



EU has the obligation to protect its people and the environment from all harm caused by endocrine disrupting chemicals

Our eight demands for an EU EDC strategy

Why we are concerned

Endocrine disrupting chemicals (EDCs) are increasing our chances of getting serious and potentially lethal diseases and health disorders as highlighted by experts from the World Health Organization (WHO) [1], scientists from the Endocrine Society [2], and others. In these reviews of scientific literature, impacts from EDCs have been linked to reproductive and fertility problems such as drastically falling sperm rates, as well as hormone dependent cancers such as breast and prostate cancers. Neurological impairments including autism and IQ loss as well as metabolic changes including obesity and diabetes have also been associated with exposures to EDCs [3, 4]. In wildlife, there is further evidence of reproductive and developmental harm linked to impairments in endocrine function in a number of wildlife species: EDCs have been associated with changes in immunity and behaviour as well as skeletal deformities [5].

A growing body of science underpins the ways in which some people are more vulnerable than others to the health impacts of endocrine disruption, even in small doses, with effects sometimes appearing decades later. The time during development in the womb and during early childhood has been found to be a particularly sensitive window of exposure and has raised serious concerns among health professionals. In 2015 over 100 national societies of obstetricians and gynaecologists from around the world called on policymakers to prioritise reducing exposures as an important means of disease prevention [6].

Avoiding EDCs is not a choice that a person can make anymore [7]. EDCs are found everywhere in our daily lives: from high-profile substances, such as the bisphenols used in the making of certain plastic bottles and can linings, and restricted phthalates that are still found in one out of five toys [8]; the flame retardants used in sofas; the pesticides sprayed on and ending up in our food; and the antimicrobial biocides found in cleaning products. They are nearly everywhere, both at home and in the workplace. The

nonprofit research institute the Endocrine Disruption Exchange (TEDX) lists over 1,400 potential EDCs [9], the WHO mentions over 800 EDCs [10], and many more suspected EDCs still need to be investigated.

EDCs end up in all of us – children and adults alike – contaminating our bodies without our consent or knowledge. Human biomonitoring samples of urine, hair and blood across Europe are starting to demonstrate the extent of that internal pollution. In France, over 20 EDCs were found in women tested for the presence of these chemicals in 2015 [11]. The European Biomonitoring Initiative has included many EDCs and potential EDCs in its priority list and the results will be used to inform policy decisions on specific substances [12].

Most importantly, EU laws regulating EDCs are not protecting us – the ones that are supposed to do so are patchy, not properly implemented and leave huge gaps where EDCs are not regulated at all such as in cosmetics, toys, textiles, furniture and food packaging and in other articles that we come into contact with every day.

What we want

In 2017 the EU Commission committed to bring out a new integrated strategy on EDCs which is supposed to cover *'for example toys, cosmetics and food packaging'* [13. 14]. Previous attempts to update the existing EU Community Strategy on EDCs from 1999 with recent scientific advances and actions to tackle the problem was derailed by intense industry lobby in 2013 as documented by the investigation *'Toxic Affair'* [15].

We are calling on EU Commission President Jean-Claude Juncker to bring out a fully-fledged strategy before the summer of 2018. This would include a concrete action plan aiming for a high level of protection for human health, especially vulnerable groups, and the environment. Tangible activities should have clear targets, a timeline and a reasonable budget. This would be an opportunity for reconnecting the EU's agenda with citizens' demands for better public health protection on EDCs as illustrated by widely supported petitions developed and supported by the EDC-Free campaign partners in 2017. The first one was delivered to member states with almost half a million signatures in July [16], and the second one with over 300,000 signatures in October [17].

An EU EDC strategy could also support and build on efforts by progressive countries, such as France [18], Sweden [19] and Denmark [20], which are already implementing actions on EDCs. Belgium has just announced the launch of a national action plan on EDCs [21]. It should be in the interest of the European Commission to promote harmonisation when it leads to an equal and high level of protection for all EU citizens, and supports the avoidance of barriers to trade within the European single market. Today, a clear

EU commitment is needed to reduce people's exposure to EDCs in a more comprehensive way throughout Europe.

