

Women of Color Are Bearing the Brunt of a Toxic Beauty Industry

Inconclusive science and social pressures are putting women's health at risk



If you walk into the hair care aisle of a pharmacy or convenience store, you're likely to find a special section dedicated to women of color. It's no secret that beauty, skin, and hair products are targeted toward specific demographics, depending on their formula and brand.

It's not just the branding, however, that's different. Because of social pressure and cultural norms, women of color are applying a greater number of—and more toxic—products to their bodies than their white counterparts, according to a [commentary](#) published on Wednesday in the *American Journal of Obstetrics & Gynecology*. And while the research is still scarce—the impact of beauty products on women of color has long been ignored by the scientific community—the chemicals in certain creams and conditioners have been [linked to cancer](#) and [reproductive health problems](#), these authors note.

"Compared with white women, women of color have higher levels of beauty product-related environmental chemicals in their bodies, independent of

socioeconomic status," authors Ami Zota and Bhavna Shamasunder, public health researchers at George Washington University and Occidental College, wrote.

This is largely because of societal pressures to adhere to beauty standards that typically embody a white, European aesthetic. Dark-skinned populations around the globe—including Asians and Latinos—are more likely to use skin-lightening products, the authors wrote. These products can contain mercury ([banned](#) in the US), which is [linked to](#) loss of vision and kidney damage. Women with certain hair textures—usually African American women in the US—use straightening products that frequently include parabens, which have been [connected with](#) uterine fibroid tumors and premature puberty.

The European Union bans hundreds of substances that the US continues to allow

"I grew up using hair relaxers, and I come from the Caribbean which is a place where skin lighteners are popular," Patrice Yursik, a popular natural hair blogger, told me. "When I started by my blog [[Afrobella](#)] it was because I wasn't using these harsh chemicals anymore."

The US [does regulate](#) beauty products and their ingredients to an extent—companies are meant to comply with federal standards, though cosmetics don't need FDA approval. Hair and makeup formulas are evaluated for poisonous substances, but the laws aren't foolproof. The European Union [bans](#) hundreds of substances that the US continues to allow, and the FDA doesn't have the authority to directly recall harmful products.

"The [cosmetics law](#) was introduced in 1938 and it hasn't been updated since then," Nneka Leiba, a director at the nonprofit Environmental Working Group, pointed out to me. "Congress needs to give them more authority and more of that power."

Plus, not all of the chemicals come from potions and shampoos. In a previous [study](#) by Zota, one of the commentary authors, she and her team found that many women also feel the pressure to change their natural odors, and use vaginal douches that can expose their bodies to phthalates. Although the CDC says that human health effects from low exposure to these chemicals are "unknown," some studies have suggested they are [linked to certain](#) kinds of cancer and hormonal disruptions. Black women reported douching at three or four times the rate of white or Mexican American women.

Deciding what constitutes a [toxic chemical](#) is not simple—which is why a whole faux industry has been built around so-called detoxes. In many instances, the classification has to do with a threshold beyond which a certain substance is considered harmful, and how it is absorbed by the body.

"The problem with all environmental chemicals is that the causal link is not the most apparent," Leiba said. "You can't say 'this' definitively caused 'this'."

In the past few years, there has been a shift in the way that women of color look at their beauty products. There has been a movement toward [natural hair](#), in which more Black women are choosing not to use straightening products and hair color. And there is a greater general awareness about what goes into our skin care products.

Yursik said women of color have become increasingly aware of the chemicals they are using, whether mineral oils, parabens, or silicon, and use these online forums to sift through the science and research and find less harmful products.

"It came not from a movement to wear your hair in a particular style, but to be more aware of what you put in your hair and how you present your beauty to the world," she said.

Hair Care Disasters: Caution with Relaxers and Dye

Heading Off Hair-Care Disasters: Use Caution With Relaxers and Dyes

By Michelle Meadows

It's never a good sign when the hairdresser panics. That's what happened to Barbara Cabrera-Avila, 38, when she returned to the salon about six weeks after having her hair straightened a couple of years ago. The cause for alarm: several bald spots in the back of her head.

The Adelphi, Md., resident began having her curls straightened at the age of six so her hair would be easier to comb and style. She says over-processed hair likely played a role in her [hair loss](#), and stress could have been a factor. What's certain is that three dermatologists advised her to take a break from hair straighteners, also known as relaxers.

