possible plaintiffs, industry, a regulatory agency, and a public-advocacy-type group. They need to sit down and hammer out ways to compensate people who have been injured so far and begin a very aggressive and forthright program of warning consumers that there appear to be some individuals who, when exposed to certain lots of carpeting, are in danger of profound adverse health effects.

"This conference would need to come to an agreement made binding



Bill Hirzy, Ph.D.

by a legislative or judicial finding that limits the liability of industry, compensates those already injured in a timely manner, and protects the industry from future liability once they've come clean and have issued accurate public service announcements and adequate warning labels on each roll of carpet. Once industry has honestly and forthrightly informed the public of the risk, then by purchasing their product, the public is consenting to take on that risk, and the industry should be free of liability. Similar to the warning label on a cigarette package. But right now the public is being stonewalled by a bunch of lies from industry and from the EPA, so they don't even have the opportunity to make informed decisions." ◆

- 11, 1993.
18. Telephone interview with Rosalind Anderson, Ph.D., Anderson Labs, June 17, 1993.
 19. Telephone interview with Bill Hirzy, Ph.D., Senior Scientist and President of EPA Union Local 2050, June 23, 1993.
 20. "Carpet Industry Agrees to New Warning Labels at U.S. House Hearing, Sanders Criticizes Environmental Protection Agency for Dragging Its Heels." Press release from Rep. Bernard Sanders, June 11, 1993.
 21. Testimony of Ronald E. VanGelder, president of the Carpet and Rug Institute, before the House Committee on Government Operations, Subcommittee on Environment, Energy, and Natural Resources, U.S. House of Representatives. Re: carpet research, June 11, 1993.
 22. "CRI Calls for Meaningful Indoor Air Quality Research." Carpet and Rug Institute press release, June 11, 1993.
 23. Consumer Product Safety Commission Memorandum and Final Report from Interagency Agreement on Volatile Organic Chemical Emissions from Carpets, (CPSC-IAG-90-1256, August 13, 1993, pp. 60-62).
 24. Testimony of Yves Alarie before the Committee on Government Operations, Subcommittee on Environment, Energy, and Natural Resources, U.S. House of Representatives. Re: carpet research, June 11, 1993.
 25. Telephone interview with Charles Auer, director of Chemical Control Division, EPA.
 26. Beebe, G. "Toxic Carpet III." Available from P.O. Box 39344, Cincinnati, OH 45239.
 27. Statement of Sen. Patrick Leahy before the Committee on Government Operations, Subcommittee on Environment, Energy, and Natural Resources, U.S. House of Representatives. Re: carpet research, June 11, 1993.
 28. Duehring, C. "Unraveling the Carpet-Toxicity Problem." *Environment and Health* (Winter 1993).
 29. Abrams, R. "Consumer Alert: Chemicals in New Carpets Pose Potential Health Hazard," April 1991.
 30. Letter to Charles Fitzgerald from K. Burton, Claims Manager, Mannington Carpets, Calhoun, Ga., May 27, 1992, with enclosure: "Environmental Chamber Test Report" from Air Quality Services, Inc., May 19, 1992.
 31. "Carpet Industry Program Steps out Front on Indoor Air Quality: Labeling for Consumers Now Underway." Carpet and Rug Institute press release, July 17, 1992.
 32. Carpet Screening Test Report (ALI Test No. 79) by Anderson Laboratories, Inc., for Kevin and Jocelyn McIvers, November 6, 1993.
 33. Anderson, R.C. "Toxic Emissions from Carpets." *Indoor Air '93*, Proceedings of the 6th International Conference on Indoor Air Quality and Climate 1: 651-56 (1993).
 34. "To the Carpet Industry: Typically Asked Questions and Suggested Responses" (Carpet and Rug Institute. "Carpet/Indoor Air Quality Fact Sheet", April 1993).
 35. Abrams, R.; Amestoy, J.L.; et al. "Carpets and Indoor Air: What You Should Know." (June 1993).
 36. Testimony of Rosalind Anderson before Committee on Government Operations, Subcommittee on Environment, Energy, and Natural Resources, U.S. House of Representatives. Re: carpet research, June 11, 1993.
 37. O'Neill, F. "The Environment and the Carpet Industry." *Carpet and Rug Industry*. pp. 33-34, (January 1991).

What Do You Do If You Want Carpet?

Not all carpets are problem carpets. Anderson Labs has found no toxic effects in about three-quarters of the new carpets tested (ones that have never been installed).⁽¹⁸⁾ For consumers the issue is knowing whether the carpet they want will pose a health risk. There is no easy answer to that question because the chemical or combination of chemicals causing problem carpets has not yet been determined.

If you wish to purchase carpeting, you can take steps to minimize total exposure to the chemicals found in it. But while reducing total volatile organic compound (VOC) exposure will lessen the amount of toxins the body has to deal with, it may not be an adequate measure for health protection, according to a Consumer Product Safety Commission (CPSC) report.⁽²³⁾

"Based on what's happening out there and what we're seeing with our carpet testing," said Dr. Rosalind Anderson of Anderson Labs in a telephone interview, "I think we have to conclude that there must be some ongoing process that we don't know about yet, continuing to generate fumes over time. Something is breaking down very slowly and consistently and whatever it breaks down to is bad news. It's probably some combination of chemicals forming new compounds that we're not expecting."

A consumer alert put out in 1991 by New York Attorney General Robert Abrams advises caution: "People who smoke, have allergies, or suffer from respiratory disorders may be more prone to experiencing symptoms when exposed to new carpeting. Further, the chemicals pose a greater risk to small children. Pregnant women should also avoid these fumes, as they may be harmful to the child [in the womb]."⁽²⁹⁾

The following are suggestions for dealing with the problem-carpet question. No guarantee of safety is implied or intended. People's sensitivities vary greatly, so caution and common sense are advised.

1) To have your sample tested for biological health effects before you install it, send a sample to Anderson Laboratories, Inc., 30 River Street, Dedham, MA 02026 [(617) 364-7357].

The Homeowner's Test costs \$350.00.

2) Negotiate with your carpet supplier an advance signed agreement that should anyone in your household experience adverse symptoms after installation, the carpet will be removed free of charge immediately upon request.

3) Plan to have your carpet installed during a time of year when it's warm enough to keep the windows open.

4) Have the carpet installed while you are on vacation, or make arrangements to stay away from home for several days during and after installation. Ask the carpet installer to unroll the carpet and air it in a well-ventilated area for seventy-two hours before bringing it into your home. Run exhaust fans and keep windows open during installation. EPA and CPSC recommend leaving your windows open several days afterward. Bear in mind, however, that if it is a "problem carpet," according to health reports and testing at Anderson Labs, no amount of ventilation will solve the problem. An interagency carpet testing report warns: "Unfortunately, this strategy might not have a major impact on the emissions of compounds such as formaldehyde, 4-PC, and BHT, which do not decay rapidly and which are possibly more important with respect to health effects."⁽²³⁾

5) According to Hendricksen Naturlich Flooring Interiors (see below), some people who have reacted adversely to synthetic carpet have fared better with woven wool carpet. Nearly all wool yarn, however, is treated with pesticide mothproofing in the manufacturing process. Naturlich recommends taking a sample home and testing it for adverse reactions before buying it. If you are sickened by inhaling fumes from a small sample, you might regret covering an entire room or house with it. Use caution and common sense.

Woven carpets use far less latex than other carpet types because the weaving process avoids the heavy latex used for gluing the secondary backing to the primary backing. In general, woven wool carpets have fewer total