

## PRESS RELEASE

## €31 billion per year in EU health savings possible from reducing exposures to hormone disrupting chemicals

- Spiralling rates of hormone-related disease may be due to exposure to hormone-mimicking synthetic chemicals found in food, drink and everyday products.
- New study says if a small portion of hormone-related cancers, diabetes & obesity, and infertility could be avoided by reducing exposure to hormone disrupting chemicals, then billions in costs from these diseases and conditions could be saved.
- A change in European chemicals policy could massively reduce costs associated with cases of hormone-related diseases and conditions. EU should act now.

**Brussels, 18 June 2014** – Exposure to food and everyday electronic, cosmetic and plastic products containing hormone disrupting chemicals (also called endocrine disrupting chemicals - EDCs) may be costing up to €31 billion per year in the European Union (EU), according to a report launched today by the Health and Environment Alliance (HEAL), (1)

The calculation draws on a list of diseases and conditions that expert scientists involved in EDC research have identified as "endocrine-related". They are:

- Reproductive and fertility problems, including low sperm count
- Abnormalities of the penis and testicles in baby boys
- · Cancer of the breast, prostate, testes
- Children's behavioural disorders, such as autism and attention deficit hyperactivity disorder (ADHD)
- Obesity and diabetes. (1)

Rates for many of these conditions are increasing rapidly. For example, with the exception of already high prevalence countries such as the Netherlands and Austria, all EU countries are experiencing strong rises in prostate cancer and Eastern and Southern European EU Member States are witnessing a dramatic rise in breast cancer. (2) Prevalence of autism and ADHD is now alarmingly high. In addition, experts say that much of the impact of EDCs is in reducing IQ, which prevents children from reaching their full potential. Some of the harm from fetal exposure to EDCs is initially hidden to emerge later in life as higher risk for hormone-related cancer or low sperm count.

On behalf of HEAL, environmental economist Dr Alistair Hunt of University of Bath and Dr Julia Ferguson, Visiting Fellow at the UK's Cranfield School of Management have calculated the total costs associated with these conditions at €636-637 billion per year. (3) This is likely to be an underestimate for several reasons, including the fact that many EU health cost figures are not available for the conditions identified.

Only a proportion of the costs of endocrine-related health problems can be attributed to exposure to EDCs. Major contributory causes include genetics and lifestyle factors, such as diet, smoking or

insufficient physical activity. However, the World Health Organization (WHO) has noted that the 'environmental burden of disease' from chemicals is likely to be underestimated because of lack of data. (4)

A recent US study put the contributory proportion of just one EDC (Bisphenol A (BPA)), through one exposure pathway (BPA leaching from food packaging into food), and to one condition (childhood obesity) at 1.8%. (5) It therefore seems reasonable to assume that the proportion for all EDC exposures might be between 2-5%. A 5% contribution to endocrine-related conditions from EDC exposure would be equivalent to approximately €31 billion per year for all 28 EU countries. (1)

Evidence linking hormone-mimicking chemicals to human health problems has grown stronger over the past decade, according to a report last year from the WHO. As the highest international health authority, WHO clearly concludes that human exposure to EDCs now represents a "global threat" that should be addressed. (6)

HEAL Executive Director, Genon K Jensen says: "A proportion of the spiralling rates of endocrine-related health problems seen in Europe today are probably caused by exposure to synthetic chemicals that end up in our bodies and disrupt our hormones. The EU should put health first and phase out these substances. Swift action could avoid massive human suffering and perhaps as much as €31 billion in health costs and lost productivity each year."

HEAL is calling for all EU laws to be overhauled to reduce people's exposures to EDCs. The EU should also set out a specific timetable by which EDCs must be identified and substituted for safer alternatives.

"A year ago, we were expecting the European Commission to propose a package of EDC policies, including a new strategy for tackling EDCs. We were also expecting a proposal for identification criteria so that the EU pesticide and biocide laws which prohibit EDCs could begin to work. We are still waiting for the package.

As the science about the negative health impacts of EDCs continues to mount, some EU countries are moving ahead in restricting these hormone disrupting chemicals. Sweden is legally challenging the Commission's delay. France is also pushing for urgent action. Following the announcement of its own national strategy on EDCs, the French delegation at the Council of Ministers meeting last week drew attention to the risks posed by EDCs – a move that was supported by five other countries. (7) So long as real action on exposure reduction is delayed, people continue to pay the bill with unnecessary ill-health," Ms Jensen concludes.

The EU has already taken some limited regulatory action on EDCs on a precautionary basis. For example, EU law has prohibited BPA in the plastic feeding bottles for babies since 2011, and some European countries have installed other national restrictions on EDCs.

Where regulatory action to protect or improve health has been taken in the past - even if there was not 100% scientific proof of harm - hindsight and further science has shown it to be justified. (8) Examples include early controls on smoking, which were introduced before scientists were able to give a biological explanation of the causal link.

