

NOT SKIN DEEP: CHILDREN'S HEALTH & CHEMICALS OF CONCERN IN PERSONAL CARE PRODUCTS

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In the United States (US) only 11 ingredients are banned or restricted from use in personal care products. In comparison, more than 2,500 are banned or restricted in the European Union and more than 500 in Canada.

This underregulated marketplace allows for chemicals of concern to be in products that individuals use every day. These chemicals include carcinogens and endocrine disrupting chemicals (EDCs) that can interfere with the body's hormone system. These exposures can have consequences for fetal development and harm the health of both children and adults.

Exposure to EDCs in personal care products is inequitably distributed in the US. Studies have found higher exposure to phthalate metabolites and parabens among individuals of color, notably Black populations. These inequities in exposure may be driven by differences in personal care product use patterns—specifically hair products, including certain leave-in products (hair gels, oils, pomades) and chemical hair relaxers. These products are disproportionately marketed to and used by Black consumers compared to other racial/ethnic groups.

Importantly, exposure to EDCs and use of hair products have been linked with a variety of adverse health outcomes, including birth outcomes (e.g., low birth weight, preterm birth) and children's health (e.g., precocious puberty, obesity, allergies and asthma, and neurodevelopment).

Personal care product use is driven by a complex combination of factors at multiple levels. While research has previously considered personal care product use an individual-level behavior, scientists are now considering upstream factors including structural and neighborhood/community-level drivers of product purchasing and use patterns. For example, my previous work in Boston, MA reported differences in access to safer hair products between sociodemographically distinct neighborhoods—highlighting how where one lives can influence product use patterns.¹

While understanding drivers of inequities in EDC exposure is important, we already know who is most impacted. It's now time to focus on interventions and solutions. Pregnancy and childhood are sensitive windows of development, so healthcare professionals working with these populations can play an important role educating their patients about EDCs in personal care products and how to reduce exposure.²

For patients:

- Avoid products with any synthetic fragrance.
- Avoid essential oils that have known endocrine disrupting properties (tea tree and lavender).

- Use publicly available consumer databases and apps to shop safer (Environmental Working Group's Skin Deep database, Clearya, Campaign for Safe Cosmetics' Non-Toxic Black Beauty Product Database, Silent Spring's Detox Me app)

For healthcare providers:

- Seek out resources and education to increase your knowledge about EDCs in personal care products.
- Share information with your patients on how they can protect themselves from toxic chemicals in personal care products.
- Advocate for environmental health training in medical school and continuing education credits.

The recommendations noted above are rooted in individual-level behavior change. Individuals can take steps to make a difference, but solutions at the business and policy level are also essential to address upstream barriers to safer hair product purchasing and use. A multi-level approach to solutions will be necessary to ensure access to safer personal care products for everyone.



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References

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