CHEMICALS REVEALED: THE STATE OF CHEMICALS IN CHILDREN’S PRODUCTS
AN ANALYSIS BY TOXIC-FREE FUTURE
Chemicals that are harmful to kids are put in thousands of children’s products. Kids are exposed when the chemicals escape the product during normal use and are ingested or inhaled. The chemicals also pose a health risk to wildlife, like orcas and their prey, when the chemicals escape the products and travel to waterways through laundry, wastewater, and other routes.

For over a decade, Washington state has required companies that make children’s products to report to the state if their products contain any of 85 chemicals considered a high concern for kids’ health. January 31, 2019 was the most recent deadline for companies to file reports—and includes the first reports of 17 harmful chemicals newly added to the reporting list.

A total of 182 companies submitted over 8,700 reports of harmful chemicals in kids’ products sold or offered for sale between September 1, 2017 and January 31, 2019.

One report of a single toxic chemical in a product can mean there are hundreds or even thousands of products containing the chemical for sale in Washington.

A SINGLE REPORT CAN REPRESENT 1000S OF ITEMS

1 report of phthalates in kids’ tiaras is filed by Greenbrier International (Dollar Tree). The level reported is 500 - 1000 ppm.

25 tiaras on store shelf in a single Dollar Tree store.

126 Dollar Tree stores in Washington state.

3150 tiaras containing 500 - 1000 ppm phthalates possibly available for sale in Washington state at one point in time.
Several classes of chemicals reported to be in kids’ products have emerged as a particular concern for kids’ health: phthalates, flame retardants, alkylphenols, bisphenols, and per- and polyfluoroalkyl substances (PFAS).

These chemicals can cause cancer, disrupt hormones, and suppress the immune system. They are showing up in food, house dust, and bodies, and get passed on in the womb to fetuses and through breastfeeding to newborns. These chemicals have also been found in fish and wildlife, wastewater treatment plant discharges, storm water runoff, surface water, and sediments.

The most recent reports of chemicals in kids’ products shows these classes of chemicals continue to be put in kids’ products.

### Phthalates

- **Reports**: 998 reports of phthalates in children’s products.
- **Reported in**: toys, shoes, pajamas, fragrances, and lip cosmetics
- **Health Concerns**:
  - A recent analysis found that sperm counts in Western countries declined nearly 60% between 1973 and 2011, and phthalates are among the hormone-disrupting chemicals that may be causing the decline.[1]
  - Exposure to phthalates has been shown to reduce sperm counts in laboratory studies, and men with greater exposure have fewer and less-motile sperm. [2-4]
- **Notable Reports**:
  - Claire’s, the tween and teen retailer found at malls across Washington, reported the phthalate DEHP in “Lip Cosmetics.”
  - The Gap reported the presence of the phthalate DEP in the highest concentration range in “Sleepwear” and “Sleep Trousers.”

### Flame Retardants

- **Reports**: 206 reports of flame retardants in children’s products.
- **Reported in**: plastics, toys, arts and crafts supplies, and baby care items.
- **Health Concerns**:
  - Obesity in the U.S. has increased significantly over the last 20 years, and now affects nearly 40% of adults and 18% of children.[5] Exposure to commonly-used flame retardants has been associated with obesity in laboratory studies, and studies show young children have greater exposure to flame retardants than adults.[6-8] Manufacturers also reported use the flame retardant TDCPP, which is considered cancer-causing.
- **Notable Reports**:
  - Target reported the flame retardant TPP, found at high levels in house dust, in the highest concentration range in “Prams/Pushchairs/Strollers.”
  - Major toy company Hasbro reported IPTPP, which will be regulated nationally as a persistent toxic chemical, in “Board Games” in the highest concentration range.
EMERGING CHEMICALS OF CONCERN

ALKYLPHENOLS

224 reports of alkylphenols in children’s products.

Reported in toys, oral hygiene products, shoes, and clothing.

Health Concerns:
In the U.S., eight percent of children have diagnosed learning disabilities, and among children living below the poverty level, twelve percent have learning disabilities.[9] Chemicals in this class have been shown to cause effects on learning and memory in laboratory studies.[10, 11]

Notable Reports:
• Nonylphenol was reported in the highest concentration range in “Fancy Dress Costumes” from Jakks Pacific.
• Greenbrier, the corporation behind Dollar Tree stores, reported the presence of nonylphenol at 500-1,000 ppm in a “Dental Cleansing” product, most likely a toothbrush.

BISPHENOLS

104 reports of bisphenols in children’s products.

Reported in toys, jewelry, sun protection products, and clothing.

Health Concerns:
More than six million U.S. children—nearly ten percent—have been diagnosed with ADHD.[12] A 2018 review concluded that early-life exposure to BPA was associated with hyperactivity in boys and girls.[13]

Notable Reports:
• Bisphenol A (BPA) was reported in “Sun Protection Products” (sunglasses) from Wenzhou Outlook Optical Co.
• The chemical BPS, used by manufacturers as a replacement for BPA, was reported in “Underwear Variety Packs” by private-label manufacturer Delta Galil USA.

PFAS (PER- AND POLYFLUOROALKYL SUBSTANCES)

The Washington reporting list does not include most current-use PFAS chemicals, and includes only compounds phased out by major U.S. manufacturers.

This entire class of chemicals raises concerns because of their extreme persistence and mobility and their toxic effects.

PFAS are used in water-resistant clothing, and footwear, as well as car seats, and, personal care products.

Health Concerns:
Nearly every U.S. resident has PFAS in his or her body, with biomonitoring studies finding PFAS in blood, breast milk, umbilical cord blood, amniotic fluid, placenta, and other tissues. Research has identified the immune system as sensitive to PFAS, and children with higher exposure had poorer protection from communicable diseases. [14]
The most recent data highlights the widespread use of chemicals of concern. After nearly a decade of information, it’s now time to act to reduce the sources of harmful chemicals.

The Pollution Prevention for Our Future Act (HB 1194/ SB 5135) is currently being considered in the 2019 Washington State Legislature. It’s the bold action we need to direct the Departments of Ecology and Health to identify and take action on chemicals in products that pose a risk to sensitive populations, like pregnant women and children, orcas, and the environment.

The bill would prioritize the classes of chemicals currently widely used in consumer products, including kids’ products: PFAS, flame retardants, phthalates, alkylphenols, and bisphenols.

The good news is that as consumers increasingly demand less toxic products, companies are stopping their use of harmful chemicals in consumer products, including kids’ products. While companies’ voluntary actions are a good step, policymakers must act to pass chemical phaseout laws that apply to ALL product makers and retailers. It’s the only way to ensure ALL people are protected – regardless of their ability to pay or where they shop.
REFERENCES


9. Committee to Evaluate the Supplemental Security Income Disability Program for Children with Mental Disorders. Mental Disorders and Disabilities Among Low-income Children; National Academies of Science, Engineering, and Medicine, 2015.


