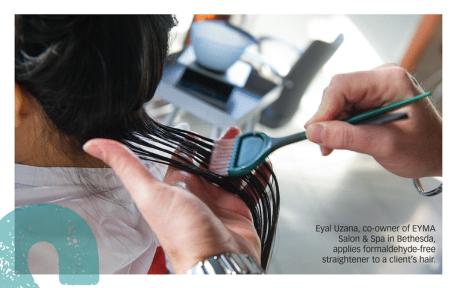


straight talk



Several times a month, hairstylist Heather Fritz leads a client past Salon Nader's row of sleek styling chairs and into a back hallway. She closes the door to the Bethesda salon, then cracks open another door, letting fresh air into the hallway. She turns on two fans as her client sits in a salon chair that has been placed there and drapes her with a black cape.

Next, Fritz puts on goggles. She offers her client a pair, too, as well as a mask to cover her nose. Only then is Fritz ready to apply one of the hair smoothing treatments that transform wavy, frizzy hair into smooth, silky tresses-treatments that have become wildly popular in salons across the country.

Fritz takes these precautions because fumes emitted during the treatment have sometimes caused clients to cough and their eyes to tear up, though Fritz says the fumes don't bother her. Other clients have complained about the odor of the chemicals, as well, so salon owner Nader Lofti now has the treatments applied in the hallway.

"My clients are educated people. They have done their reading and want to do this treatment. But sometimes they still ask me, 'Is this good for you?' " says Fritz, a petite woman who has worked at Salon Nader for seven years and in the hair industry for 30 years. "I say, 'You have to make up your own mind about these things."

WOMEN IN THE Bethesda area spend thousands of dollars each year to have chemicals—from smoothing treatments to dye—applied to their hair in the name of beauty. Though research suggests that these chemicals are safe if applied properly, their odors and the physical reactions they cause still leave some customers and stylists wondering about health problems arising from long-term use.

"If you think about all the chemicals and the constant particles that are airborne, I get concerned," says Bethesda resident Andrea Kessler, whose husband, Bruce Marks, owns the salon Last Tangle in Washington, D.C. "I do a lot of research to try to help Bruce find the safest products, but it isn't always that easy to get accurate information from the [salon product manufacturers]."

Hair smoothing treatments-including the popular Brazilian Blowout-cause the greatest concern among salon owners and their clients. The vapors that can trigger watering eyes are caused by the chemical methylene glycol, which releases formaldehyde when combined with heat during the smoothing treatment. Formaldehyde is a key component in many smoothers because it helps seal the protein keratin into hair, smoothing cracks and damage in follicles and giving locks a shiny, smooth effect that lasts for about 60 washes, or roughly two months.

Formaldehyde is produced in trace amounts by humans when we breathe. It's normally present in air indoors and out at low levels, usually less than 0.03 parts per million (ppm), according to the National Institutes of Health's

National Cancer Institute (NCI).

In elevated concentrations, the chemical is an effective disinfectant and preservative that's widely used in medical laboratories and in manufacturing automobiles, building products, household products, textiles and wood products.

When formaldehyde in the air measures above 0.1 ppm, the chemical produces a pungent odor that can cause eye, nose and throat irritation and aggravate allergy and asthma symptoms, says the National Cancer Institute. Some people also become nauseated and dizzy.

Breathing high concentrations of formaldehyde over extended periods has been shown to cause nose and throat cancer in rats, and may cause leukemia in humans, the NCI says. The chemical is classified as a carcinogen by the International Agency for Research on Cancer.

To ensure that formaldehyde concentrations remain at safe levels, the Occupational Safety and Health Administration (OSHA), the federal agency responsible for the enforcement of safety and health laws in the workplace, has set a ceiling of 0.75 ppm over an average eight-hour period.

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made no mention of the chemical in their products, according to the Environmental Working Group, a Washington, D.C.-based environmental health and advocacy organization. But after testing the air in salons across the country, OSHA found elevated levels of the chemical in salons using the treatments.

In April 2011, the agency issued a warning to hairstylists and salon owners that the fumes released during the treatments could reach unsafe levels for stylists in salons that aren't properly ventilated.

