



# Phthalates

## Why am I being warned about potential exposure to 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 significant exposure to [listed chemicals](#).

## What are phthalates?

Phthalates are a family of chemicals 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 the 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 systems.
- [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 the child.
- [DINP](#) (diisononyl phthalate) may increase the risk of cancer.
- [DnHP](#) (di-n-hexyl phthalate) may harm the male and female reproductive systems.

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## What types of products may contain these phthalates?

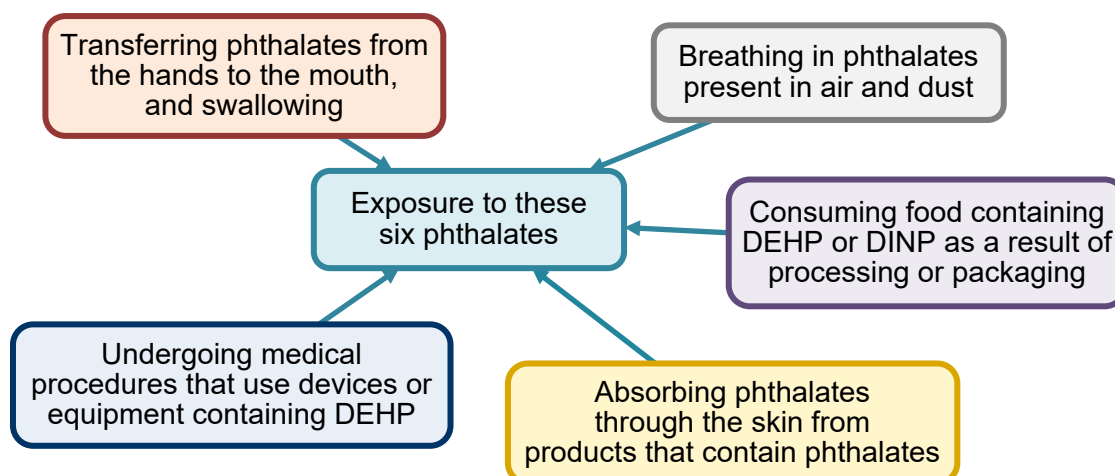
- These include some:
  - ▶ Plastic lunchboxes, binders, backpacks, and storage cases.
  - ▶ Rainwear, handbags, belts, footwear, and other artificial leather items made with polyvinyl chloride (commonly referred to as PVC or vinyl).
  - ▶ Plastic shower curtains and bath mats.
  - ▶ Vinyl gloves, tubing,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

- ▶ Personal care products, including some nail polishes, as well as perfumes and other products containing fragrances.
- ▶ Inks and pigments, adhesives, sealants, paints, and lacquers.
- ▶ Plastic food packaging materials.
- ▶ 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 child care articles containing BBP, DBP, or DEHP at levels greater than 0.1%.
  - ▶ The manufacture, sale, or distribution of toys and child care 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%.
- Federal 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 when you touch or come into other direct contact with phthalate-containing products.
- Exposure to DEHP can result from contact with medical devices or during medical procedures in which 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 before eating.
  - ▶ Clean floors regularly, using a wet mop or a vacuum cleaner 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:****Scientific Information on Phthalates**

- US Consumer Product Safety Commission (CPSC)
  - ▶ Phthalates Business Guidance & Small Entity Compliance  
<https://www.cpsc.gov/Business--Manufacturing/Business-Education/Business-Guidance/Phthalates-Information>
- US Department of Health and Human Services (HHS)  
Centers for Disease Control and Prevention (CDC)
  - ▶ Phthalates Factsheet  
[https://www.cdc.gov/biomonitoring/phthalates\\_factsheet.html](https://www.cdc.gov/biomonitoring/phthalates_factsheet.html)
- US Food and Drug Administration (FDA)
  - ▶ Phthalates  
<https://www.fda.gov/cosmetics/cosmetic-ingredients/phthalates>

**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 List of Chemicals  
<https://www.p65warnings.ca.gov/chemicals>
  - ▶ Proposition 65: Fact Sheets  
<https://www.p65warnings.ca.gov/fact-sheets>