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Phthalates are a class of chemicals widely employed to make plastics more malleable and help lotions penetrate skin. A number of phthalates are known to cause birth defects or reproductive harm in test animals.

Health concerns

Phthalates are known to interfere with the production of male reproductive hormones in animals and likely to have similar effects in humans. Their effects in animal studies are well recognized and include lower testosterone levels, decreased sperm counts and lower sperm quality. Exposure to phthalates during development can also cause malformations of the male reproductive tract and testicular cancer. Young children and developing fetuses are most at risk.

Where they are found

Phthalates are used in an enormous range of products, including air fresheners, plastic toys, flooring tiles, medical devices, cosmetic and personal-care products (including fragrances and nail polish), vinyl, inks and adhesives. Phthalates are also used as food additives and as inert ingredients in pesticides.

Because phthalates are not chemically bound to products, they easily migrate or off-gas, especially with heat. People can be exposed to phthalates by inhaling or ingesting contaminated dust particles, eating contaminated food, or applying products which contain phthalates to the skin.

Stay safe

- Buy phthalate-free cosmetics, personal care products, cleaning products, detergents and air fresheners. Manufacturers aren't required to list phthalates on the label, but any item listed as "fragrance" is often a chemical mixture that can contain phthalates. When buying cosmetics, purchase from companies that have pledged not to use phthalates.
- Avoid buying plastics that may be treated with phthalates, including vinyl toys, shower curtains and gloves. Look out for "PVC," "V" or the "3" recycling code on the item or its packaging. Choose instead toys such as phthalate-free Legos or those made of unpainted solid wood and finished with tung oil or beeswax blocks. Ask for dolls that are phthalate-free.
- If you have vinyl flooring in your home, damp mop regularly since phthalates bind to dust on the floor. Direct sunlight on vinyl tiles causes them to release phthalates more quickly, so put lower blinds on windows that shine directly on flooring. Finally, if you're already considering replacing your flooring, choose nonvinyl options such as cork, linoleum, wood or stone.

Take Action

Congress introduced legislation in April 2010 to reform the Toxic Substances Reform Act (TSCA) in ways that would tighten up regulation of problem chemicals like phthalates and require testing of new chemicals before they were allowed for use in commerce. Urge your legislators to support this much needed reform.

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