

The 5 WORST Products for Your Hair



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by



Nature's Blast™

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INTRODUCTION:

Just for a moment, reflect on all the hair care commercial advertisements you've seen; all the TV commercials, billboards, and magazine advertisements. Isn't it always the case that those models featured in hair product ads are lovely, smiling, and seem to be supremely healthy? Indeed, the last thing we would ever expect from a hair care product—shampoo, conditioner, mousse, hair spray, styling gel, straightener, coloring agent—is that it could have some kind of detrimental impact on our health.

We regularly hear about products that the government has had to regulate after it came to light that using these common items might be dangerous.

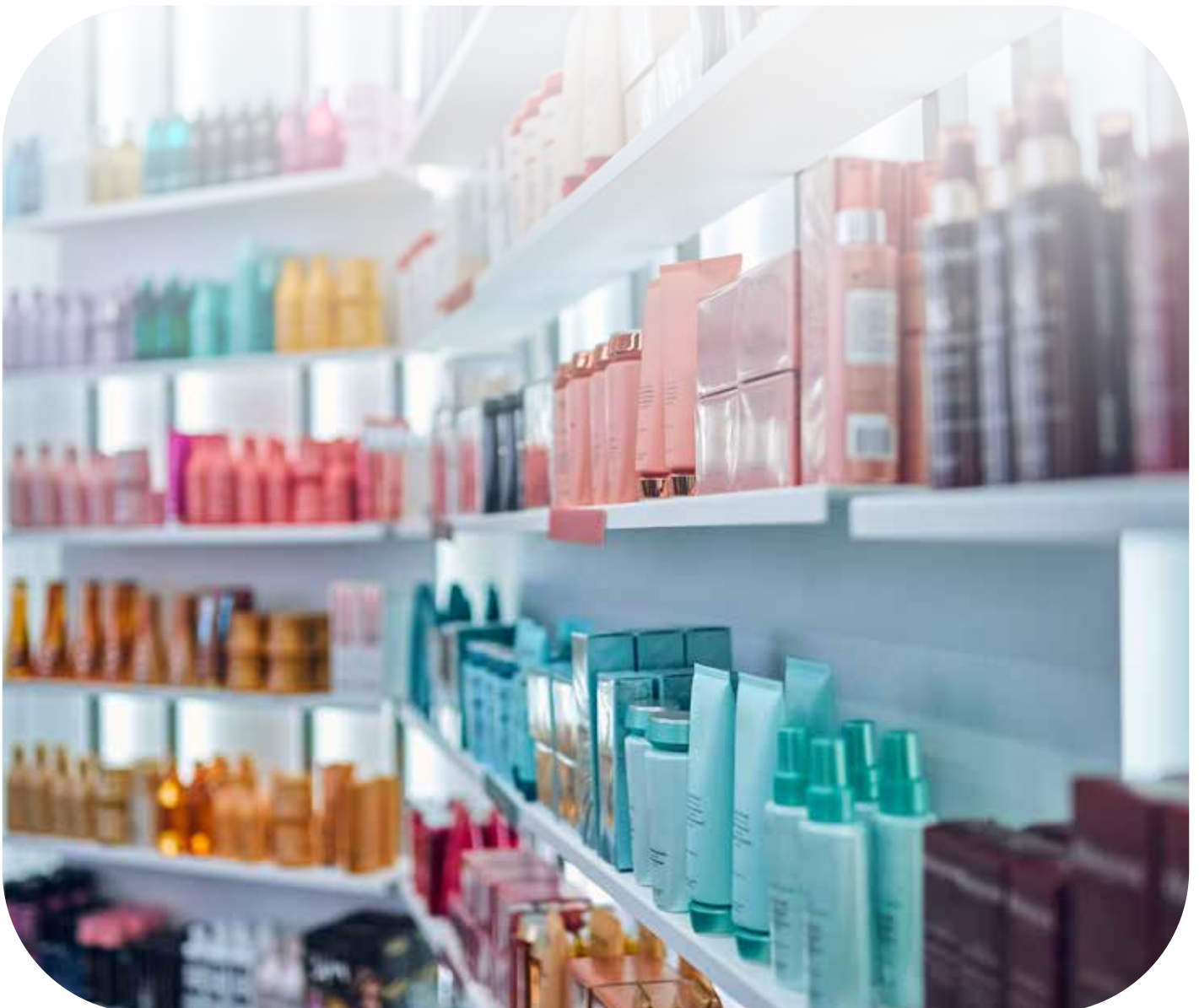
That's the reason some medicines, tobacco products, and yard care chemicals have been regulated. So can't we rest assured that, if there were anything in our hair care products that was not only bad for our hair but harmful to our health, the government would step in to regulate it?