An October 2011 report by the Cosmetic Ingredient Review, a D.C.-based cosmetics safety standards organization, concluded that methylene glycol concentrations in smoothing treatments used in salons across the country were releasing formaldehyde gas at levels that were "2.5 fold to 5.7 fold" beyond what was considered safe by the American Conference of Government Industrial Hygienists and were "unsafe under present conditions of use."

The Review, which is overseen by a panel of scientists, industry and consumer representatives and Food and Drug Administration officials, recommended that manufacturers of smoothing treatments reduce the concentration of methylene glycol in their products so that formaldehyde releases would be well below OSHA's safety level. It also recommended that salons install ventilation near workstations where the treatment is being applied.

Following that report, several man-

ufacturers have been reformulating their ingredients, says Robert Golden, founder of the Potomac-based environmental consulting firm ToxLogic and a consultant for the Professional Keratin Smoothing Council, which represents four large manufacturers of the hair smoothing products. The council is planning to report on its efforts to the Review in June, Golden says.

Its data will show that the industry has totally reformulated products so that the formaldehyde released into the air measures .3 parts per million, he says. That level would be considerably lower than the .75 parts per million considered safe by OSHA.

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MANY SALONS CONTINUE to offer smoothing treatments in the meantime. They're both popular and profitable-with fees ranging from \$300 to \$600, depending upon the salon and the length of a customer's hair.

"It you aren't offering it, it hurts business," Kessler says.

Still, her husband doesn't require his employees to provide the service, nor does he offer the Brazilian Blowout at his salon. Instead, he offers a keratin smoothing treatment, Kenra Smooth, which says its ingredients are "OSHA compliant." And he spent \$2,000 on improving ventilation to make sure odors don't linger.

Other stylists say they aren't given the option of declining to apply the treatments even though they worry about health issues. A stylist at a salon in the White Flint mall who asked not to be named says she often doesn't feel well after applying the treatments. But "I have no choice but to do them because we get paid by commission and I need the money," she says.

INDUSTRY ASSURANCES about smoothing treatments have satisfied many Bethesda-area salon owners, who say they feel comfortable with the products they use on customers. "The consumer is pretty educated in this area, and all the information is out there," says Lofti, owner of Salon Nader. "It's there for people to decide whether they want to choose it."

But some salon owners remain skeptical about hair smoothing products, especially in light of the safety history of the popular Brazilian Blowout treatment.

In 2009, federal and state regulators began investigating the product made by North Hollywood, Calif.-based GIB after stylists and consumers claimed their eyes became irritated and they suffered nosebleeds when using it.

In its October 2011 report, the Cosmetic Ingredient Review Board singled out the Brazilian Blowout as containing Bethesda resident Bruce Marks, owner of Last Tangle in Wash-gton, spent \$2,000 to improve ventilation in his D.C. salon.

IN MARCH 2011, OSHA ISSUED A WARNING TO HAIRSTYLISTS AND SALON OWNERS THAT THE **FUMES RELEASED DURING THE TREATMENTS COULD REACH UNSAFE LEVELS FOR STYLISTS IN** SALONS THAT AREN'T PROPERLY VENTILATED.

excessive amounts of methylene glycol and formaldehyde. Then in 2012, GIB was found by California's attorney general to have falsely stated that its product was "formaldehyde-free" and was fined \$600,000. It was also required to add a warning label to its product about the potential for formaldehyde emissions and the need for proper ventilation.

Later in 2012, GIB agreed to pay \$4.5 million to settle a lawsuit filed by hairstylists and consumers who claimed harm from using the product. The suit was finalized this past January. GIB didn't return a call seeking comment.

Last fall, actress Jennifer Aniston made headlines when she debuted a new, shorter hairdo and explained to Elle UK

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straight talk

that she cut her hair after she "did this thing called a Brazilian and my hair did not react really well to it." Though Aniston didn't specify that she used the Brazilian Blowout, her story reignited concern among some Bethesda area salon owners about the safety of hair smoothing products.

