

FACTSHEET

Endocrine disruptors

What are they?

Hormones – such as oestrogen or testosterone – control many processes in the body, from the development of children in their mothers' wombs to appetite and fertility.

Endocrine disruptors (EDs) are chemicals that interfere with the hormonal system. Given their capacity to mimic, obstruct and block natural hormones, exposure to even tiny amounts of EDs may result in severe and irreversible effects on human health, such as infertility, cancers, genital malformations, IQ loss or obesity.¹

In the EU, the cost of exposure to endocrine disruptors has been estimated at an astronomical €163bn per year.²

How are we exposed?

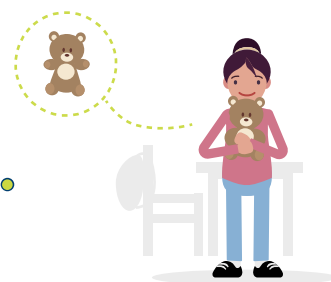
Exposure to endocrine disruptors occurs at home and at work, through the air we breathe, the food we eat, and the water we drink. In addition, consumers may encounter EDs in many everyday products. Here are a few examples from tests performed by consumer organisations between 2013 and 2018 (see more in our visual: bit.ly/EDisruptorsDay):



COSMETICS: 7 out of 16 beauty balm creams tested in Belgium contained suspected EDs, such as propylparaben.³ Similar ingredients were used in one-fifth of anti-aging creams tested by UFC-Que Choisir in France.⁴ In both tests, suspected EDs were found in expensive brand creams, but not in the cheaper alternatives.



TOYS: 9 out of 29 toys purchased from online platforms in Denmark contained endocrine-disrupting phthalates which are illegal. In some cases, the legal limit was exceeded more than 200 times.⁵



FOOD PACKAGING: many reusable water bottles tested in Norway leached phthalates, bisphenol A, lead and other EDs into their content.⁶ Disturbingly, bottles marketed to kids were the worst performers in the test.

These tests however also show that **using safer alternatives is possible and affordable**. Additionally, neither price nor brand is a decisive factor.

¹ United Nations Environment Programme and WHO, 'State of the Science of Endocrine Disrupting Chemicals 2012. Summary for Decision-Makers', 2013.

² This estimate includes direct costs such as hospital stays, doctors' services, nursing-home care and other medical costs as well as indirect costs resulting from lost worker productivity, early death and disability, and loss of intellectual abilities caused by pre-natal exposure. From [Burden of disease and costs of exposure to endocrine disrupting chemicals in the European Union: an updated analysis](#), 2016."

³ Test-Achats/Test-Aankoop, 'BB- et CC-crèmes : pas de miracle !', 2014.

⁴ UFC-Que Choisir, 'Comparatif : Crèmes antirides', 2014.

⁵ Forbrugerrådet Tænk, 'Test: Unwanted chemicals in toys from eBay, Amazon and Wish', 2019.

⁶ Forbrugerrådet, 'Drinking bottles leach chemicals', 2018.



What the EU does (and does not do) to protect consumers against EDs

The EU is committed to [protect consumers and the environment](#) against endocrine disruptors. Still, the pace of EU action remains inexcusably slow, due to powerful industry lobbying⁷ and a lack of political appetite to regulate these harmful chemicals (as shown by the EU Commission's 2018 strategy which contained neither policy measures nor timelines⁸).

EU laws on chemicals regulate EDs in theory, but they fail to protect consumers in practice. This is in part because **current risk-evaluation methods largely overlook a chemical's possible endocrine-disrupting properties**. Current regulations on chemicals for example underestimate health risks associated with consumers' *combined* exposure to EDs from multiple sources (known as the 'chemical cocktail' effect).⁹

Moreover, **EU laws tend to overlook 'low-dose' effects** where even a single molecule can increase health risks. This implies that there may not be a safe exposure level to EDs. However, thresholds are the basis of how the EU regulates most chemicals.

Another problem is that **EU laws are inconsistent in how they protect consumers against EDs**. For instance, while EDs are banned in pesticides, they are not addressed in cosmetics, which consumers apply directly on their skin.

What the EU must do

The EU Commission's President, Ursula von der Leyen has rightly committed to step up the protection of citizens' health from endocrine disruptors.¹⁰ To achieve this, BEUC recommends¹¹ the EU to urgently:

- **TACKLE BOTH KNOWN AND SUSPECTED EDs.** The EU must use the precautionary principle to prevent potential harm to its citizens and the environment.
- **REGULATE ENDOCRINE DISRUPTORS ACROSS THE BOARD.** If a chemical is problematic in toys, it is also in childcare products and should be regulated accordingly. New safeguards must be developed for *all* consumer goods.
- **BETTER PROTECT VULNERABLE CONSUMERS SUCH AS CHILDREN AND PREGNANT WOMEN.** The EU must improve existing laws, e.g. on food packaging or toys, but also come up with new ones, e.g. on childcare products, textiles and absorbent hygiene products.
- **ACCOUNT FOR THE 'CHEMICAL COCKTAIL' AND LOW-DOSE EFFECTS.** The EU needs to protect consumers from simultaneous exposure to numerous chemicals, even in tiny amounts.
- **INFORM CONSUMERS.** Better information about the use of known and suspected EDs in products would allow consumers to make healthier choices.
- **ENSURE THAT EDs STAY OUT OF THE CIRCULAR ECONOMY.** The EU needs to strictly control recycled materials to prevent, for example, packaging from contaminating our food with EDs.¹²

Read BEUC's full position at <http://bit.ly/EDconsumers>

⁷ Corporate Europe Observatory, 'A toxic affair – how the chemical lobby blocked action on hormone-disrupting chemicals', 2015.

⁸ ECHA newsletter, Guest column: Protecting consumers against endocrine disruptors must be a top priority for the EU in 2019, February 2019.

⁹ EDC-MixRisk, 'Policy Brief', 2019.

¹⁰ A Union that strives for more- My agenda for Europe, Political guidelines for the next European Commission 2019-2024, Ursula von der Leyen.

¹¹ BEUC, 'Hormone-disrupting chemicals: when will the EU act against these everyday toxicants?', 2016.

¹² BEUC, 'How to detoxify the circular economy', 2017.