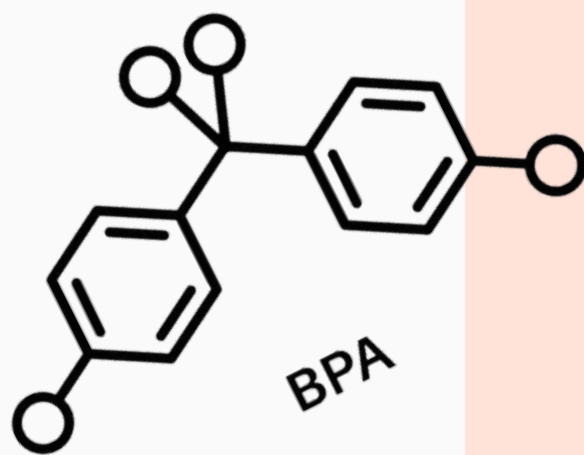
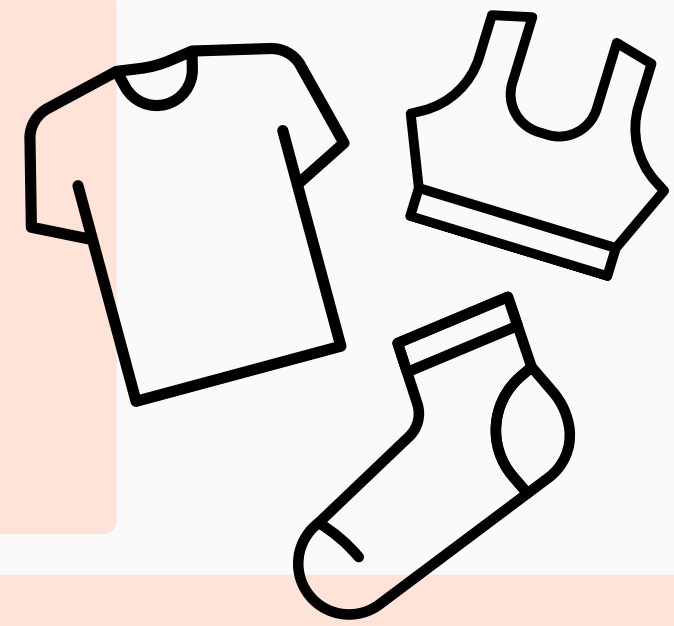


WHAT YOU NEED TO KNOW ABOUT BPA IN CLOTHING

The Center for Environmental Health (CEH) found high levels of the chemical bisphenol A (BPA) in socks, sports bras, and athletic shirts.



BPA is a well-studied hormone-disrupting chemical, known to cause developmental and reproductive harm, and can be absorbed through our skin.

[See the list of sock brands with high levels of BPA.](#)

[See the list of athletic shirts and sports bras with high levels of BPA.](#)

In fall 2021, CEH began sending legal notices to approximately 100 different sock brands after testing showed BPA levels in socks could expose people to up to 31 times the legal limit under California law.

Throughout 2022, CEH has been pushing those 100+ companies-like Adidas, Hanes, and Columbia-to take action and remove all bisphenols, including BPA, from their socks. CEH has already reached legally binding agreements with some of those companies which require them to reformulate their products (or if they are unable, to provide a clear warning to consumers).



After finding toxic levels of BPA in socks, CEH tested sports bras and athletic shirts with similar polyester/spandex blends and discovered 8 brands of sports bras and 6 brands of athletic shirts exposing people to up to 22 times the safe limit of BPA, according to CA law.

CEH sent legal notices to these 14 companies, and we will continue to take action until they make their clothing safe to wear.

TAKE ACTION

No one should have to wonder if the clothing they buy could potentially expose them to harmful chemicals like BPA. CEH is working to make sure our products are safe for our health.

You can get involved and add public pressure (to get companies to do the right thing) by signing these petitions:

[Tell Fashion CEOs: Take the BPA Out of Socks](#)

[Tell Activewear CEOs: Take the BPA Out of Sports Bras and Athletic Shirts!](#)

HOW TO LIMIT YOUR EXPOSURE TO BPA FROM CLOTHING

- To date, CEH's investigations have only found BPA in polyester-based clothing with spandex. When buying socks avoid ones made from polyester with spandex.
- Look for socks made with mostly cotton, wool, or other natural fibers.
- Limit your exposure to BPA by removing your activewear and socks after your workout.



WHAT IS BPA?

BPA, or bisphenol A, is a chemical that is often used in plastics to make them clear and strong. BPA can be added in the manufacturing of polyester as an intermediary step to improve the natural properties and lifespan of a fabric, it can also be added as an antistatic agent.

BPA is also found in epoxy resins that can line water pipes and food cans, and is used in receipt paper. Although BPA is the most well-known bisphenol, there are dozens of other bisphenols (often called BPA replacements) out there that are chemically similar to BPA and cause similar adverse health effects.



BPA is one of the better known endocrine disrupting chemicals (EDCs). These chemicals look and act like hormones produced by our bodies, which confuses our endocrine system and causes disruption of its normal functions. Since the endocrine system is responsible for metabolism, growth and development, reproduction, and so much more, any changes in your endocrine function can cascade into a number of negative health effects

WHAT DOES BPA DO TO THE BODY?

BPA mimics the hormone, estrogen, causing changes to the way our cells normally function and multiply. Some negative health outcomes associated with BPA exposure in babies, children, and young adults are developmental harm, delayed onset of puberty, anxiety, depression, and hyperactivity. BPA exposure is also associated with the development of breast cancer and prostate cancer.

WHAT IS A HORMONE DISRUPTING CHEMICAL?

Hormones are your body's chemical messengers, responsible for regulating normal functions like digestion, sweating, and sleep, among many other things. Hormone disrupting or endocrine disrupting chemicals, as their name suggests, interfere with the normal function of this messenger system either by mimicking or blocking hormone receptors. BPA, by mimicking estrogen, can disrupt your body's hormone signaling and alter body systems.

WHERE DOES BPA COME FROM?

BPA is a synthetic chemical that is made by petrochemical companies. Chemicals like benzene and propylene are synthesized to make phenol and acetone, which are the common feedstocks for BPA.



HOW IS A PERSON EXPOSED TO BPA IN CLOTHING?

BPA exposure typically occurs through ingestion (water bottles, food can linings, food containers) or by absorption through skin (receipt paper). With clothing, the primary pathway of exposure is absorption through the skin.

Studies have shown that BPA can be absorbed through your skin and end up in the bloodstream after handling receipt paper for seconds or a few minutes at a time. Clothing is worn for hours at a time, so it is concerning to be finding such high levels of BPA, particularly in socks made for babies and children.

WHAT IS PROP 65?

Proposition 65, California's right-to-know law, increases transparency about the toxic chemicals all around us. Prop 65 tasks California's Office of Environmental Health Hazard Assessment with maintaining a comprehensive list of chemicals known to cause cancer or reproductive harm. [Learn more.](#)