

# Hazardous and Untested Chemicals in Children's Products



**Every day children are exposed to an average of 27 personal care product ingredients that have not been found safe for kids, according to a national survey conducted in summer 2007 by Environmental Working Group. Overall, 77% of the ingredients in 1,700 children's products reviewed have not been assessed for safety.**

In July and August of 2007, EWG surveyed more than 3,300 parents to find out what shampoos, lotions, bath soaps and other personal care products their children use. Based on the specific products named by these parents, we found that children are exposed to an average of 61 different chemical ingredients every day, and that on average 27 of these ingredients have not been found safe for children by the government or the cosmetic industry's expert safety panel.

Due to gaping loopholes in federal law, cosmetics companies can put almost any ingredient they choose into their products, with no requirement to safety test. Companies can also claim that their products are gentle and natural even when they contain artificial chemical ingredients or harsh skin irritants.

This new children's product safety guide helps parents navigate around bogus claims and find safer products with fewer ingredients linked to allergies, cancer, and other concerns for children.

Gaps in health protections leave children exposed to potentially harmful ingredients when their developing tissues and organs are sensitive to chemical damage. Our analysis of more than 1,700 children's products shows:

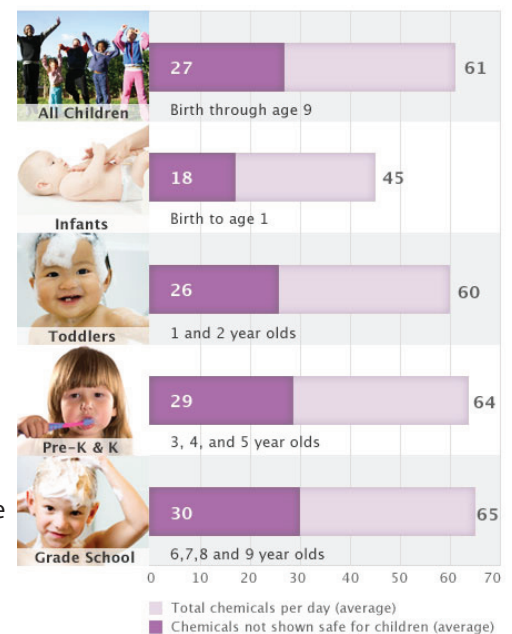
- Every week three-quarters of all children are exposed to allergens, neurotoxins, and hormone-disrupting chemicals in their body care products, in addition to the dozens of chemicals not assessed for safety at all.
- Many children's products contain harsh, industrial chemicals at odds with claims on labels. We found products marked as gentle, mild, natural, or unscented routinely contain fragrance, synthetic and hazardous ingredients, and chemicals that trigger allergy or irritate the eyes and skin.
- On any given day children are exposed on an average of 27 ingredients not found safe for kids by FDA, the industry safety panel, or any other public authority.

Exposures to harmful chemicals during childhood pose concern because children are more vulnerable to chemicals than are adults. In many ways, children are like sponges for chemicals. Children's skin is 30% thinner than an adults', on average, and can absorb greater amounts of chemicals from the skin surface. They breathe in more air (and air contaminants) relative to their weight than adults, and the blood-brain barrier that helps block chemicals from penetrating brain tissue is not fully formed until a baby reaches 6 months of age. Parents must be particularly careful to choose safe products for their children.

EWG's analysis includes a [Parent's Buying Guide] that gives recommendations on choosing safer products instead of the many that contain ingredients of concern for children.

Personal care product safety in the U.S. falls under the purview of the Food and Drug Administration (FDA). But unlike its clear authority to regulate drugs and food additives, the FDA has no power to require that cosmetics be tested for safety before they are sold. Instead, an industry-funded panel (the Cosmetic Ingredient Review, or

**Children are exposed to an average of 61 personal care product ingredients daily, including 27 ingredients that have not been found safe for kids**



Source: EWG analysis of 3,300 online survey responses on personal care product use for children from birth through age 9, coupled with EWG database of ingredients in more than 23,000 personal care products. Ingredients were compared against chemicals assessed for safety by the industry safety panel and by FDA.

