Every Parent's Guide





Dear Friend:

Playing is what children do best, but a child's health is nothing to play with. All parents have one thing in common; they want to keep their children safe. A baby's first couple of years is crucial. Unfortunately, some things are less safe for kids today than when my children were toddlers. Many people do not realize that some chemicals in baby toys are not 100% safe. Why risk a child's health for a toy?

Every parent knows that given the chance, toddlers like to stick anything they find into their mouths. All baby products should be made from safe, non-toxic materials. However, scientists are finding associations between chemical exposure and human diseases and disabilities such as Down's syndrome, ADHD, thyroid disruption, and cancer.

Sometimes chemical exposures come from common products in our homes. By making intelligent decisions about what chemicals we allow into a child's environment, we can prevent unnecessary exposure to dangerous substances. Many chemicals are simply too toxic and dangerous to children to allow exposures to continue. In particular, there are two harmful chemicals; Phthalates and Bisphenol-A which are used in many baby products like teething rings, bottles and rattles. Phthalate is used to make PVC plastic soft and flexible. Because the chemical leaches out of the plastic, it is more likely to put kids at risk. Bisphenol-A is used to coat baby feeding bottles and it has been shown to cause hormone disruption in mice. Male mice had enlarged prostate and female mice with Bisphenol-A in their womb reached puberty early, according to recent study.

Assembly Bill 319 "Safer Baby Products" addresses this problem and will ban Bisphenol-A and Phthalates from baby products for children under age 3. If enacted, California will be the first state in the country to ban these chemicals.

Parents work hard to create a good life for their kids. They deserve to know that the products they buy are safe for infants and toddlers. This guide will better educate parents on how to avoid toxic toys and chemicals.

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1. Toxic Toys



Your child's teether could be toxic: How to avoid Bisphenol-A and Phthalates.

Phthalates and Bisphenol-A are chemicals that can leach out of plastic in children's toys. Children have a natural tendency to put objects in their mouth and suck as a way of exploring the world around them. This may increase the rate at which the Phthalates and Bisphenol-A are leached. Children are more vulnerable to the effects of chemical substances than are adults. During development, children undergo sensitive biological processes that, if interrupted, may cause irreparable long-term effects. The widespread use of both these chemicals is a growing cause for concern.

Bisphenol-A

How does Bisphenol-A affect health?

Bisphenol-A has been linked to the following complications:

- Reproductive damages
- Growth in prostate cancer cells
- Down's syndrome
- Cancer
- Obesity, ADHD, malfunctions in the thyroid system

Even at low levels, Bisphenol-A can cause problems with body functions. One study showed that male mice had dramatically enlarged prostates and reduced sperm production in adulthood when exposed to low levels of Bisphenol-A in utero. Another experiment showed that females exposed to small doses of Bisphenol-A in the womb reach puberty early.

What products contain Bisphenol-A (BPA)?

Bisphenol-A is an industrial chemical used to make polycarbonate It is used in the coating of metal cans, water bottles, microwave ovenware and eating utensils, as well as in baby feeding bottles. About 2.5 billion pounds of the chemical are produced each year in the world.

Several studies have shown that Bisphenol-A can leach out of baby feeding bottles. The leaching appears to be worse if the bottle is old or scratched, or made of a lower quality plastic. Although the amount leaching from bottles is within the legal limits, it is close to the levels that have been shown to disturb hormones and reproduction in mice. Today, there is no law prohibiting the use of Bisphenol-A in baby bottles. In fact, most major manufacturers of baby bottles in the U.S. use Bisphenol-A in their production. Glass bottles do not contain this chemical.



Phthalates

How do Phthalates affect health?

Phthalates have been linked to a range of health problems and illnesses in children:

- Disturbance of hormones and reproduction such as premature birth, genital changes especially in males, early onset of puberty, and reduced sperm quality in adult males.
- Damage to the liver and the kidney
- Allergies
- Cancer

Many scientists agree that Phthalates have these effects on health, but disagree on what is considered a safe level of exposure. Men with high levels of Phthalates in their urine tend to have low levels of sperm production.

