



Phthalates

Why am I being warned about phthalates?



- Six phthalates are on the [Proposition 65](#) list because they can cause birth defects or other reproductive harm and/or cancer.
- Proposition 65 requires businesses to determine if they must provide a warning about exposures to [listed chemicals](#).

What are phthalates?

Phthalates are a family of chemicals that are added to many plastics to make them flexible. They are usually identified by their individual chemical names.

What are the names of these phthalates? What health effects am I being warned about?

Exposure to:

- [BBP](#) (Butyl benzyl phthalate) during pregnancy may affect development of the child.
- [DBP](#) (Di-n-butyl phthalate) during pregnancy may affect development of the child, and may also harm the male and female reproductive system.
- [DEHP](#) (Di(2-ethylhexyl)phthalate) may increase the risk of cancer, and may harm the male reproductive system. Also, exposure to DEHP during pregnancy may affect the development of the child.
- [DIDP](#) (Di-isodecyl phthalate) during pregnancy may affect the development of child.
- [DINP](#) (Diisononyl phthalate) may increase the risk of cancer.
- [DnHP](#) (Di-n-hexyl phthalate) may harm the male and female reproductive system.

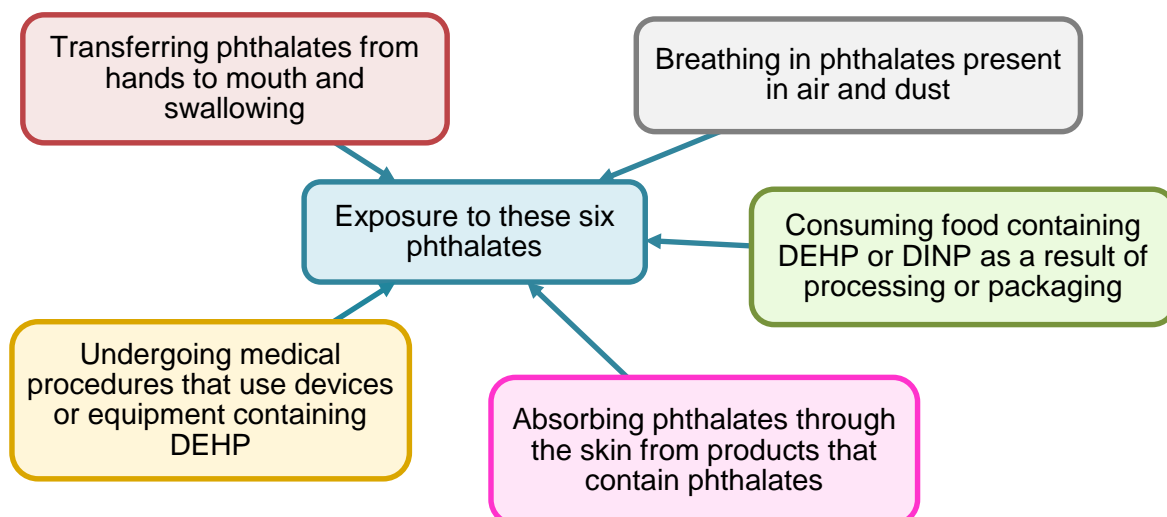
What types of products may contain these phthalates?

- These items include:
 - ▶ Some plastic lunchboxes, binders, backpacks and storage cases.
 - ▶ Some rainwear, handbags, belts, footwear and other artificial leather items that are made with polyvinyl chloride (commonly referred to as PVC or vinyl).
 - ▶ Some plastic shower curtains and bath mats.
 - ▶ Some vinyl gloves, tubing and garden hoses.
 - ▶ Some furniture and automobile upholstery, and other materials used in automobile interiors.
 - ▶ Some vinyl tile flooring, and coverings on some wires and cables.

- ▶ Some personal care products, including some perfumes and other products containing fragrances, and nail polishes.
 - ▶ Some inks and pigments, adhesives, sealants, paints, and lacquers.
 - ▶ Some plastic food packaging materials.
 - ▶ Some medical devices and equipment, including some types of blood and intravenous solution bags, tubing for dialysis, feeding tubes, oxygen masks, and surgical gloves.
 - California law prohibits:
 - ▶ The manufacture, sale, or distribution of children's toys and childcare articles containing BBP, DBP, or DEHP at levels greater than 0.1%.
 - ▶ The manufacture, sale, or distribution of toys and childcare articles intended for the use of a child under 3 years old, if that product can be placed in the mouth and it contains DIDP or DINP at levels greater than 0.1%.
 - US law has similar prohibitions.
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How does exposure to these phthalates occur?

