

CEHC FACT SHEETS: Phthalates

What are phthalates?

Phthalates are man-made chemicals used in soft, flexible plastics, polyvinyl chloride (PVC) products, and in a variety of personal care products (cosmetics, shampoos, lotions, etc.). These chemicals are anti-androgenic and can adversely impact androgen-sensitive tissues during specific windows of development.

How does phthalate exposure occur?

Adults and children may be exposed to phthalates in the environment and at home. Both phthalates can leach out of plastics when they are heated and the chemicals get into the food or drinks in the plastic containers. Scientists are still learning if the amount that comes out is dangerous. Phthalates can be found in the following products:

- Food storage containers
- Polyvinyl chloride (PVC) tubing/products (such as water pipes and hospital IV bags and tubing)
- Flexible plastics, plastic bottles

What are the health effects of phthalate exposure?

Many doctors and scientists are concerned about phthalates because they can act in ways similar to hormones naturally found in our body. Hormones help control how our body works. Most of the health information we know about these chemicals comes from animal studies.

In studies using rats, phthalates cause problems with male reproductive organs. In children, scientists have found an association between phthalates and changes in reproductive hormones and increased allergies, runny nose, and eczema. In adults, phthalates are associated with changes in sperm quality.

How is phthalate exposure diagnosed?

There are no known diagnostic techniques for determining exposure to phthalates.

How is phthalate exposure treated?

There are no known treatments for phthalate exposure.

How can phthalate exposure be prevented?

- Do not microwave food/beverages in plastic
- Do not microwave or heat plastic cling wraps
- Do not place plastics in the dishwasher
- Look for labels on products that say "phthalate-free"