The problem is, hair products are simply not regulated all that closely. Dr. Kathryn M. Rexrode of Harvard Medical School has pointed out that the Food and Drug Administration doesn't take a close look at hair products or the chemicals in them unless someone complains about them. "Products are tested to make sure they don't cause short-term problems, such as skin irritation," she reports. "But they're not tested for long-term safety."¹



Dr. Tamarra James-Todd, an Assistant Professor at the Harvard School of Public Health, adds, "Just because it's on your shelf doesn't mean that it's safe." She emphasizes the need for hair care product users to consider what they use daily and the possible impact of those products on their health.²

The Harvard report noted that the average American woman uses 12 different personal care items a day. Only considering how these products will make her look and smell great, but giving little thought to any long-term effects on health. This book will discuss five commonly used hair products and describe why we should use our brains to decide whether or not to put these on our heads.





FORMALDEHYDE

You may recall that formaldehyde is the primary chemical used in funeral homes to embalm bodies. You might be surprised to learn that it is also present in many hair care products, particularly shampoos.

Formaldehyde is used in many ways as a preservative. It prevents the growth of microscopic organisms in water-soluble material, so it has been used widely in many industries, including building homes, cabinetry, and furniture. The problem is that formaldehyde has repeatedly been linked to cancer. Since 1987, formaldehyde has been listed by the EPA (Environmental Protection Agency) as a probable carcinogen.

For example, in the funeral industry workers exposed to formaldehyde over a long period have a much greater risk of developing leukemia.

Formaldehyde health concerns came to light after Hurricane Katrina in 2005. FEMA's temporary housing trailers... The strong odor in the FEMA trailers proved to be formaldehyde, which had been used to keep the trailers mold-free while they were in storage.



Of course, it's one thing to work around a powerful chemical like formaldehyde and quite another to use it casually in a hair care product that is only briefly in contact with the body. Or is it?

One issue is that formaldehyde is used as a base chemical from which other preservatives are developed. When combined, these chemicals tend to release formaldehyde back into the environment. Thus, these compounds are called FRPs (formaldehyde-releasing preservatives). Some FRPs have been shown to combine with other chemical compounds, penetrate the skin, and cause cancer.

Beyond the drastic, long-term potential of formaldehyde as a cancer-causing agent, the chemical is also caustic and famously results in many allergic reactions. Almost 12% of the population is allergic to high concentrations of formaldehyde. In 2015, the American Contact Dermatitis Society named formaldehyde the "Contact Allergen of the Year."

Avoiding formaldehyde may turn out to be a formidable task. Here are some of the common personal care items in which the chemical is found in some form:

- Hair gel
- Shampoo, including baby shampoo
- Hair smoothing product
- Body soap
- Body wash
- Nail polish
- Nail glue
- Color cosmetics

If you want to avoid formaldehyde, check your hair care products' label to make certain they don't contain these chemical compounds:

- Formaldehyde
- Quaternium-15
- DMDH hydantoin
- Imidazolidinyl urea
- Diazolidinyl urea
- Polyoxymethylene urea
- Sodium hydroxymethylglycinate
- 2-bromo-2-nitropropane-1
- 3-diol (bromopol)
- Glyoxal





HAIR DYE

For a product constantly used by women of every age and station in life, hair dye seems to be a virtually unexamined product. Reading the list of potentially harmful chemicals found in hair dye is like naming a rogues' gallery. Dye has been known to contain the following:

Formaldehyde and FRPs

DEA (diethanolamine, a fragrant carcinogen)

Lead acetate (can cause lead poisoning, skin irritation, gastrointestinal problems, and death)

Apart from those chemical compounds that often ride along with the particular type of hair dye

one uses, the dye itself is a health threat. In 2019, the International Journal of Cancer confirmed what had long been suspected, that there is a link between breast cancer and permanent hair dye. The journal reported a study that found women who had used hair dye at least once in the preceding year had a 9% higher chance of contracting breast cancer. African American women who had used hair dye in the previous year had a 45% greater chance of contracting breast cancer. We will come back to the unique circumstances faced by African American women and hair care products in the fourth section of the book.

While acknowledging the link between hair dye and cancer, the American Cancer Society also points out that using hair dye has other possible adverse outcomes. For instance, hair dye can result in allergic reactions and hair loss. Because of the uncertainty surrounding hair dye and fetal health, women of childbearing age are urged to avoid using hair dye at least during the first trimester of pregnancy.

