

OVEREXPOSED AND UNDERPROTECTED



Endocrine disrupting chemicals (EDCs)

Man-made and natural chemicals that interfere with the body's hormone system, the endocrine system. EDCs can potentially interfere with the production, secretion, and effects of natural hormones.

Measurement of Endocrine Disrupting and Asthma-Associated Chemicals in Hair Products Used by Black Women

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Background

Black women spend upwards of 7.5 billion dollars on beauty products every year, spending nine times more on ethnic-targeted hair products than the average consumer. As the beauty industry grows in inclusiveness and diversity, more brands are creating products for Black women such as makeup lines and products for naturally curly hair. However, the chemicals in these and other personal care products are not adequately tested for safety and are largely unregulated, raising health concerns.

Black women suffer more from hormone-related health problems including uterine fibroids, infertility, pre-term birth, early puberty, and increasing rates of breast and endometrial cancers. Black women also have higher levels of personal care product chemicals in their bodies.

New Study

This is the first study to measure concentrations of endocrine disrupting chemicals (EDCs) in hair products used by Black women. Researchers tested the presence of 66 chemicals in 18 hair products (anti-frizz, root stimulator, hair lotion, hair relaxer, hot oil treatment, and leave-in conditioner).

Key Findings

- The hair products tested contained **45 endocrine disrupting or asthma- associated chemicals,** including chemicals banned in the European Union (EU) or regulated under CA Proposition 65
- Relaxers marketed to children contained the highest levels of 5 banned/regulated chemicals
- All tested products contained fragrance chemicals
- 84% of detected chemicals were not listed on the product label
- 78% of products contained parabens
- Parabens, fragrances, nonylphenols, and diethyl phthalate were commonly found in root stimulators, hair lotions, and hair relaxers.
- Cyclosiloxanes were more frequently detected in anti-frizz products and at higher concentrations than any other chemical measured.

Chemical Group	Health Effects	Products
Alkyphenols	Endocrine disruption, developmental/ reproductive disruption in animals	Hair relaxer, root stimulator, hair lotion, hot oil
Cyclosiloxanes	Endocrine disruption, potential carcinogen	Anti-frizz, leave-in conditioner, hair relaxer, root stimulator, hot oil
Ethanolamines	Exacerbate asthma, potential carcinogen	Hair relaxer, leave-in conditioner
Fragrances	Exacerbate asthma, endocrine disruption	Root stimulator, hair relaxer, hair lotion, anti-frizz, leave-in conditioner, hot oil
Parabens	Endocrine disruption	Hair lotion, hair relaxer, root stimulator, leave-in conditioner, hot oil
Phthalates	Exacerbate asthma, endocrine disruption, disrupt male reproductive development/fertility, potential carcinogen	Hair relaxer, root stimulator, hair lotion, anti-frizz, hot oil
UV Filters	Endocrine disruption, developmental/ reproductive disruption in animals potential carcinogen	Anti-frizz, root stimulator, hair lotion, hair relaxer, leave-in conditioner, hot oil

Reducing Exposures

- Look for products that say "paraben-free" or "fragrance-free" on the label, and choose products that are plant-based or made with organic ingredients
- Check out Black Women for Wellness' 14 ways to reduce exposure http://www.bwwla.org/newsite2017/wp-content/uploads/2017/03/14ways_print-8x11.pdf
- For more tips on reducing exposures to harmful chemicals in personal care products, download Detox Me, Silent Spring's free mobile app for healthier living.
 www.detoxmeapp.org