# Phthalates, BPA, and BPS

Phthalates, BPA, and BPS are some of the environmental exposures that influence our health throughout our lifetime. All of these environmental exposures together make-up our exposome.

## How are we exposed to them?

#### Phthalates and BPA/BPS may be found in:

Shower curtains

Personal care products

Cosmetics

Fragranced products

Vinyl flooring



Sales receipts

Plastic containers for storing food

Plastic toys

Food & beverage cans & packaging

Grease resistant food wrappers

Where?

#### You can be exposed:

#### By mouth:

From food or water that is packaged or heated in plastic or cans



Handling receipts treated with BPA/BPS to stabilize the ink (and then touching the mouth)

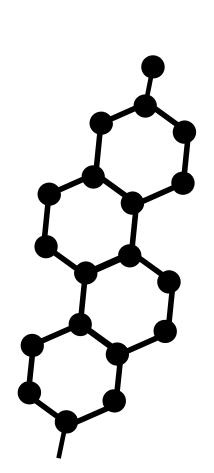
#### By inhaling:

Fumes from products that contain phthalates, e.g., detergents, shower curtains, or new vinyl flooring

#### By touch:

Phthalates can enter through the skin when using products like lotion, shampoos, soaps, and perfumes

### How do they affect our health?



Both phthalates and BPA/BPS are suspected to be hormone disruptors. Hormone disruption can be especially harmful during critical periods of growth, so exposures in the womb and during infancy, childhood, and adolescence are more likely to affect health.

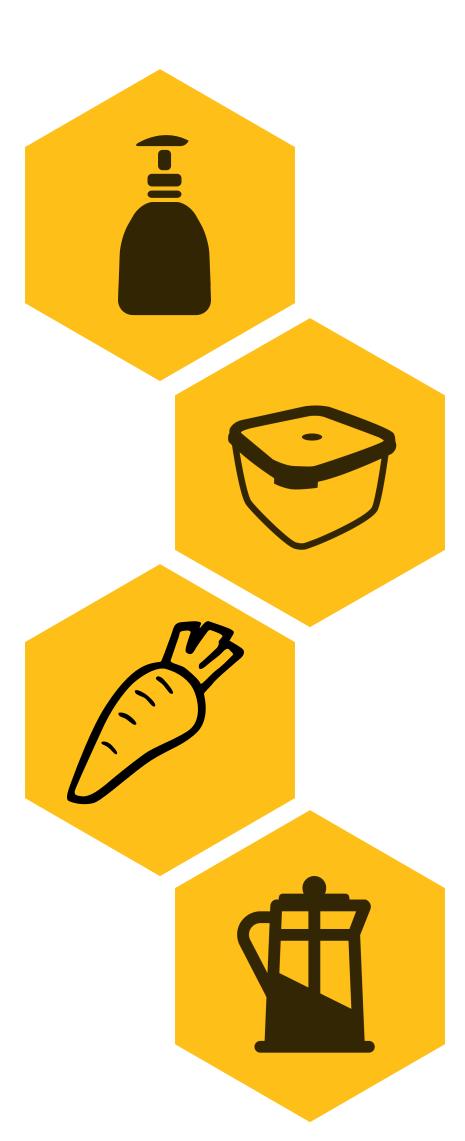
Human studies link phthalate, BPA and BPS exposure to a variety of health outcomes, such as fertility problems, respiratory diseases, childhood obesity, behavioral outcomes, and increased susceptibility to breast and prostate cancer.

# If I'm worried about phthalates, BPA, and BPS, what can I do to avoid them?

Scientific studies take a very long time to fully understand and prove the health effects of a chemical. In the meantime, if you want to play it safe, here are some tips to avoid exposure:

What?

- Read the labels of products, and avoid the use of products that use phthalates. Some common phthalates are listed as: BBP, DBP, DEHP, DEP, DiDP, DiNP, DnHP, DnOP.
- Avoid the use of PVC (vinyl) products and flexible plastics.
- Use personal care products that are labeled as "fragrance free", "phthalate free", and "BPA free".
- Use fresh produce that has never been stored in plastic.
- Microwave food in glass or ceramic containers instead of plastic.
- Brew coffee using a French press or non-plastic pour over coffee maker





#### **Additional Resourcs**

The Nationanl Institute of Environmental Health Sciences https://bit.ly/2v8M2k3

Pediatric Environmental Health Specialty Units https://bit.ly/2Iq7JW6



Learning how environmental exposures affect health and community well-being.

https://emoryhercules.com/

