

PLASTICS

ECO-HEALTHY CHILD CARE® HELPS EARLY CHILDHOOD LEARNING ENVIRONMENTS TO BE AS HEALTHY, SAFE AND GREEN AS POSSIBLE BY REDUCING CHILDREN'S EXPOSURE TO TOXIC CHEMICALS.



PLASTICS

Certain plastics contain chemicals that are harmful to human health even at low levels of exposure. Children are at greater risk to these chemicals because their bodies are still developing and they often insert plastic objects into their mouths--increasing exposure. Also, a small toxic dose for an adult may be a big dose with big effects for a child.

Soft, flexible plastics are often made with chemicals called phthalates, and hard clear plastics are often made with a chemical called bisphenol-A (BPA). These ingredients can interfere with hormones (such as estrogen and testosterone) and may disrupt a child's normal development and growth, especially if the child is exposed to these chemicals over long periods of time.

BPA and phthalates have been linked to cancer, diabetes, obesity, infertility and behavioral problems.

Polystyrene plastic products, including disposable dining-ware, foam and packaging products, can expose children to styrene, a known neurotoxicant and suspected carcinogen.

Human exposure to BPA or phthalates can occur through:

Inhalation, breathing in air that contains vapors or dust contaminated with these toxic chemicals.

Ingestion, chewing on a plastic toy creates small openings in the plastic, providing an avenue for leaching of chemicals from the toy into a child's mouth; or eating and drinking foods that have been in contact with containers and products made from these harmful chemicals.

- **Phthalates** (pronounced THAL-ates)
Phthalates can be found in PVC (polyvinyl chloride) plastic and fragrances in products.
- **Bisphenol A (BPA)** Bisphenol A can be found in baby bottles, water bottles, sippy cups, regular drinking cups, canned food liners, and receipts. Traces of BPA can be found in more than 90% of the U.S. population.

Note: BPA has sister compounds (BPS and BPF) that may be used as replacements for BPA; therefore a plastic may be "BPA-free" but may still contain sister compounds that have similar health concerns. Avoid certain plastics labeled #7. Bisphenol products tend to be very hard and rigid (they cannot be flexed by the hand) and are generally see-through (even when colored and/or tinted).



TIPS FOR USING PLASTICS MORE SAFELY

Avoid plastics with recycling codes: #3, #6, and #7
(Recycling codes, shown below, are found on the bottom of some plastic products– if products are labeled.)



#3 – Polyvinyl Chloride (PVC): PVC (soft vinyl plastic) often contains phthalates and sometimes lead. Products that likely contain PVC include: flexible plastic toys (rubber duckies, dolls, beach balls, infant bath books), bibs, rest/nap mats, inflatable swimming pools, garden hoses, raincoats, wall paneling and flooring, window blinds, cosmetics, shower curtains, crib bumpers, imitation leather, and food packaging. PVC exposure has been linked to cancer, birth defects, reproductive and developmental disorders, and liver dysfunction.

#6 – Polystyrene (PS) (commonly known as Styrofoam)
Toxic styrene can leach from polystyrene plastic. Products that likely contain Styrofoam: cups and lids, carry-out containers, packaging “peanuts”, food trays, disposable cutlery, toys, coolers and packaging for meats, cheeses, and fish.

#7 – Other (usually polycarbonate) Avoid plastics marked with a “PC,” for polycarbonate, or recycling label #7. Not all of these plastics contain BPA, but many do. BPA can leach from polycarbonate plastic. Recycling code #7 can be considered the “catch-all” category. Dubbed as “Other,” #7 includes those resins that do not fit into recycling categories 1-6.

PLASTIC RESOURCES

Styrene

National Institute of Environmental Health Sciences, Questions and Answers about Bisphenol A:
www.niehs.nih.gov/health/topics/agents/sya-bpa/index.cfm

Eco-Healthy Plastics Factsheet

TEN TIPS FOR SAFER USE OF PLASTICS:

1. **Avoid plastics with recycling code #3, #6, and #7**
2. **Purchase glass baby bottles with a silicone sleeve whenever possible.** If glass is not an option, milky, opaque plastic bottles and sippy cups labeled “BPA free” can be used.
3. **Never heat or microwave food or drink in any plastic containers,** even if the product says “microwavable” or “microwave safe”. Leaching of toxic chemicals from plastic to food or liquid may occur. Use a paper towel instead of plastic wrap to cover food in the microwave.
4. **Never heat plastic baby bottles.** When mixing formula, heat the water before mixing. When warming breast milk, use a glass bottle (remove the plastic cap).
5. **Use PVC-free plastic wrap or a reusable option like beeswax wraps.**
6. **Eat fresh or frozen produce.** Minimize the use of canned foods and canned drinks as many are lined with BPA or its sister compounds BPS/BPF.
7. **Choose a pacifier that is either entirely made of silicone, or has a silicone or natural rubber nipple** and is labeled BPA-free (if hard plastic).
8. **Purchase phthalate-free and fragrance-free beauty products.**
9. **Ask your dentist for BPA-free sealants and composite fillings.**
10. **Discard all worn or scratched plastic food containers,** especially baby bottles, sippy cups and infant feeding plates and cups.

FOR MORE INFORMATION Call:
202-543-4033, ext. 13
Email: ehcc@cehn.org
Visit: www.cehn.org/ehcc