

# AVOIDING FIRE RETARDANTS

EWG'S & HEALTHY CHILD  
HEALTHY WORLD'S GUIDE TO  
MAKING YOUR FAMILY  
& YOUR KIDS SAFER

HERE'S WHAT YOU NEED  
TO KNOW ABOUT FIRE  
RETARDANTS TO PROTECT  
YOURSELF & YOUR FAMILY

## YOUR COUCH MAY NOT BE YOUR FRIEND

Fire retardants are commonly added to upholstered furniture (such as couches and easy chairs), electronics (such as TVs and computers), carpet padding, some foam-filled kids' products and other consumer items. The chemicals can migrate from these products and stick to house dust. After decades of use, fire retardants are now also regularly found in the environment, including in soil and waterways.

## FIRE RETARDANTS CAN GET INTO YOUR- & YOUR KIDS-BODIES

Just as fire retardant chemicals can contaminate house dust and the environment, they can also contaminate people. **We may absorb them through our skin, breathe them in or ingest tiny amounts from our hands or from house dust.** Small children are a special concern because they tend to put their hands in their mouths and spend more time on the floor, where dust accumulates. Studies by the Environmental Working Group and other scientists have shown that exposure to some retardants is significantly higher in young children than in adults.

## FIRE RETARDANTS MAY AFFECT YOUR FAMILY'S HEALTH

Although there is much we still don't know about the potential dangers of these chemicals, what we do know is worrisome. PBDEs were phased out in the United States because of their toxicity, but they may still be present in some household items. **They have been linked to deficits in motor skills, attention and IQ in children.** Some of the fire retardants that replaced PBDEs, such as chlorinated tris and triphenyl phosphate, have themselves been linked to cancer and endocrine disruption. Because of these potential health concerns, EWG and Healthy Child Healthy World urge people to avoid fire retardants as much as possible.

## WHAT DO BREAST MILK & POLAR BEARS HAVE IN COMMON?

In 1999, Swedish scientists studying women's breast milk reported something totally unexpected: The milk contained an endocrine-disrupting chemical found in fire retardants! Additional analysis showed that the levels in breast milk had been doubling every five years since 1972. These incredibly persistent chemicals, known as polybrominated diphenyl ethers, or PBDEs, have since been found to contaminate the bodies of people and wildlife around the globe—even polar bears.

**Fast-forward to today.** We now know that these chemicals could imitate thyroid hormones in our bodies and disrupt their normal functioning. PBDEs have also been linked to lower IQ, among other significant health effects.

**PBDEs have since been phased out in the U.S., but this doesn't mean that toxic fire retardants have gone away.** PBDEs are incredibly persistent, so they will likely contaminate people and wildlife for decades to come. What's more, some fire retardants used to replace PBDEs have been shown to pose potential health risks of their own, such as cancer and endocrine disruption. Several studies have shown that the levels of fire retardants are higher in children's bodies than in those of adults.



1.

**MAKE SURE THE PRODUCTS YOU BUY FOR YOUR BABY CONTAIN NO FIRE RETARDANTS.**

Recent testing has revealed that there are fire retardants in some car seats, nursing pillows, changing table pads, crib mattresses, nap mats and other products intended for little ones. Before you buy, do some research to find out which manufacturers don't add chemical fire retardants to their products.

2.

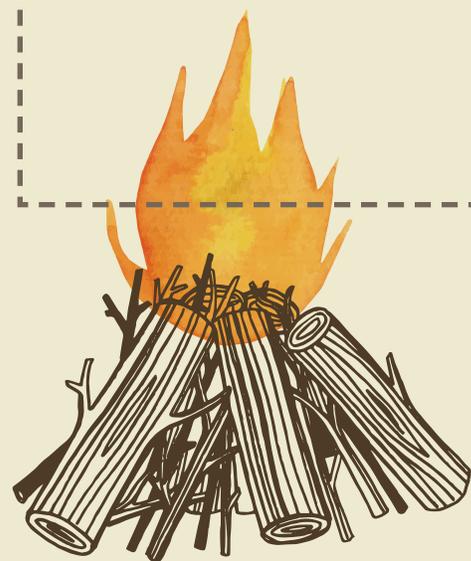
**LOOK FOR FIRE RETARDANT-FREE UPHOLSTERED FURNITURE.**

Under new regulations, furniture makers are now better able to offer products that do not contain fire retardants. If you're in the market for a new couch or easy chair, look for labels that say the item is fire retardant-free. If there's no label, contact the manufacturer to find out if the furniture contains these chemicals.

3.

**BE SMART WHEN REUPHOLSTERING FURNITURE.**

If you're reupholstering, it's wise to use a professional rather than doing it yourself, because the foam inside likely contains fire retardants, including the phased-out PBDEs. And talk to your upholstery shop about replacing your old foam with fire retardant-free foam.



# HOW TO AVOID FIRE RETARDANTS

4.

**MAKE SURE FOAM CUSHIONING ISN'T EXPOSED.**

Make sure that cushion covers are intact, since exposed foam can allow fire retardant chemicals to escape more easily. Infants' items that may contain these chemicals, such as nursing pillows and baby carriers, should always be completely covered with protective fabric.

5.

**USE A VACUUM CLEANER WITH A HEPA FILTER.**

HEPA filters can more efficiently trap small particles and dust that may be contaminated with fire retardants. Using a vacuum fitted with a HEPA filter will also help to remove other contaminants and allergens from your home.

6.

**BE CAUTIOUS ABOUT REMOVING OLD CARPETING.**

The padding under your carpet is often made of scrap foam that can contain fire retardants. Over time, it can break down, creating small particles that you can breathe in and spread around the house. When it comes time to replace old padding, isolate the work area from the rest of your home, keep your kids away and use a mask if you do the work yourself to limit your exposure.

**FOR MORE INFORMATION REGARDING FIRE RETARDANTS GO TO  
EWG.ORG/KEY-ISSUES/TOXICS/FIRE-RETARDANTS**