What products contain Phthalates?

Phthalates are chemical substances that make PVC plastic soft and flexible. It can leach out of these products easily, especially upon oral contact. Phthalates are also contained in many soft plastic toys and other baby products, such as teething rings and rattles. This is a particular concern for children who explore the world by putting things in their mouths. While some manufacturers have removed Phthalates from toys and other products intended for very young



Are there alternatives to Phthalates or Bisphenol-A?

Yes, there are alternatives to these chemicals, and some companies have already stopped using Phthalates and Bisphenol-A in their children's products. Several major bottle producers have stopped putting Phthalates in their teethers and rattles.

What's being done to eliminate the use of Bisphenol-A and Phthalates from children's toys?

Bisphenol-A:

• No state has banned or limited the use of Bisphenol-A or Phthalates from baby products.

Phthalates:

- The European Union is moving to eliminate Phthalates by unanimously approving a permanent ban on 6 types of Phthalates in September 2004.
- Other countries that have banned some, or all, use of Phthalates include: Austria, Denmark, France, Finland, Germany, Greece, Italy, Mexico, Norway, Sweden, Spain, and Japan. Canada has issued a national health advisory on Phthalates.
- Many of the leading manufacturers of toys and baby products in the U.S. have restricted the use of Phthalates as a result of the research released in the last few years.

Proposed Legislation to eliminate Bisphenol-A and Phthalates in children's toys: Assembly Bill 319

AB 319 requires that Bisphenol-A and Phthalates be phased-out of children's toys and child care products by January 1, 2007. Specifically AB 319:

- Requires that Phthalates be phased out of toys and childcare products (if in concentrations
 greater then 0.1 percent) regardless of the age group it is intended for.
- Requires other types of Phthalates be phased-out of toys and childcare products (if in concentrations greater then 0.1 percent) intended for children under three years of age if the product can be placed in the mouth of a child.
- Requires Bisphenol-A be phased-out of toys and childcare products intended for children under three years of age.
- Requires replacement chemicals for either Phthalates or Bisphenol-A that are the least toxic alternatives available.

California can lead the way and be the first state in the U.S. to ban Phthalates and Bisphenol-A.



Shopper's Guide to Safer Products for Children

Cut, fold along dotted lines and keep in your wallet for easy reference.

For more information and a list of companies that do not use Phthalates and PBDEs, go to www.environmentcalifornia.org

Shopper's Guide to Toxic-Free Kids

Products to Avoid

Food containers with polycarbonate plastic: Avoid #7 plastic and those with a "PVC" on the bottom/underside of the product.

- Canned foods
- Foods wrapped in plastic
- Plastic baby bottles

Choosing Safer Products

- Look for "PVC Free" labels on toys
- Choose wood toys
- Choose plastic food containers labeled #1, #2, #4, or #5 on the bottom: You still should not heat food in these plastic containers.
- Opt for glass: For baby bottles and food containers, look for glass options rather than plastics or cans.
 Heat food in glass containers over plastic.
- Buy ceramic, metal or enamel plates and feeding utensils

If You Use Plastic Toys or Containers

- Never heat food or beverages in plastic bottles or containers
- Don't let milk sit in plastic baby bottles for long periods
- Don't use harsh detergents or hot water when washing plastic baby bottles
- Throw away plastic bottles that look scratched or hazy
- Don't let children put plastic toys in their mouths

See www.environmentcalifornia.org for more information

2. Healthier Home

Your Carpet or Television Could be Toxic: How to Avoid PBDEs and have a Healthier Home

Polybrominated diphenyl ethers (PBDEs) are chemicals used as flame retardants in many common household products such as furniture, carpet, and electronic equipment. Studies have shown two types of PBDEs, Penta-PBDE and Octa-PBDE, to be to be highly toxic. A third PBDE, Deca, is causing concern as more studies are showing that the chemical may be breaking down into the more dangerous PBDE compounds.

What are PBDEs?

How do PBDEs affect health?

