

10 Things to Know about Cosmetics and Cancer

By Stacy Malkan

Personal care products that we apply to our bodies every day – including soaps, shampoos, lotions, deodorants, colognes and make-up – commonly contain chemicals that are known or suspected to be toxic including endocrine disruptors, allergens, asthma triggers, carcinogens and neurotoxins.

Exposure to these chemicals is widespread. Biomonitoring studies conducted by governments and NGOs have found hundreds of synthetic chemicals inside children, teenagers and adults in all parts of the world, and even in the umbilical cord blood of newborn babies.

In May 2010, the U.S. President's Cancer Panel issued a report detailing concerns about the chemical exposures in our daily lives and the lack of scientific data showing safety. Research on toxic and endocrine-disrupting chemicals in personal care products and cosmetics was highlighted in the report as one area for which environmental cancer research is needed to improve our understanding of environmental cancer and to support environmental cancer hazard assessment and control.

Following are 10 areas of particular concern regarding cosmetics:

Children and adults are exposed to multiple carcinogens from personal care products.

- One in five personal care products contain at least one chemical linked to cancer, according to the Environmental Working Group's Skin Deep database, which analyzes the chemicals in 60,000 personal care products using top government and academic sources of chemical hazards.
- Examples of known or suspected carcinogens in personal care products include: coal tar hair dyes, petroleum distillates, BHA, BHT, petrolatum, hydroquinone, formaldehyde, PAHs, acrylamide, nitrosamines and 1,4 dioxane.
- Many children's bath products contain carcinogenic impurities that are not listed on labels.
 - o Recent product tests found the carcinogens formaldehyde and 1,4 dioxane in dozens of children's bath products. Both chemicals are known to cause cancer in animals and are probable human carcinogens according to U.S. Environmental Protection Agency.
 - o 17 out of 28 children's products tested contained *both* formaldehyde and 1,4 dioxane including Johnson's Baby Shampoo, Sesame Street Bubble Bath and many other products marketed as "pure" and "gentle."

Personal care products are a major source of exposure to endocrine-disrupting chemicals.

- A recent study found an average of 13 hormone-disrupting cosmetic chemicals in the urine of teenage girls, including parabens, triclosan, phthalates and musks. These chemicals are widely used in personal care products.
- Studies show that higher estrogen exposures throughout life increase the risk of breast cancer. This raises the concern about repeated exposures to estrogen-mimicking chemicals and hormones in personal care products.
 - o Several case studies link hormone-containing personal care products with early sexual development. The early and lifelong use of products containing hormones (such as

placenta) by African American women may be a factor in the higher rates of breast cancer in young African American women.

http://www.camerasante.org/doc/Donovan_cosmetics.pdf

- A new study published in the Journal of Pediatrics revealed a large increase in the number of American girls who are entering puberty as early as ages 7 and 8. Studies link an early start to menstruation with elevated risk of breast cancer. Girls who go through puberty earlier tend to have lower self-esteem, poor body image and they are more likely to engage in risky behavior.

Hair dyes are linked to higher rates of cancer.

- Coal tars and PPD
- Higher rates of Non-Hodgkins lymphoma and bladder cancer among salon workers

Skin lighteners contain carcinogens and other toxins that are banned in many countries.

- Hydroquinone
- Heavy metals
- Huge growth market due to heavy marketing

Two problems with sunscreen: toxicity and efficacy

- Many sunscreens do not work as they claim
- Oxybenzone found in 95% of people, hormone disruptor, widely used in sunscreen
- New research on Vitamin A raises questions about cancer

Anti-bacterial soaps are linked to cancer, and aren't even necessary

- Triclosan and thyroid cancer
- Regular soap is just as effective

Fragrances add many unknown chemical exposures to our daily lives

- New study found 4 hormone disruptors and 10 allergens on average in perfumes and colognes.
- 12 out of 17 fragrances contained phthalates – concerns about male reproductive health
- Companies are not required to disclose fragrance chemicals.

What we wash down the drain comes back to us

- Lifecycle issues – triclosan, phthalates and groundwater contamination
- Two new studies: hormone disruptors in soybean fields, intersex fish

We are getting exposed to the same toxic chemicals every day from many other sources.

- Cleaning products, plastics
- Air, water, food

What we know raises many concerns, but there is so much more we don't know.

- Companies are not required to assess the safety of personal care products or ingredients.
- Only 13% of cosmetic ingredients have been reviewed in the U.S. by the industry-funded panel Cosmetic Ingredient Review.
- Assessments typically look at short-term health effects and not long-term effects such as cancer, and they often do not consider low-dose effects, timing of exposures, impacts on most vulnerable populations, potential for enhanced toxicity of chemical mixtures.
- Need to take precautionary principle approach