Barbara says giving up the straight hair she had grown comfortable with wasn't easy. After all, people's personal preferences about how they want to look tie into self-esteem--a fact that makes for good sales in the hair business. In addition to

paying for trims and cuts to achieve a certain look, consumers spend millions of dollars each year to get hair that's different from what nature intended--whether it's to tame tight curls, give flat hair a boost, or get rid of the gray.

According to the Food and Drug Administration's Office of [Cosmetics](#) and Colors, hair straighteners and hair dyes are among its top consumer complaint areas. Complaints range from hair breakage to symptoms warranting an emergency room visit. Reporting such complaints is voluntary, and the reported problem is often due to incorrect use of a product rather than the product itself. FDA encourages consumers to understand the risks that come with using hair chemicals, and to take a proactive approach in ensuring their proper use. The agency doesn't have authority under the Federal Food, Drug, and Cosmetic Act to require premarket approval for cosmetics, but it can take action when safety issues surface.

When the Product Is the Problem

When consumers notify FDA of problems with cosmetics, the agency evaluates evidence on a case-by-case basis and determines if follow-up is needed, says Allen Halper, an FDA consumer safety officer. FDA looks for patterns of complaints or unusual or severe reactions. The agency may conduct an investigation, and if the evidence supports regulatory action, FDA may request removal of a cosmetic from the market.

Take the example of two popular hair relaxer products by World Rio Corp.--the Rio Naturalizer System (Neutral Formula) and the Rio Naturalizer System with Color Enhancer (Black/Licorice). After receiving complaints about these products in November and December of 1994, FDA warned the public against using them. Consumers complained of hair loss, [scalp](#)irritation, and discolored hair.

In December 1994, the World Rio Corp., Inc. of Los Angeles, Calif., announced that it stopped sales and shipments of the product. But reports indicated that the company continued to take orders, and the California Department of Health also stepped in to stop sales. In January of 1995, the U.S. Attorney's Office in Los Angeles filed a seizure action against these products on behalf of FDA. By then, the agency had received more than 3,000 complaints about the Rio products.

Although most relaxers are alkaline, this product was formulated to be acidic. In the resulting consent decree of condemnation and permanent injunction, FDA

alleged that the products were potentially harmful or injurious when used as intended, that they were more acidic than declared in the labeling, and that the labeling described the products as "chemical free" when "allegedly they contained ingredients commonly understood to be 'chemicals.'"

Safer Straightening

FDA has received complaints about scalp irritation and hair breakage related to both lye and "no lye" relaxers. Some consumers falsely assume that compared to lye relaxers, "no lye" relaxers take all the worry out of straightening.

"People may think because it says 'no lye' that it's not caustic," says FDA biologist Lark Lambert. But both types of relaxers contain ingredients that work by breaking chemical bonds of the hair, and both can burn the scalp if used incorrectly. Lye relaxers contain sodium hydroxide as the active ingredient. With "no lye" relaxers, calcium hydroxide and guanidine carbonate are mixed to produce guanidine hydroxide.

Research has shown that this combination in "no lye" relaxers results in less scalp irritation than lye relaxers, but the same safety rules apply for both. They should be used properly, left on no longer than the prescribed time, carefully washed out with neutralizing shampoo, and followed up with regular conditioning. For those who opt to straighten their own hair, it's wise to enlist help simply because not being able to see and reach the top and back of the head makes proper application of the chemical and thorough rinsing more of a challenge.

Some stylists recommend applying a layer of petroleum jelly on the scalp before applying a relaxer because it creates a protective barrier between the chemical and the skin. Scratching, brushing, and combing can make the scalp more susceptible to chemical damage and should be avoided right before using a relaxer. Parents should be especially cautious when applying chemicals to children's hair and should keep relaxers out of children's reach. There have been reports of small children ingesting straightening chemicals and suffering injuries that include burns to the face, tongue, and esophagus.

How often to relax hair is a personal decision. According to Pearl Freier, an instructor at the International Academy of Hair Design in South Daytona, Fla., relaxing at intervals of six to eight weeks is common, and the frequency depends on the rate of a person's hair growth. Leslie F. Safer, MD, a dermatologist in

Albany, Ga., who has treated women with scalp irritation from relaxers, says straightening every six weeks is too frequent, in his opinion. Relaxers can cause hair breakage in the long term, he says, and blow drying and curling can do more damage.

Consumers should be aware that applying more than one type of chemical treatment, such as coloring hair one week and then relaxing it the next, can increase the risk of hair damage. "The only color we recommend for relaxed hair is semi-permanent because it has no ammonia and less peroxide," compared with permanent color, Freier says.

