



# Pediatrics & Primary Care

Understanding everyday toxicants and how you can minimize patient and infant exposure



## Additional Resources

Learn more about the chemicals in your everyday products and environment:

**The Environmental Working Group:** [www.ewg.org](http://www.ewg.org)

**Explore our website:** [www.seed-program.org](http://www.seed-program.org)

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SCHOOL OF PUBLIC HEALTH

## How can I minimize my exposure?



- Encourage patients to reduce their use of single-use plastics, especially around routine items
- Educate patients about potential routes of exposure (hand-to-mouth behavior)
- Wash your hands thoroughly before cooking or eating and after handling electronics
- Buy organic when possible and check ingredients before providing products in clinic
- Advise patients to avoid fast or processed foods and takeout; avoid single-use plastics
- Promote phthalate-, phenol-, and chemical-free personal care and cleaning products
- Look for these labels:



# EDCs

Endocrine-disrupting chemicals (EDCs) interrupt normal hormonal activity by mimicking, blocking, or altering hormones and changing the way that they function in the body.

EDCs include phthalates, phenols, per- and polyfluoroalkyl substances (PFAS), and other toxicants. Some EDCs are rapidly removed from the body, while others can remain in the body for a long time. Most people are exposed to multiple EDCs daily, allowing these chemicals to remain at harmful concentrations.



# These chemicals are harmful

Current research suggests that EDCs, including PFAS, can lead to adverse health effects in adults, children, infants, and fetuses.\*



## Parental health

- ✗ Increases risk of reproductive disorders (e.g., infertility, endometriosis)
- ✗ Elevates cancer risk
- ✗ Alters metabolic and immune function



## Fetal & infant health\*

- ✗ Alters neurodevelopment
- ✗ Impairs metabolism and growth
- ✗ Affects reproductive and endocrine systems

\*Additional adverse effects on infant health include metabolic (thyroid) disorders, decreased immunity, behavioral disorders, and more.

EDC exposure occurs through ingestion (e.g., processed food, food packaged in plastic, unfiltered water), dermal absorption (e.g., skin lotion), or inhalation (e.g., cigarette smoke). Infants and individuals in their reproductive years are especially vulnerable to EDC exposure, so pediatricians and primary care are an important resource for implementing interventions to minimize patient exposure.

## How are my patients exposed?



Household cleaning supplies (antibacterial/antimicrobial soaps and detergents)



Plastic toys or accessories, pacifiers, and electronics



Personal care products, dental products, nail polish, nail polish remover, cosmetics, and fragrance (e.g., candles)



Infant formula, plastic breast pumps, and plastic bottles



Takeout containers, plastic packaging, canned foods and beverages, and plastic kitchen and storage items