- These phthalates can be gradually released from products into indoor environments such as homes, schools, daycare centers, and offices. They can settle on floors and other surfaces, and can accumulate in dust and air, where they can be inhaled.
- These phthalates can be absorbed into the body by touching or other direct contact with phthalate-containing products.
- Exposure to DEHP can result from contact with medical devices or during medical procedures where devices or equipment containing phthalates are used.
- Low levels of DEHP and DINP have been detected in some foods that have been in contact with plastics during processing and packaging.
- During pregnancy, these phthalates can pass from mother to baby.



How can I reduce my exposure to these phthalates?

- ❌ Avoid plastics known as polyvinyl chloride (PVC) or vinyl (with recycle code 3).
- ✓ Choose personal care products that are identified as “phthalate-free” or “fragrance-free”.
- ✓ Prior to undergoing medical procedures (especially recurring ones like dialysis) plan ahead by requesting medical devices or equipment that do not contain DEHP. This is especially important for protecting boys from the reproductive effects of DEHP (during pregnancy, in infancy, and around the time of puberty).
- ✓ Minimize exposure to dust, which can contain some of the phthalates listed above.
 - ▶ Wash your hands and your child’s hands frequently, especially before preparing food and eating.
 - ▶ Clean floors regularly, using a wet mop, and a vacuum with a high-efficiency particulate air (HEPA) filter, if possible.
 - ▶ Wipe up dust regularly, using a damp cloth.
- ✓ Eat more fresh food, and less processed and packaged food.

For more information:**General Phthalate Fact Sheets**

- California Environmental Protection Agency (CalEPA)
Office of Environmental Health Hazard Assessment (OEHHA)
 - ▶ Butyl Benzyl Phthalate (BBP)
<https://www.p65warnings.ca.gov/fact-sheets/butyl-benzyl-phthalate-bbp>
 - ▶ Di-n-butyl Phthalate (DBP)
<https://www.p65warnings.ca.gov/fact-sheets/di-n-butyl-phthalate-dbp>
 - ▶ Di(2-ethylhexyl)phthalate (DEHP)
<https://www.p65warnings.ca.gov/fact-sheets/di2-ethylhexylphthalate-dehp>
 - ▶ Diisodecyl Phthalate (DIDP)
<https://www.p65warnings.ca.gov/fact-sheets/di-isodecyl-phthalate-didp>
 - ▶ Diisononyl Phthalate (DINP)
<https://www.p65warnings.ca.gov/fact-sheets/diisononyl-phthalate-dinp>
 - ▶ Di-n-hexyl Phthalate (DnHP)
<https://www.p65warnings.ca.gov/fact-sheets/di-n-hexyl-phthalate-dnhp>

Scientific Information on Phthalates

- US Department of Health and Human Services (HHS)
National Institute of Health (NIH), US National Library of Medicine (NLM), Tox Town
 - ▶ Phthalates
https://toxtown.nlm.nih.gov/text_version/chemicals.php?id=24
- US Consumer Product Safety Commission (CPSC)
 - ▶ Phthalates
<https://www.cpsc.gov/Business--Manufacturing/Business-Education/Business-Guidance/Phthalates-Information>

- Centers for Disease Control and Prevention (CDC)
 - ▶ Phthalates
https://www.cdc.gov/biomonitoring/phthalates_factsheet.html
- US Food and Drug Administration (FDA)
 - ▶ Phthalates
<https://www.fda.gov/cosmetics/productsingredients/ingredients/ucm128250.htm>

Proposition 65

- California Environmental Protection Agency (CalEPA)
Office of Environmental Health Hazard Assessment (OEHHA)
 - ▶ Proposition 65: Background
<https://www.p65warnings.ca.gov/faq>
 - ▶ Proposition 65: The Chemical List
<https://www.p65warnings.ca.gov/chemicals>