

Phthalates Fact Sheet



Part of the reason we are looking at exposure to phthalates is the lack of a clear answer about their potential health effects. Improvements in laboratory methods and technology to measure phthalates in urine is one important step in learning more about phthalate exposure and health. Phthalates are chemicals that are added to plastics to make them softer, more flexible, and harder to break. They are in many of the plastics we come in contact with on a daily basis. They can also be found in many consumer products, such as fragrances, nail polish, and plastic film and sheets. Phthalates are all around us, and hard to avoid. Due to their widespread use, phthalates may be present everywhere in the environment, including foods. People can be exposed to phthalates primarily by eating foods and drinking water and other beverages that have been in contact with containers and products containing these chemicals. Furthermore, exposure can occur from breathing in air that contains phthalate vapors or dust contaminated with phthalate particles. Young children may have a greater risk of being exposed to phthalate particles in dust than adults because of their hand-to-mouth behaviors. Current labeling laws do not require phthalates to be identified as an ingredient in consumer products. However, the U.S. Congress (the Consumer Product Safety Improvement Act (CPSIA) of 2008) has permanently banned three types of phthalates (DEHP, DBP, and BBP) in any amount greater than 0.1 percent (calculated for each phthalate individually) in children's toys, and in any child care article that is designed or intended by the manufacturer to facilitate sleep or the feeding of children age 3 and younger with sucking or teething.

Phthalates are found in:

- Many flexible plastics, such as:
 - o Some plastic food packaging, and some plastic food storage containers, specifically containers with a #3 label.
 - o Tubing and containers used in medical care.
 - o School products, like binders, art supplies, and lunchboxes.
 - o Soft plastic and inflatable toys.
 - o Some water bottles.
 - o Plastic clothes, such as raincoats, shoes, and backpacks.
 - o Shower curtains.
- Fragrances, like those found in some perfumes/colognes, lotions, deodorants, soaps and shampoos, hair sprays, air fresheners, and similar products.
- Some nail polish.
- Some household products, such as paints, flooring, adhesives, and blinds.
- Some medications and dietary supplements.

Possible health concerns from excessive exposure to phthalates:

- More research is needed to fully understand the health effects of exposure to phthalates.
- There is some evidence in human studies that suggests these chemicals may:
 - o Change the way hormones such as estrogen and testosterone work in the human body.
 - o Reduce the chance of conception for otherwise healthy couples; changes in sperm quality may occur (including semen abnormalities, diminished sperm motility, and reduced sperm production).
 - o Change male reproductive organs in the developing fetus.
 - o Increase chances among children of developing allergies, runny nose, and eczema.
- We do not know how common these potential health effects are among the general population of the state. Furthermore, we cannot determine with available data what level of exposure to phthalates could cause these to develop.

Possible actions one can take to reduce excessive exposure to phthalates:

- Use safe alternatives to plastics such as glass or polyethylene plastic (symbol #1). Plastic products with phthalates can sometimes be called 'PVC' or be labeled as #3.
- Avoid microwaving or heating foods and beverages in plastic containers or cling wraps.
- Do not place plastics in the dishwasher.
- Consume more fresh foods, and when possible avoid processed and packaged foods.
 - o Processed foods and high fat dairy and meats can be especially high in phthalates.
 - o There is evidence that fast food can have high levels of phthalates.
- Choose products that are labeled 'phthalate free'
- Choose unscented products, or products that have natural essential oils.

For more information, visit: <http://www.atsdr.cdc.gov/toxprofiles/index.asp> or http://www.cdc.gov/biomonitoring/phthalates_factsheet.html or <http://www.cpsc.gov/en/Business--Manufacturing/Business-Education/Business-Guidance/Phthalates-Information/> or <http://www.4csbc.org/pages/phthalates.html> or <http://www.cdc.gov/biomonitoring/>

To learn about purchasing PVC free products for your school and home, visit: <http://chej.org/campaigns/pvc/resources/pvc-free-products/>

For any other questions, please call 1-888-878-8992

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