It's interesting to note that hair dye is actually poisonous. Accidental exposure of the eye to hair dye, in addition to extreme pain, can result in temporary or even permanent blindness. Accidental consumption of hair dye can lead to severe gastric distress.

One commonly used hair dye component is PPD (paraphenylenediamine), a chemical that's also found in gasoline, printer's ink, textile dye, and temporary tattoos. PPD is the substance that comes inside the dye carton in its own little bottle. This compound is used because it makes the dyed color last the longest. Most cases of contact dermatitis caused by hair dye are actually the result of exposure to PPD. In some cases, individuals who have dyed their hair with PPD products have developed eczema on their eyelids or the corners of their ears. The more serious skin issues caused by this compound tend to occur with stylists who use PPD dyes with their customers. These individuals sometimes experience dermatitis that spreads across their arms and even their chests.





Here are some of the symptoms of allergic reactions to hair dye containing PPD:³

- Severe rash
- Welts or blisters
- Swelling and itching of the scalp
- Swollen eyelids, lips, hands, and feet
- Stinging or burning sensation on the face, neck or scalp
- Anaphylaxis (a potentially fatal allergic reaction marked by trouble breathing; requires immediate medical attention)

It's important to know how to treat an allergic reaction to hair dye, assuming it is not life-threatening or so severe it requires medical treatment. Here are some treatment options:

- Immediate washing with warm water, mild soap, mild shampoo
- Apply potassium permanganate, which causes PPD to oxidize
- Apply a topical corticosteroid skin cream anywhere except the eyes
- Use Clobex or other shampoo containing corticosteroids
- Take an oral antihistamine
- Apply hydrogen peroxide