This is not only a unique opportunity to increase well-being by preventing diseases, but it can also contribute to reducing the rising costs associated with EDC-related illnesses, as showed by a study evaluating the bill at a staggering 163 billion Euros a year for Europe [22], even though its scope covered only a few, rather than all, EDC-related illnesses. This is also an opportunity for policy coherence and for the EU to set a regulatory framework that builds the foundations for a truly non-toxic circular economy by encouraging industrial innovation through safer substitution. Considering that our exposure to preventable environmental chemicals is estimated to result in health costs worth 10% of global GDP [23], there is a real business case for promoting safe substitution to toxic EDCs through a comprehensive EU strategy for action.

We need a comprehensive action plan that effectively prevents further impacts on health and ends wildlife loss associated with EDCs. It needs to set out legal actions for eliminating exposure and to contribute towards meeting the 2030 commitments set out in the Sustainable Development Goals to "substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water, and soil pollution and contamination" [24].

The EU EDC Strategy must reflect the most recent advances in science and draw the logical conclusions from them by complementing existing obligations in the EU regulatory context. The following identifies the eight crucial elements that the EDC strategy needs to include to enable the EU to effectively protect health and the environment against EDCs.

Essential elements of an EU Endocrine Disrupting Chemicals Strategy

1. Consider public health and precaution as the cornerstones of a new EU EDC Strategy

Protect those who are most vulnerable. Reduce exposures to children to prevent suffering from EDC-related diseases and the spiralling costs associated with treating them. Build on and expand the short-, medium- and long-term actions from the 1999 EU EDC strategy and augment their effectiveness [25].

2. Enhance public awareness of EDCs – connect it with the EU's work on protecting citizen's health

A recent Eurobarometer survey found that two out of three European citizens are concerned about exposure to chemicals in their daily lives through food, air, drinking water and consumer products or other items, as well as in the workplace. Less than half of the same group felt well informed about the potential dangers of chemicals [26]. A Europe-wide campaign to raise awareness on EDCs is needed.

Specific focuses of such a campaign should include:

- Informing parents before and during pregnancy, and families in general, about ways to minimise exposures in everyday life.
- The dissemination of good practice for exposure reductions and health advice connected to grassroots and local agendas and the creation of a bank of success stories showing how the EU is making a difference.
- Information and training materials for medical, health and educational professionals and multiplier groups so that they can advise the public on reducing their exposures.
- A response to consumers' concerns and the provision of tools for traceability and the right to know for chemicals in products.

3. Improve regulation: Increase the control of the use of EDCs across all sectors

- Make a plan with timetables to implement suitable EDC criteria in all relevant EU laws to identify and reduce exposures to EDCs.
- Address missed deadlines first, like the 2015 one for cosmetics and obvious loopholes like toys, food packaging regulations. Commit to addressing other relevant EU legislation and sources of exposure, such as public procurement, worker's exposure, textiles, etc. and deliver on the 7th EAP commitment [27].
- Support the implementation of the EU Plastics Strategy by banning the presence of EDCs in plastics in particular as the presence of EDCs can hinder recyclability and negatively affect the value of recyclates.
- EDCs should be regulated with the presumption that no safe threshold for exposure can be set with sufficient certainty [28].
- EDCs should be regulated by using group approaches based on similar structures and similar properties to avoid regrettable substitution [29].
- Implement and enforce, efficiently and ambitiously, the existing regulatory obligations controlling the use of EDCs. This includes speeding up the inclusion of EDCs in the REACH candidate list of substances of very high concern and the adoption of measures to limit exposure, such as REACH restrictions or REACH authorisation. Currently only 12 substances have been identified as EDCs under REACH.
- Accelerate the assessment of EDCs to implement restrictions on them in pesticides and biocides.
- Create new sectorial laws to ensure robust protection in priority for consumer products. For most consumer products, e.g. textiles, child care articles, plastics there is no specific provision addressing EDCs.

4. Reduce our EDC daily cocktail: Replace the substance-by-substance approach by including all possible sources of exposure to multiple chemicals

- Prioritise the identification and regulation of the most problematic groups of hormone disrupting chemicals and swiftly act on known co-exposures to harmful chemicals from various sources (e.g. indoor air pollution, dust, food contact materials).