## Notes

1. Health costs in the EU: How much is related to Endocrine Disrupting Chemicals? **Direct link to report:** <a href="http://www.env-">http://www.env-</a>

health.org/IMG/pdf/18062014\_final\_health\_costs\_in\_the\_european\_union\_how\_much\_is\_realted\_to\_edcs.pdf

**Webpage link:** <a href="http://www.env-health.org/news/latest-news/article/health-costs-in-the-eu-how-much-is">http://www.env-health.org/news/latest-news/article/health-costs-in-the-eu-how-much-is</a>

2. Berlaymont Declaration (2013) signed by 89 scientists, <a href="http://www.env-health.org/resources/press-releases/article/heal-responds-to-berlaymont">http://www.env-health.org/resources/press-releases/article/heal-responds-to-berlaymont</a>

3. Cost estimates of endocrine-related diseases and conditions by country from technical report by Dr Alistair Hunt of University of Bath and Dr Julia Ferguson, Visiting Fellow at the UK's Cranfield School of Management

	Table to the total and the total
0	Technical report
Country	figures: Total
	costs
A	(€ Millions)
Austria	10,804
Belgium	14,083
Bulgaria	9,063
Croatia	5,212
Cyprus	1,213
Czech	
Republic	13,381
Denmark	7,051
Estonia	183
Finland	6,972
France	82,634
Germany	101,714
Greece	14,038
Hungary	12,612
Ireland	5,772
Italy	75,452
Latvia	2,558
Lithuania	3,808
Luxembourg	653
Malta	510
Netherlands	21,141
Poland	48,638
Portugal	13,367
Romania	25,070
Slovak	-,
Republic	6,327
Slovenia	2,554
Spain	58,914
Sweden	12,125
UK	80,641
Total	636,500
	123,000
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Cost estimates of possible EDC-related contribution to endocrine-related diseases and conditions by country by HEAL estimate

County	HEAL figures for 5% contribution to costs of endocrine related diseases that may be the result of exposure to EDCs. HEAL estimates (€ millions)
Austria	540.20
Belgium	704.15
Bulgaria	453.15
Croatia	260.60
Cyprus	60.65
Czech Republic	669.05
Denmark	352.55
Estonia	9.15
Finland	348.60
France	4,131.70
Germany	5,085.70
Greece	701.90
Hungary	630.60
Ireland	288.60
Italy	3,772.60
Latvia	127.90

Lithuania	190.40
Luxembourg	32.65
Malta	25.95
Netherlands	1,057.05
Poland	2,431.90
Portugal	668.35
Romania	1,253.50
Slovak Republic	316.35
Slovenia	127.70
Spain	2,945.70
Sweden	606.25
UK	4,032.05
Total	31,825.00

- 4. Prüss-Ustün et al. 2011, "Knowns and unknowns on burden of disease due to chemicals: a systematic review", *Environmental Health* 2011, **10**:9. http://www.ehjournal.net/content/10/1/9
- 5. No-one knows exactly what contribution EDC exposure makes to the overall costs of the chronic diseases covered. Trasande L, 2014, "Further limiting Bisphenol A in food uses could provide health and economic benefits" available at content.healthaffairs.org/content/early/2014/01/16/hlthaff.2013.0686 put the contributory proportion of BPA exposure from food packaging to child obesity at 1.8%. It therefore seems reasonable to assume that the proportion might be between 2-5%.
- 6. UNEP/WHO (2013) State of the Science of Endocrine Disrupting Chemicals 2012. An assessment of the state of the science of endocrine disruptors prepared by a group of experts for the United Nations Environment Programme and World Health Organization. Edited by Ake Bergman, Jerrold J. Heindel, Susan Jobling, Karen A. Kidd and R. Thomas Zoeller
- 7. Council of Ministers, Press release, 3320th Council meeting, Environment, Luxembourg, 12 June 2014 http://consilium.europa.eu/uedocs/cms\_data/docs/pressdata/en/envir/143188.pdf
- 8. Late Lessons From Early Warnings, Vol I & II. <a href="http://www.eea.europa.eu/publications/late-lessons-2">http://www.eea.europa.eu/publications/late-lessons-2</a>

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The Health and Environment Alliance (HEAL) is a leading European not-for-profit organisation addressing how the environment affects health in the European Union (EU). With the support of more than 65 member organisations, HEAL brings independent expertise and evidence from the health community to different decision-making processes. Our broad alliance represents health professionals, not-for-profit health insurers, doctors, nurses, cancer and asthma groups, citizens, women's groups, youth groups, environmental NGOs, scientists and public health research institutes. Members include international and Europe-wide organisations as well as national and local groups. Website: <a href="https://www.env-health.org">www.env-health.org</a>. Follow HEAL on <a href="facebook">Facebook</a> and Twitter <a href="mailto:QHealthandEnv">QHealthandEnv</a> <a href="mailto:QEDCFree">QEDCFree</a> and <a href="mailto:QCHM\_HEAL">QCHM\_HEAL</a>