- Studies show that PBDEs affect human hormone function and are toxic to the developing brain in the pregnant woman's womb. And, early in a child's life this can result in impaired learning, memory, and motor skills.
- They have also been linked to Non-Hodgkin's Lymphoma in humans and a variety of cancers in rodents.
- PBDE levels in California women have been increasing since 1960 to levels that are 3 to 10 times
 higher than that of women in Europe. This may be due to the extremely stringent fire safety codes in
 California, resulting in widespread use of PBDEs in plastic-containing products.

How do PBDEs enter our bodies?

PBDEs enter our bodies through inhalation, through pores in our skin, and by eating contaminated food. Studies show that indoor air and dust particles in homes may contain PBDEs. Fish and meat contain PBDEs that have accumulated in fatty tissue of animals. Read more about PBDEs in dust and in San Francisco Bay fish: www.ewg.org/reports

Recent research shows high levels of PBDEs in breast milk in California women. Despite this, scientists agree that breastfeeding is better than formula for infants. Mothers who are considering breastfeeding their child may want to visit the Natural Resource and Defense Council's information webpage on breastfeeding at www.nrdc.org/breastmilk/benefits.asp.

What products contain PBDEs?

- Electronic products, such as computers, televisions, and hair dryers
- Foam padding in carpets, home and office furniture
- Fabrics on furniture as well as seating on cars, buses and airplanes



Five Tips on Reducing Exposure to Toxic PBDEs:

- Whenever possible, try to buy food that is organically grown and less likely to contain harmful PBDEs. Prepare fish and meats by broiling and draining juices to reduce levels of toxic chemicals. Consider limiting the consumption of animal fat where PBDEs tend to collect. Reducing animal fat intake is especially important for women of child-bearing age. For information on PBDEs in fish in San Francisco Bay, see www.ewg.org/reports/taintedcatch/part2.php.
- If you are ready to buy a new carpet or a piece of upholstered furniture, consider purchasing one that is made of wool which contains no PBDEs and is naturally fire-resistant or furniture advertised as PBDE-free.
- Avoid reupholstering furniture with foam that contains PBDE. Avoid contact with deteriorating foam in furniture and under carpeting. Clean-up dust with a high-efficiency vacuum, preferably with a HEPA filter. Vacuums with HEPA filters can cost as little as \$99—maybe less.
- Consider purchasing an indoor air cleaner with a HEPA filter.
- When shopping, ask the customer service agent if the product you want to buy contains PBDEs or look on companies' websites. Visit www.ewg.org/reports/mothersmilk for names of manufacturers of PBDE-free products.

When using products that do not contain PBDEs, Is there a greater risk for fires?

No. Currently, manufacturers are already moving away from using PBDEs in their products. For names of companies that have already begun phasing out PBDEs or plan to do so in the near future, see Environmental Working Group's website, www.ewg.org/reports/mothersmilk

How can PBDEs be eliminated from consumer products?

Assembly Bill 302 is the first-in-the-nation ban of the production or sale of any product containing two types of PBDEs after January 1, 2006. Some states around the country have passed legislation to ban Penta-PBDE and Octa-PBDE; a few others are studying its health effects and alternatives.

What can consumers do to help eliminate the use of PBDEs?

Avoiding PBDEs is the smartest approach to maintaining your health and the health of the environment. It takes public awareness and advocacy to drive the elimination of this group of chemicals from consumer products. Promote a cleaner environment with your pocket book by buying PBDE-free products. Write to manufacturers who sell products containing this group of chemicals, telling them of your consumer choice and why. Send a copy of your letter to your state and federal representatives and the Governor.

To find more information and/or reports on PBDEs visit:

- Environment California report on PBDEs: www.environmentcalifornia.org/envirocaliftoxics.asp?id2=9719
- Natural Resource and Defense Council's information on breastfeeding: www.nrdc.org/breastmilk/benefits.asp
- Environmental Working Group reports on PBDEs in San Francisco Bay fish and in household dust: www.ewg.org/reports
- Environmental Health News: www.environmentalhealthnews.org/archives.jsp



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