



Columbia River Toxics Reduction Workshop

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Reducing Flame Retardants/PBDEs in the Columbia River

What are PBDEs?

Polybrominated diphenyl ethers (PBDEs) have been widely used as flame retardants throughout the US and the globe. Three commercial PBDE mixtures have been produced and used in the United States and elsewhere: commercial pentabromodiphenyl ether (c-pentaBDE), commercial octabromodiphenyl ether (c-octaBDE), and commercial decabromodiphenyl ether (c-decaBDE). Although manufacture and import of c-pentaBDE and c-octaBDE were phased out in 2004, PBDE congeners associated with those mixtures continue to be found in humans and the environment. Levels are continuing to increase in the Columbia River Basin and elsewhere.

Reduce PBDEs in the environment

The best, long-term way to deal with harmful chemicals is to support policies and programs in your community that help reduce environmental pollution.

Citizens can get involved in programs and policies to protect people and the environment from harmful chemicals. In the Columbia River Basin, we are looking at all feasible solutions to reduce and keep PBDEs out of the environment. This workshop is an attempt to better understand PBDEs and to identify those actions to reduce and eliminate PBDEs in our environment.

PBDE Informational Links

EPA:

<http://www.epa.gov/oppt/pbde/>

Washington State:

<http://www.ecy.wa.gov/programs/swfa/pbt/pbde.html>

<http://www.doh.wa.gov/ehp/oehas/pbde/pbde.htm>

Oregon:

<http://www.oregon.gov/DHS/ph/envtox/pbde.shtml>

Agency for Toxic Substances and Disease Registry:

<http://www.atsdr.cdc.gov/tfacts68-pbde.html>

Environmental Working Group:

<http://www.ewg.org/pbdefree>

Helpful PBDE Health Information

Cleaning and Dusting:

- Keep indoor living and working spaces free of dust. Dust can also contain lead and other metals, pesticides and allergens — including mold and dust mites.
- Avoid stirring up dust when you vacuum and clean. The way you dust and the kind of vacuum you use make a difference. To learn more, contact the Master Home Environmentalist Program of the American Lung Association of Washington State.
- Properly ventilate living and working spaces, especially while you clean. This might include opening up windows and doors, or using properly installed fans.
- Wash your hands after cleaning and dusting.
- Remove shoes when entering the house. This helps prevent tracking in unwanted chemicals from outside, including lead and pesticides.

To reduce exposure to toxic flame retardants:

- Avoid upholstered furniture and baby products (nursing pillows, strollers, baby carriers etc) that contain polyurethane foam and a label that they meet TB117, the California furniture flammability standard. (These are likely to contain PBDEs or similar flame retardants and there is not data to show TB117 reduces fire deaths.)
- Avoid foam carpet padding, which is likely to contain such flame retardants.

Foods:

- Follow the advice of applicable Fish Advisories. Current advisories for PCBs and mercury provide helpful advice for reducing PBDE exposure.
- Prepare fish and meats in ways that reduce the amount of fat. PBDEs concentrate in the fat of fish and in other fatty meats. Wash your hands before and after preparing food.
- Know that breastfeeding is the healthiest choice for babies and mothers. The Healthy Mothers Healthy Babies Web page has more.