Hair Dye Reactions

As with hair relaxers, some consumers have reported hair loss, burning, redness, and irritation from hair dyes. Allergic reactions to dyes include itching, swelling of the face, and even difficulty breathing.

Coal tar hair dye ingredients are known to cause allergic reactions in some people, FDA's Lambert says. Synthetic organic chemicals, including hair dyes and other color additives, were originally manufactured from coal tar, but today manufacturers primarily use materials derived from petroleum. The use of the term "coal tar" continues because historically that language has been incorporated into the law and regulations.

The law does not require that coal tar hair dyes be approved by FDA, as is required for other uses of color additives. In addition, the law does not allow FDA to take action against coal tar hair dyes that are shown to be harmful, if the product is labeled with the prescribed caution statement indicating that the product may cause irritation in certain individuals, that a patch test for skin sensitivity should be done, and that the product must not be used for dyeing the eyelashes or eyebrows. The patch test involves putting a dab of hair dye behind the ear or inside the elbow, leaving it there for two days, and looking for itching, burning, redness, or other reactions.

"The problem is that people can become sensitized--that is, develop an [allergy](#)--to these ingredients," Lambert says. "They may do the patch test once, and then use the product for 10 years" before having an allergic reaction. "But you're supposed to do the patch test every time," he says, even in salons.

And what about ending up with something other than the exact shade of strawberry blonde on the shelf? "Don't think the color on the box is the color you'll get," says Freier, the cosmetology instructor. "There are so many variables, like what chemicals are already in your hair and what your natural color is, that go into how your hair will turn out."

When using all hair chemicals, it's critical to keep them away from children to prevent ingestion and other accidents, and to follow product directions carefully. It sounds basic, but some people don't do it, says FDA's Halper. "If it says leave on hair for five minutes, seven minutes doesn't make it better," he says. "In fact, it could do damage."

Look Out For Your Eyes

Whether applying hair chemicals at home or in a hair salon, consumers and beauticians should be careful to keep them away from the eyes. FDA has received reports of injuries from hair relaxers and hair dye accidentally getting into eyes. And while it may be tempting to match a new hair color to eyebrows and eyelashes, consumers should resist the urge. The use of permanent eyelash and eyebrow tinting and dyeing has been known to cause serious eye injuries and even blindness. There are no color additives approved by FDA for dyeing or tinting eyelashes and eyebrows.

The law does not require that coal tar hair dyes be approved by FDA, as is required for other uses of color additives. In addition, the law does not allow FDA to take action against coal tar hair dyes that are shown to be harmful, if the product is labeled with the following caution statement:

"Caution-This product contains ingredients which may cause skin irritation on certain individuals and a preliminary test according to accompanying directions should first be made. This product must not be used for dyeing the eyelashes or eyebrows; to do so may cause blindness."

--M.M.

Hair Color and Cancer

Over the years, some studies have indicated a possible link between hair dye use and [cancer](#), while others have not. In February 1994, FDA and the American Cancer Society released an epidemiologic study involving 573,000 women. Researchers found that women who had ever used permanent hair dyes showed decreased risk of all fatal cancers combined and also of urinary system cancers. The study also revealed that women who had ever used permanent hair dyes showed no increased risk of any type of hematopoietic cancer (cancer of the body's blood-forming systems).

This research, published in the Journal of the National Cancer Institute, did suggest that prolonged use (20 years or more of constant use) of black hair dye may slightly increase the occurrence of non-Hodgkin's [lymphoma](#) and multiple myeloma, but these cases represented a small fraction of hair dye users. This study followed previous NCI studies that raised concern about the use of hair dyes and higher rates of non-Hodgkin's lymphoma.

In another study, published in the October 5, 1994, issue of the Journal of the National Cancer Institute, researchers from Brigham and Women's Hospital in Boston followed 99,000 women and found no greater risk of cancers of the blood or lymph systems among women who had ever used permanent hair dyes.

Then in 1998, scientists at the University of California at San Francisco questioned 2,544 people about their use of hair-color products. After integrating the results of this study with those of animal and other epidemiologic studies, they concluded that there was little convincing evidence linking non-Hodgkin's lymphoma with normal use of hair-color products in humans. The study was published in the December 1998 issue of the American Journal of Public Health.

FDA continues to follow research in this field.

Michelle Meadows is a staff writer for FDA Consumer.

SOURCE: Federal Drug Administration