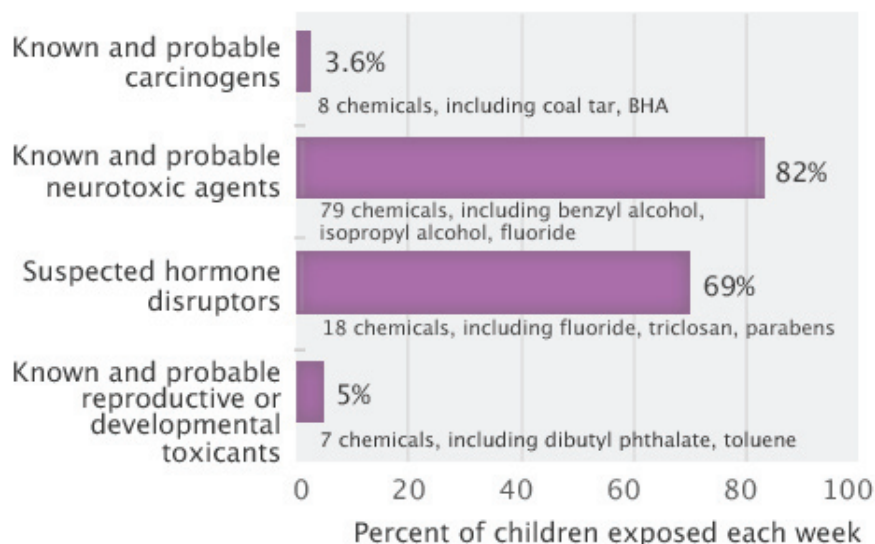
CIR), not a government health agency, reviews the safety of cosmetic ingredients in the U.S. Based on our survey results, they have yet to review the safety of 77% of ingredients in children’s products on the market today.

Products are required under federal law to bear a prominent warning label when manufacturers have not substantiated their safety, but FDA provides industry with no guidance on what if any tests they must conduct to prove product safety, and all final safety decisions lie with individual manufacturers. As a result, our survey shows that products can contain ingredients that may pose risks to children, and can bear claims that parents can’t always trust.

**Health effects: Children’s products commonly contain ingredients linked to allergies, nervous system problems, and other health impacts.**

- Every week 82% of children are exposed to one or more ingredients with the potential to harm the brain and nervous system, according to our in-depth analysis of survey responses and product ingredient listings. Our analysis revealed [79 neurotoxic chemicals] in children’s products altogether, including some considered to be known human neurotoxins. Exposures to neurotoxins are of particular concern during infancy: the blood-brain barrier that helps block chemicals from reaching the brain is not fully formed until a child reaches about 6 months of age, leaving the infant brain highly vulnerable to chemicals that can damage brain tissue and nerves (Grandjean 2006).
- Every week, 69% of children are exposed to one or more [ingredients that may disrupt the hormone system], and 3.6% of children are exposed to [ingredients with strong data linking them to cancer], including chemicals classified as known or probable human carcinogens. Health risks from hormone disruptors and carcinogens are elevated during childhood, when growing body tissues can react more strongly to toxic insult. Children are up to 10 times more sensitive than adults to carcinogens, and their growth and development can be influenced by synthetic hormones. Increasing rates of some kinds of children’s cancers, early breast development, and early puberty all raise concerns about carcinogenic and hormonally active ingredients in children’s products.
- 75% of all products reported in this survey or marketed for children contain one or more of 20 top ingredients of concern for children. [see products] These include chemicals linked to allergies, nervous system problems, cancer, reproductive risks, and hormone disruption. While many ingredients in children’s products raise concerns with respect to potential health impacts, these 20 ingredients are highlighted in this study because of both their prevalence in children’s products and their known or suspected hazardous properties. [See more on Ingredients of concern.]
- Finally, at least 41% of all products made for children warn parents to “keep out of reach of children.” [see products] These product contain chemicals that can be dangerous if not used according to label directions, when children absorb more than typical amounts through the skin or lungs, or through swallowing the product. But even through normal use of products, children’s bodies can be sponges for chemicals, with their thinner skin and higher breathing rates than adults. These factors raise concerns about children’s exposures even when directions are followed, given the wide range of potentially hazardous chemicals found in children’s products.

**Children are repeatedly exposed to chemicals linked to potential health concerns through use of body care products**

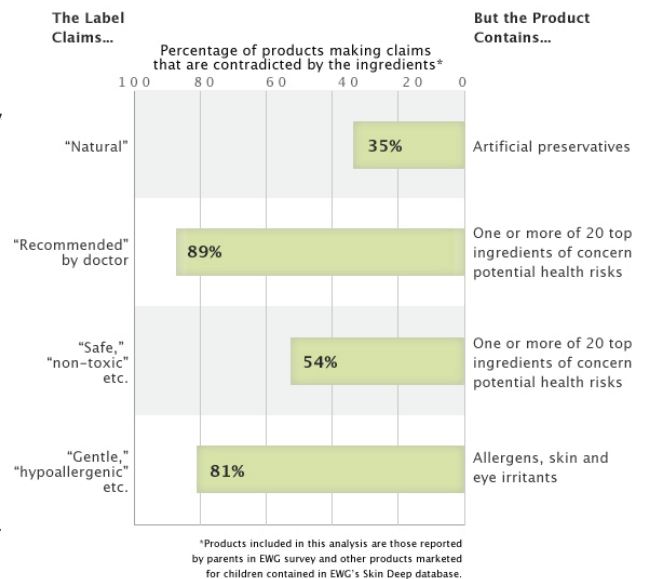


Source: EWG analysis of 3,300 online survey responses on personal care product use for children from birth through age 9, coupled with EWG database of ingredients in more than 23,000 personal care products. Ingredients were compared against those listed by federal, state, and international agencies, non-governmental organizations, and peer-reviewed literature regarding potential to effect various health consequences.

