



Obstetrician-gynecologists

Understanding everyday toxicants so that you can minimize your patients' exposure



Additional Resources

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

The Environmental Working Group: www.ewg.org

Explore our website: www.seed-program.org

Contact & Follow us:
SEED@hsph.harvard.edu
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SCIENTIFIC EARLY LIFE ENVIRONMENTAL HEALTH & DEVELOPMENT PROGRAM



HARVARD T.H. CHAN
SCHOOL OF PUBLIC HEALTH

How can I minimize my exposure?



- Focus on exposure during reproductive years when advising patients about EDCs
- Encourage patients to reduce their use of single-use plastics, especially around routine items
- Advise patients to shop organic and wash produce thoroughly before consuming
- Educate patients about potential routes of exposure and how to find alternatives
- Check the ingredients of lubricants and personal care products used in the clinic
- Provide safe sexual health items (e.g., cotton tampons or natural rubber condoms)
- 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 reproductive health consequences.*

Maternal health

- ✗ Increases risk of reproductive disorders (e.g., endometriosis)
- ✗ Elevates reproductive cancers risk
- ✗ Reduces fertility and fecundity

Fetal and infant health

- ✗ Increases risk of pregnancy loss
- ✗ Alters neurodevelopment
- ✗ Decreases birth weight

*Additional adverse reproductive health effects, influencing birth and IVF outcomes, have been associated with EDCs.

EDC exposure occurs through ingestion (e.g., processed food, unfiltered water), dermal absorption (e.g., lotion), or inhalation (e.g., cigarette smoke). Through educational conversation, doctors are a valuable intervention tool for minimizing patient exposure to EDCs. It is particularly important for obstetrician-gynecologists to recognize exposure sources because individuals in their reproductive years are especially vulnerable to these toxins.

How are patients and infants exposed?



EDCs crossing the placental barrier and contaminating breast milk



Infant formula, plastic breast pumps, and plastic bottles



Tampons, other menstrual products, and sexual care items



Personal care products, cosmetics, hair products, and fragrance (e.g., candles)



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



Antibacterial/antimicrobial soaps and cleaning supplies