- Move from a single substance risk assessment to cumulative assessments for chemicals acting on the same adverse outcome and similar chemicals [30]. Sweden and Denmark are looking at this issue in the context of their national work [31].
- Respond more swiftly to early warning signals from new scientific findings about potential health or environmental damages in re-approvals and authorisations of substances. When concerns show up in one chemical use, a risk evaluation should automatically be triggered across legislative ‘silos’ to fully assess the impact of cumulative exposures and to ensure swift action in the absence of full scientific certainty.

5. Speed up testing, screening and identification of EDCs

- Update test requirements with new and updated screens and test methods in all relevant EU laws so that data gaps will be closed and EDCs can be identified. The EU should systematically make industry responsible for providing sufficient evidence to demonstrate safety.
- Prioritise data collection on potential EDCs and draw up lists to communicate to consumers and business alike.
- Improve the screening and testing guidelines used to identify EDCs and address data gaps.

6. Work towards a clean ‘Circular economy’ and a non-toxic environment: Avoid toxic substances such as EDCs in products from the start

- Need to have full traceability to avoid finding EDCs in recycled materials.
- Need to have producer responsibility. Each company should be obliged to inform consumers about the chemical content of their products, including the packaging.
- Need to have the same level of protection from EDCs for primary and secondary materials [32], which means that when an EDC is banned from a virgin material, it should be banned from recycled materials as well, contrary to current practice.

7. Enhance European market leadership for safer substitution with no regrets and promotion of innovative solutions

- Support initiatives that guide companies to move away from EDCs. Some examples can be found at chemsec.org – market place, the ‘dating platform’ for companies trying to meet a provider of safer alternatives.
- Limit and avoid the use of pesticides in agriculture and the management of green or urban areas and set specific targets for an overall reduction of pesticide use in line with the Sustainable Use of Pesticides Directive (2009/128/EC).
- Encourage communication campaigns at a national level in order for citizens to be 1) more mindful about chemical use in their daily lives, in particular during pregnancy and with children, 2) to have the right to know about EDCs in products.

8. Monitor the health and environmental effects of single, groups and mixtures of ED substances to capture all sources of EDC exposure ‘across the board’ and respond swiftly to minimise them

- Ensure sufficient focus on investigating chemicals of new and emerging concern which are used as replacements for banned chemicals in the context of the EU Human Biomonitoring Initiative [33].
- Develop sensitive test methods with new endpoints such as chemicals interfering with brain development and ensure they are appropriately considered within the regulatory evaluations.

EDC-Free Europe is a coalition of public interest groups representing more than 70 environmental, health, women’s and consumer groups across Europe who share a concern about hormone disrupting chemicals (EDCs) and their impact on our health and wildlife. Campaign partners include trade unions, consumers, public health and healthcare professionals, advocates for cancer prevention, environmentalists and women’s groups:





DES Daughter Network

Because Social Media increases Awareness and brings the DES Community Together



* This organisation endorses this EDC-Free Europe statement on an EU EDC Strategy but is not an official campaign partner.

Contact the campaign: email info@env-health.org or visit www.edc-free-europe.org

Notes:

- [1] WHO/UNEP, "WHO | State of the Science of Endocrine Disrupting Chemicals - 2012," WHO (World Health Organization, 2013), <http://www.who.int/ceh/publications/endocrine/en/>.
- [2] Endocrine Scientific Statement (review), 2015: <https://www.ncbi.nlm.nih.gov/pubmed/26544531>
- [3] <http://www.chemtrust.org/brain/>
- [4] <http://www.chemtrust.org/obesity-and-diabetes-2/>
- [5] EEA Report: The impacts of endocrine disrupters on wildlife, people and their environments <https://www.eea.europa.eu/publications/the-impacts-of-endocrine-disrupters>
- [6] https://www.figo.org/sites/default/files/uploads/News/Final%20PDF_8462.pdf
- [7] <https://www.nytimes.com/interactive/2018/02/23/opinion/columnists/poisons-in-our-bodies.html>
- [8] https://echa.europa.eu/documents/10162/13577/ref_4_report_en.pdf/b53f5cd9-64a4-c120-1953-e9e176b9c282
- [9] <https://endocrinedisruption.org/interactive-tools/tedx-list-of-potential-endocrine-disruptors/about-the-tedx-list>
- [10] <http://www.who.int/ceh/risks/cehemerging2/en/>
- [11] <https://www.generations-futures.fr/perturbateurs-endocriniens/expert-4>
- [12] <https://www.hbm4eu.eu/>
- [13] http://europa.eu/rapid/press-release_IP-17-1906_en.htm
- [14] The Commission had to review the Cosmetics Regulation with regard to substances with endocrine-disrupting properties 'at the latest on 11 January 2015' (Art. 15.4 Regulation (EC) No 1223/2009 on cosmetic products)
- [15] https://corporateeurope.org/sites/default/files/toxic_lobby_edc.pdf
- [16] The SumofUs online petition asks people to reject the European Commission's proposal on EDCs signed by over 465.5K Europeans. The EDC-Free secretariat worked together with EDC-Free partners from [Spain](#), [Germany](#) and [France](#) to create, develop, translate and share the petitions. July 2017
- [17] The SumofUs online petition in [English](#), [German](#) and [French](#) resulted in Members of the European Parliament blocking the European Commission's weak proposal on endocrine disruptors and was signed by 321.675 individuals and forced the Commission to come up with an improved proposal. October 2017
- [18] French national action plan <https://www.ecologique-solidaire.gouv.fr/rapport-devaluation-du-plan-national-daction-sur-perturbateurs-endocriniens-gouvernement-engage>
- [19] Swedish Action plan for a toxic-free everyday environment 2015–2020 states it will develop an EDC national action plan <https://www.kemi.se/en/about-us/our-work/action-plan-for-a-toxic-free-everyday-environment? t id=1B2M2Y8AsgTpgAmY7PhCf%3d%3d& t q=Non+toxic+strategy+plan& t tags=language%3aen%2csiteid%3a007c9c4c-b88f-48f7-bbdc-5e78eb262090& t ip=88.202.72.145& t hit.id=Kemi Web Models Pages ArticlePage/ cb2842eb-7e3f-4ea8-8a4e-2a37d1aa9cef en& t hit.pos=10>
- [20] Danish report towards a non-toxic future includes EDCs as a priority http://en.mfvm.dk/fileadmin/user_upload/ENGLISH_FVM.DK/Focus_on/Chemicals_and_waste/13215_MF_Kemikonference_Rapport_A4_PRINT.pdf
- [21] http://www.senat.be/www/?Mlval=index_senate&MENUID=52000&LANG=fr
- [22] <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5244983/>
- [23] <http://www.env-health.org/resources/press-releases/article/human-exposure-to-preventable> , "Calculation of the disease burden associated with environmental chemical exposures: Application of toxicological information in health economic estimation" was published online in the peer-reviewed journal Environmental Health on 5 December 2017. <https://ehjournal.biomedcentral.com/articles/10.1186/s12940-017-0340-3>
- [24] SDG 3, target 3.9
- [25] http://ec.europa.eu/environment/chemicals/endocrine/strategy/index_en.htm
- [26] <http://ec.europa.eu/commfrontoffice/publicopinion/index.cfm/Survey/getSurveyDetail/instruments/SPECIAL/surveyKy/2111>
- [27] <http://ec.europa.eu/environment/action-programme/>
- [28] Gore AC, Chappell VA, Fenton SE, Flaws JA, Nadal A, Prins GS, et al. 2015. EDC-2: The Endocrine Society's Second Scientific Statement on Endocrine-Disrupting Chemicals. *Endocr. Rev.* 36:E1–E150; doi:10.1210/er.2015-1010
- [29] CHEM Trust report: From BPA to BPZ: A toxic soup? <http://www.chemtrust.org/toxicsoup/>
- [30] <https://www.ncbi.nlm.nih.gov/books/NBK215036/>
- [31] <http://www.government.se/press-releases/2018/03/government-wants-to-investigate-cocktail-effects-of-chemicals/> ; <http://mst.dk/media/143466/kemiindsats-engelsk.pdf>
- [32] <http://eeb.org/work-areas/resource-efficiency/circular-economy/>
- [33] <https://www.hbm4eu.eu/>