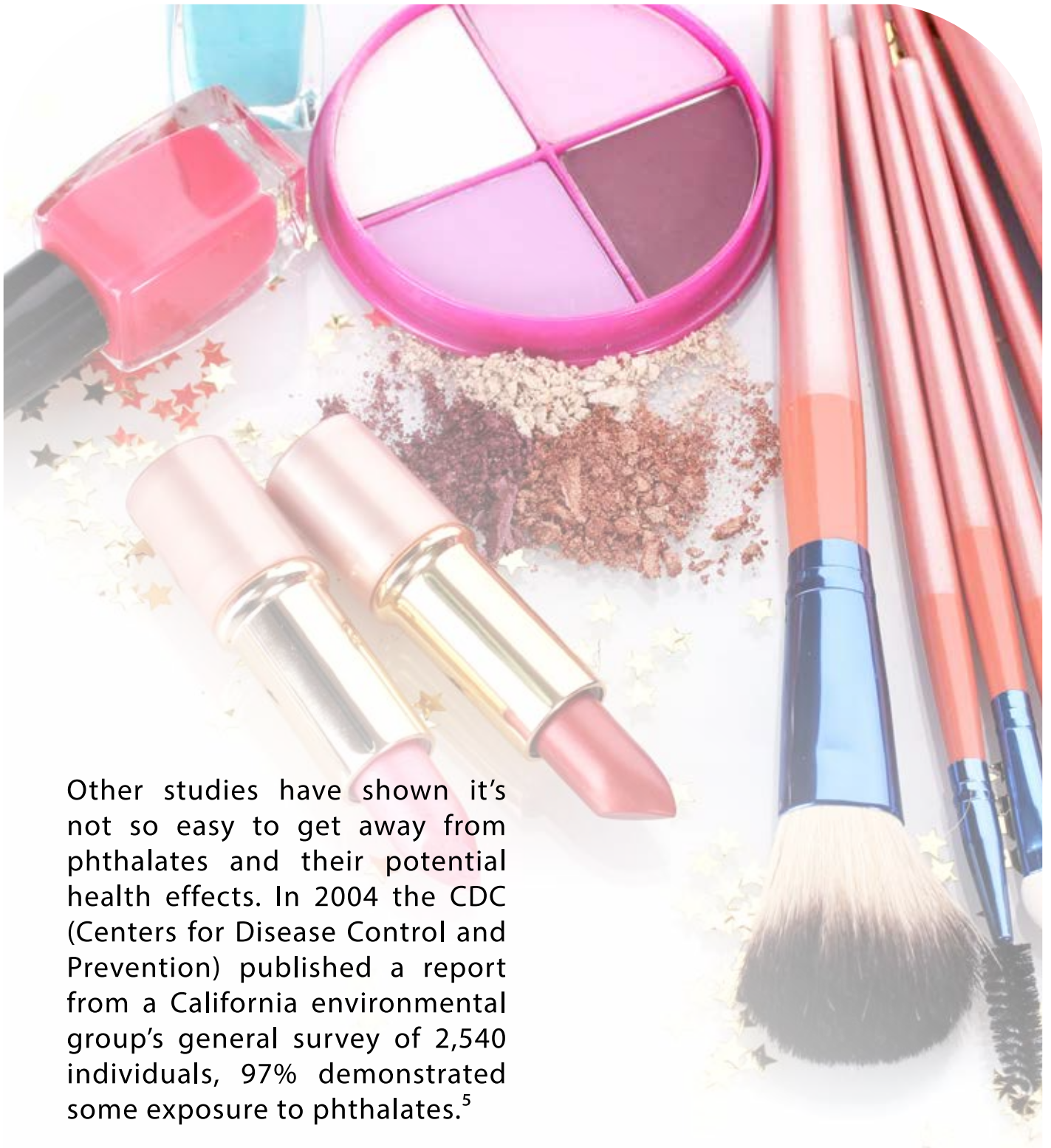
PHTHALATES

If you have used hairspray recently or used a hair care product that listed “fragrance” as one of its ingredients, chances are you’ve exposed yourself to Phthalates. Phthalates are plasticizers, that is, they are chemical compounds that make plastics and other materials more flexible and less likely to break.

There are many phthalates, and they are used in a plethora of products, from lubricating oil to solvents to adhesives to automotive plastics. Phthalates are even found in foods like oils, as well as being wrapped in plastic containing phthalates.

As you may know, the average sperm count of American men has been decreasing over the last half-century. While there is no definitive answer yet for why this is happening, many have theorized that common chemicals in our environment may be the culprits. Phthalates could be one of the suspects. Animal studies, as reported by the National Institute of Health, have shown that phthalate exposure is linked to lower sperm counts, male genital birth defects, and altered pregnancy outcomes.⁴





Other studies have shown it's not so easy to get away from phthalates and their potential health effects. In 2004 the CDC (Centers for Disease Control and Prevention) published a report from a California environmental group's general survey of 2,540 individuals, 97% demonstrated some exposure to phthalates.⁵

While we may not be able to avoid phthalates completely, we can at least stop using products containing them in our hair and skin. In addition to hair spray and shampoo, these compounds are often used in skin lotion, nail polish, and makeup. They may be listed on product labels as DEP, DBP, or DMP.

While the hair care and cosmetics industries continue to tout the safety of phthalates, it is interesting to note that the industries themselves are gradually restricting the use of these compounds in personal care products.

HAIR CARE PRODUCTS FOR BLACK WOMEN

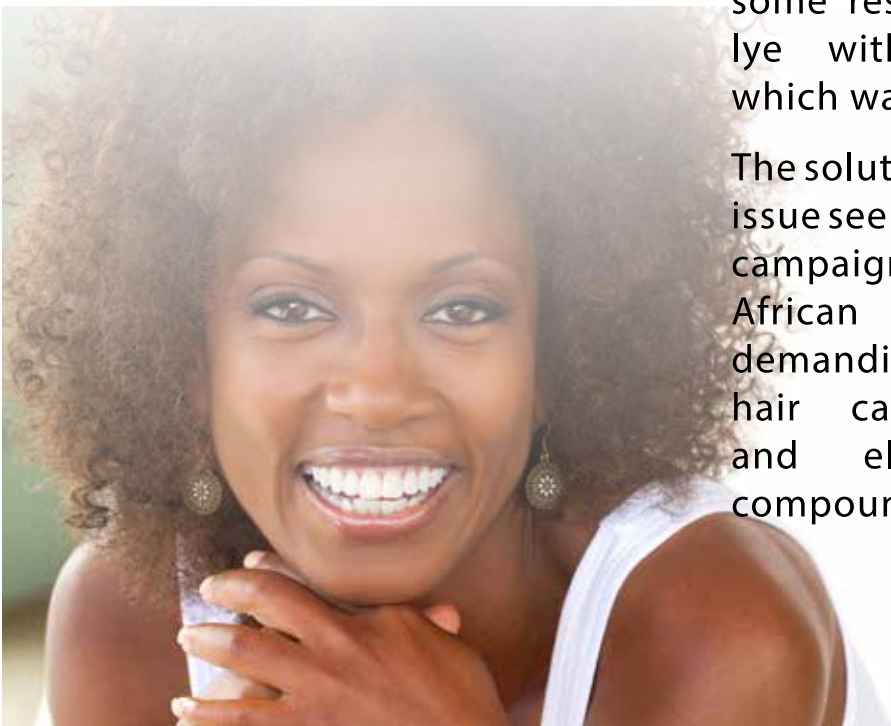
It's a startling thing to note that 40% of hair care products advertised for the general public contain chemicals that may be hazardous to human health. It's astonishing and outrageous to note that 70% of hair care products promoted for Black Americans contain potentially harmful chemicals.⁶