## Misleading marketing claims: Children's products commonly bear claims like gentle and natural that are at odds with harsh, synthetic ingredients in the product.

- Manufacturers are not required to substantiate marketing and label claims, and, consequently, parents cannot necessarily trust that claims are true. Our analysis shows that 19% of children's products are labeled "natural," 9% are "recommended" or "tested" by a doctor, pediatrician, dermatologist, or ophthalmologist, and 6% are labeled "safe." According to FDA, companies can use marketing terms such as these "to mean anything or nothing at all" (FDA 2000).
- 35% of all children's products marked as "natural" on the label are not fully natural at all, but contain one or more artificial preservatives linked to allergic reactions, hormone disruption, or nervous system problems in laboratory studies. [see products]
- 80% of children's products marked as gentle and non-irritating (gentle, soothing, non-irritating, dermatologist approved, or free of harsh ingredients) instead contain ingredients linked to allergies and skin or eye irritation according to government and industry sources. [see products] Some manufacturers warn parents of children's risks for allergies, including Johnson & Johnson, which includes warnings on some baby vapor bath and cream products that serious breathing problems could occur even when the products are used as directed.
- 54% of children's products marked as safe and non-toxic contain one or more of [20 top ingredients of concern] in children's products, including chemicals linked to allergies, nervous system problems, cancer, reproductive risks, and hormone disruption. [see products]

### Many children's products contain potentially hazardous ingredients that contradict label claims



## Study Methodology

In a widely disseminated online survey, EWG researchers asked parents which body care products they had used on their children in the last week, and how often. EWG requested information for children from birth through age 9. We linked survey response fields to our Skin Deep database, an online database of more than 23,000 personal care products, which includes lists of ingredients and associated health concerns compiled from more than 50 definitive government, academic, and industry regulatory and toxicity databases. When responding to the survey, parents could select from among products already listed in the Skin Deep database, or could enter the names of products that were not yet contained in the Skin Deep product database. EWG collected survey responses for 3 weeks.

3,308 responses to the survey reported use of more than 1,200 different products by more than 450 brands. 90% of the 22,000 product type selections or answers matched a brand contained in the Skin Deep database, and 8,000 were an exact product match in Skin Deep.

To assess children's additive exposures to ingredients in the many products used in a day or over a week, EWG developed an exposure model. The model matched products listed in survey results to the product ingredient listings in our Skin Deep product database. This model relied on ingredient lists from exact product matches when available, or relied on ingredient lists from products from the brand and product type (e.g., lotion or sunscreen) listed in the survey when parents did not enter a product name that could be matched exactly. By supplementing parent-entered product data with ingredient lists from EWG's in-house personal care product database, EWG researchers estimated children's cumulative exposures to hazardous and unassessed ingredients in body care products, with model results reflecting survey responses.

## Recommendations

Children's personal care products are the tip of the iceberg when it comes to government and industry failures to protect public health. An extensive body of scientific literature demonstrates that everyone in the world carries in their body hundreds if not thousands of industrial chemicals at any given moment, the result of exposures to contaminants in air, water, and food, and to ingredients in everyday consumer products.

No one understands the health implications of our exposures to complex mixtures of low doses of industrial compounds and pollutants: federal health statutes do not require companies to test products for safety before they are sold, including the law governing cosmetic safety (the Federal Food, Drug, and Cosmetic Act), and the 30-year-old law governing the safety of all indus-

trial chemicals (the Toxic Substances Control Act). As a result, nearly all personal care products, even those made especially for babies, contain ingredients that have not been assessed for safety by any accountable agency. These are particularly risky policy gaps given the many studies showing the sensitivity of children to toxic chemicals, and considering that these pollutants cross the placenta to contaminate children even before the moment of birth. A recent study conducted by EWG found an average of 200 chemicals in umbilical cord blood from 10 newborn babies .

This situation is untenable. To protect the health of our children, we recommend action:

- The federal government must set safety standards for children's products. Just as federal standards require premarket safety testing for pesticides in food, ingredients in children's products should be tested for safety before they reach store shelves. Such testing is essential to safeguard babies and children from potentially harmful exposures.
- Parents should make healthy choices for their children, reducing the number of personal care products they use to care for their children, and using our [Parent's Buying Guide] to select safer products. Avoiding products with potentially harmful chemicals sends a signal to industry demanding change.
- Meanwhile, companies must reformulate products to protect consumers from exposure to untested ingredients, potentially toxic chemicals, and noxious impurities. Companies that make choices to protect the health of Americans, and back up their marketing claims with publicly available information, will earn the trust of parents everywhere.

**READ THE COMPLETE TEXT AT:** <http://www.cosmeticdatabase.com/special/parentsguide/>