

# Women's Voices for the Earth



## PBDEs

### What Are They and Why Should You Be Concerned?

Polybrominated diphenyl ethers (PBDEs) are a class of flame retardant chemicals used to make household objects less likely to catch fire.

- They're **bioaccumulative** (build up in our bodies) and **persistent** (don't break down easily in the environment).
- PBDE exposure is linked to **hormone disruption, thyroid problems**, and reproductive harm like **undescended testicles, delayed puberty, reduced fertility, low birth weight, and birth defects**.
- They've been detected in breast milk, which is particularly concerning because **developing children, infants, and fetuses are at highest risk to PBDEs**. Studies show that exposure in the womb is associated with **neurological impairment** such as lower IQ's.



Twelve states and the European Union have banned certain PBDEs, but the U.S. government as a whole has not taken action on these toxic chemicals. Studies have shown that American adults have 10 to 100 times higher levels of PBDEs in their bodies than adults in other countries, and the highest human levels in the world tested to date have been found in pregnant women in California.

### Where Are PBDEs Found?

PBDEs are added to many household and offices products, most commonly:

- Polyurethane foam found in upholstered furniture and bedding
- Foam padding often found in baby products
- Computers, televisions and other electronics

Because PBDEs shed off of these products, they build up in household dust and indoor air. Once they are in the dust in your home, these chemicals can enter your body by breathing them in or accidentally ingesting dust. PBDEs have also been so widespread in our environment that they have moved up the food chain and are now common contaminants in meat, fish and dairy products. PBDEs are found in the highest concentrations in the fat components of these foods.

## Easy Ways to Avoid PBDEs

### *Reduce Exposure to Dust*

- Clean your home with a wet mop or microfiber cloth.
- Use a vacuum with a HEPA filter.
- Remove your shoes at the door to avoid tracking chemicals inside.
- Wash your hands several times a day, which has been shown to reduce PBDE levels in your blood significantly.

### *Choose PBDE-Free Electronics*

- Certain PBDE-free products are now available from Canon, Dell, HP, Intel, Erickson, Apple, Acer, Nokia, Motorola, LG Electronics, and Sony.

### *Reduce Your Fat Intake*

- Choose leaner meat or poultry cuts.
- Choose cooking methods that remove excess fat, such as broiling, grilling, and roasting.

### *Safer Furniture*

- Many companies such as Wal-Mart, Ikea, and Sam's Club have eliminated PBDEs in their products.
- If you're not buying from one of the above companies, email or call the manufacturer of the product you are interested in and ask them if they use PBDEs.
- Choose furniture made with less flammable fabrics like leather, wool and cotton.
- Look for crib mattresses stuffed with cotton, polyester, or wool instead of foam. [The Mattress Matters report](#) has some safer brands.



## Help Eliminate PBDEs for Good!

Cleaner and greener PBDE alternatives are available and currently used by major manufacturers of household products. We can achieve fire safety without the use of these toxic chemicals.

**Ask lawmakers to ensure that harmful chemicals like PBDEs aren't put into our products in the first place.** Congress can pass the Safe Chemicals Act of 2011, which would require that chemicals be evaluated for safety before they're placed in products we use everyday. Visit our [Making Products Safe](#) page to find out how you can support it!

## More Information & Fun Resources

- Visit [www.healthystuff.org](http://www.healthystuff.org) to find the [best and worst brands](#) of infant and toddler car seats.
- Check out the CHEMSec report on [Electronics Without Brominated Flame Retardants and PVC](#). You can find product reviews for small and large household appliances, computers, cell phones, TVs, video cameras and more on p. 22 of the report.