Ruth Brooks, the founder of Organic Beauty Salon, Harlem's first organic hair salon, was quoted in a Sierra Club article as saying, "There is no incentive to regulate the cosmetics industry. [Black hair] products specifically are a slurry of industrial waste, which lowers the price." Brooks warns that manufacturers often include some innocuous chemical in with the harmful ones in a product so that it can be labeled "natural."⁷

Some extremely toxic chemicals, such as formaldehyde and lye, are still commonly included in hair care products specifically marketed to Black Americans. In addition to "natural," cosmetic buzzwords like "organic," "fragrance," and "parfum," should send up a red flag to potential consumers. These words are often used deceptively as a means of hiding the potentially hazardous contents of many hair care products.

On those occasions when manufacturers have been confronted about the use of harmful chemicals in hair products, they have responded by switching one dangerous compound for another. For instance, when called out for using lye as a hair relaxer, cosmetic manufacturers advertised they had stopped using it. Instead, some resorted to replacing the lye with calcium hydroxide, which was also a caustic irritant.⁸

The solution to this industry-wide issue seems to be the social media campaign being waged by many African American consumers, demanding transparency in hair care product labeling, and eliminating dangerous compounds.





1,4-DIOXANE

Chances are, you've never heard of the chemical compound 1,4-dioxane. You very likely, however, encounter it every day. This compound is used in shampoo, bubble bath, and soap to produce the suds that make us think we're getting a deep cleaning. Unfortunately, suds aren't all we're getting with 1,4-dioxane.

The compound 1,4-dioxane has been determined to be a cancer-causing agent. It easily penetrates the skin and is toxic to our internal organs. This compound is present in more than 5500 cosmetic products.

Should you go looking for 1,4-dioxane on the label of your favorite shampoo, you won't see it. Instead, you may find other compounds listed, of which 1,4-dioxane is actually a key part. These include sodium laureth sulfate, oleth, xynol, PEG compounds, and ceteareth. The FDA doesn't require manufacturers to list 1,4-dioxane on these products' ingredient

labels because it only comes into being when the compounds react together—much as suds only happen when the soap is mixed with water.

Just to get a sense of how dangerous 1,4-dioxane is, the NIH (National Institute for Health) published an article stating that three different health agencies, the DHHS (Department of Health and Human Services), the EPA (Environmental Protection Agency), and the IARC (International Agency for Research on Cancer) have determined that 1,4-dioxane is a carcinogen.⁹

The compound also creates other health risks. Breathing it in can irritate the eyes and upper respiratory tract and also result in liver and kidney damage. Workers exposed to the chemical have had nervous system issues, and some have even died.

These are things to consider when you are about to shampoo your hair.

SUMMARY

When an outbreak of listeria or E.coli contaminates our food chain, we are immediately up in arms, rushing to the refrigerator to see if we purchased any of the tainted products. When a new virus makes the news, we rush into action to do whatever is necessary to contain the outbreak and protect the health of those we love. Unfortunately, food-borne illnesses and viral infections emerge quickly. What if an equally disastrous health crisis loomed, only it would be years or decades before we realized the source of the problem and the scope of the danger?

Ironically, potentially deadly health issues lurk no farther away than the shampoo bottle you grab in the morning. Without realizing it, through the use of our hair care products, we have allowed ourselves to be exposed to any number of toxic compounds with grave possible health outcomes: blood and breast cancers, loss of fertility, skin diseases. These are heavy prices to pay just to have a beautiful, bouncy head of hair.

In large measure, the problems we face in this regard result from the cosmetics and hair care industries sliding by without fully divulging what chemical compounds exist in their products and what potential health problems those compounds may present. When confronted with these issues, the industry's behavior has been to argue that the proof of health hazards has not definitively been scientifically established.

A positive step toward remedying this potentially catastrophic issue was proposed by two women senators, Diane Feinstein and Susan Collins, in 2017. The two women introduced a bill called "The Personal Care Product Safety Act," which would require transparency in labeling from the personal care industry and would require the FDA to banish any demonstrably hazardous chemical from hair care products. To date, no action has been taken on this bill.

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