THREE LOCAL SALON owners—Eyal Uzana, co-owner of EYMA Salon & Spa in Bethesda; Margy McHale, owner of Aurelia Salon and Spa in Gaithersburg; and Gail Cohen, owner of Salon Central in Bethesda-all recall the strong smell and eye-irritating vapors produced by GIB's Brazilian Blowout. Because of that, and the company's mislabeling of its product, they've stopped offering treatments containing methylene glycol to clients.

Uzana says he "didn't feel right" and the smell made him sick when he used the product on clients several years ago. Within months, he stopped offering the treatment. He now offers a keratin hair smoothing treatment that he and his partner, Massimo Quartararo, formulated. The product, Research in Beauty's Nano-Complex, doesn't contain methylene glycol.

McHale also stopped offering the Brazilian Blowout product because she "didn't feel good" when using it. "It was frightening," she says. Now she offers two brands of hair smoothing treatments, Amino Fusion F450 and Surface, that don't contain methylene glycol.

Cohen says several of her stylists coughed and complained about sore throats after using the Brazilian Blowout. She, too, stopped selling it and now uses an Aveda smoothing product without methylene glycol.

The three salon owners haven't heard complaints about eye or throat irritation from these alternative smoothing treatments, and they think the results are as good as those from products containing methylene glycol.

Other salon owners continue to offer smoothing treatments with methylene glycol, though, and simply provide

WHAT ABOUT HAIR DYES?

IN THE 1970S, a number of chemicals in hair dyes, such as coal tar, were linked to cancer in animals and were banned from hair products. Multiple studies conducted since 1980, however, have found limited and conflicting evidence of a link between the personal use of hair dyes and cancer, according to the National Cancer Institute.

Some studies have shown people using hair dyes have an elevated risk of cancer, but many others do not, the institute says. Meanwhile the Working Group of the International Agency for Research on Cancer has determined that hair dyes are "not classifiable" as cancer-causing to humans.

Some consumer groups still worry, however.

"While there is absence of evidence of harm [by hair dyes], there isn't great data showing the safety of [using] these products either, especially when you are pregnant," says Alexandra Gorman Scranton, director of science and research for Women's Voices for the Earth, a Missoula, Mont.-based group that aims to eliminate toxic chemicals from the environment. "I also think there is great economic incentive by those who make hair dyes to make sure that the data don't show it" to be harmful.

The Personal Care Products Council, a trade group in Washington, D.C., that represents 600 cosmetics and personal care product companies, not surprisingly disputes that. Last June, it noted that more than 50 studies, including those published in the Journal of the American Medical Association, showed no association between hair dyes and cancer. The council also says prominent pregnancy and women's health organizations—including the March of Dimes and the Motherisk Program at The Hospital for Sick Children in Toronto—have said there's no evidence of harm from using hair dyes during pregnancy. It further notes that hair dyes have been independently tested and found safe by scientists in the European Union and Japan, and by the Cosmetic Ingredient Review.

The American Congress of Obstetricians and Gynecologists also has weighed in, saying that using hair dyes during pregnancy is "believed to be safe" because little dye is absorbed through the skin.

"It's tough to try proving a negative," says Linda Loretz, chief toxicologist at the Personal Care Products Council. "Studies involving hundreds of thousands of women simply don't find harm."—Bara Vaida

proper ventilation when they do so.

Stan Sokolowski, co-owner of Rockville-based Kindle & Boom, says his salon performs hair smoothing treatments-but only on Mondays, when few of his 30 employees are working, which helps minimize concerns about formaldehyde vapors. No stylist is forced to perform the treatment, he says.

Cindy Feldman, owner of Rockvillebased Progressions, places freestanding air extractors near workstations where clients are getting Brazilian Blowouts. She also hired an environmental consulting company, Enviro-Tech Services Inc. of Rockville, in June 2011 to test the

air in the salon while the treatment was being applied.

Enviro-Tech found that the level of formaldehyde released inside the salon met OSHA's safety standards, says Hassan Samii, manager at Enviro-Tech.

"I wanted an untainted opinion on whether it was safe, and I got one," Feldman says. "The issue of my employees' and guests' health is very important to me."

Bara Vaida is a freelance health writer based in Northwest D.C. To comment on this story, email comments@bethesda magazine.com.

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