

Healthy Legacy

Healthy people,
a clean environment
and a thriving economy

Protect Public Health: Phase Out Toxic Flame Retardants

Flame retardants are widely used in a variety of products to prevent and slow the spread of fire. While fire safety is very important, some flame retardants contain toxic chemicals that get into the environment and into the human body, and have been linked to adverse health impacts.

Polybrominated diphenyl ethers (PBDEs) are a class of flame retardants that are highly persistent in the environment. PBDEs accumulate in the food chain and in the human body. A common commercial form, known as deca-BDE, is widely used in televisions, computers, wires, cables and some textiles. However, safer alternatives are available.

PBDEs, including deca, are in our bodies. Levels of PBDEs in U.S. women's breast milk are 10 -100 times higher than levels in European women.¹ Total PBDE levels in breast milk, blood and tissues have increased by a factor of 100 during the past 30 years, doubling about every five years.²

Exposure to deca

Because deca accumulates in the food chain, people are exposed through meat, fish and dairy products. Deca is not chemically bound to products, so is released into our homes and offices, exposing us through dust. Deca also passes through the placenta to the developing fetus. Fire fighters are at higher risk from toxic byproducts when PBDEs burn.

**The American Public Health Association,
Minnesota Public Health Association,
Minnesota Medical Association and
Minnesota Professional Firefighters have
recommended the phase out of toxic PBDE
flame retardants.**



Photo credit: Jean-Sebastien Ouellet

**Toddlers receive up to 300 times
greater exposure to deca than
adults. This comes mostly from
household dust and breast milk.**

Health impacts

Animal studies indicate that deca is toxic to the brain, reproductive system and liver and disrupts thyroid function. Deca can break down to more toxic forms in soil, sediment, house dust and fish tissue.³

- Deca causes the same effects on developing brains of mice as penta, which has already been banned in ten states and Europe.⁴
- The U.S. Environmental Protection Agency considers deca a possible human carcinogen.⁵

To leave a healthy legacy, Minnesota
needs safe products and safe ways to make them.

Policy Recommendations

Phase Out Deca By 2010

Safer alternatives that meet fire safety standards are available and already being used by many companies, including an estimated 95% of computer and 57% of television manufacturers. Alternatives include: product redesign to eliminate the need for added chemicals; use of self-extinguishing plastics that don't need added flame retardants; or use of less toxic chemicals.

This bill would:

- Phase out the manufacture and sale of computers, televisions, textiles and mattresses containing deca-BDE by 2010. Allows continued use of deca-BDE in wire, cable and other applications.
- Exempt used products.
- Allow manufacturers of products to request a temporary exemption if feasible and safer alternatives are not available.

We don't have to choose between fire safety and protection from toxic flame retardants. We can assure both through use of safer alternatives.



Photo credit: Brittany Randolph

1. Schechter A et al. 2003. Environ Health Perspect 111(14): 1723-1729.
2. Hites RA, 2004. Environ. Sci. & Technol. 38(4): 945-56.
3. Stapleton HM et al 2004. Environ Sci Technol 38(1): 8A-9A.
4. Viberg H, et al, 2003. Toxicol Sci., 76(1): 112-20.
5. National Toxicology Program. 1986. TR-309. Research Triangle Park, NC: NTP.

Consumer Education

Healthy Legacy educates and empowers people to protect themselves and their families by supporting healthy businesses and practices.

Business Leadership

Healthy Legacy encourages businesses to develop and use safe substitutes for toxic chemicals. Investing in clean technologies creates new jobs, profitable new markets for farmers and industry, and increases worker safety.

Protective Policies

Healthy Legacy promotes phasing out the most toxic chemicals that persist and build up in our bodies and the environment. We support safe substitutes and solutions.

For more information contact:
Lindsay Dahl (612) 870-3458
info@healthylegacy.org
www.HealthyLegacy.org

Healthy Legacy Steering Committee

Arc Greater Twin Cities
Clean Water Action Alliance of Minnesota
Environmental Justice Advocates of Minnesota
Indigenous Environmental Network
Institute for Agriculture and Trade Policy
Learning Disabilities Association of Minnesota
Minnesota Public Interest Research Group (MPIRG)
Women's Environmental Institute

Visit our website, www.HealthyLegacy.org, for a complete list of our coalition partners.