
BREXIT: WILL THERE BE IMPLICATIONS FOR BREAST CANCER PREVENTION?

Introduction

The EU has some of the most comprehensive and stringent environmental and public health protections in the world. Consequently, the UK's cosmetics, detergents and farming methods are safer than many countries outside of the EU and there are regulatory mechanisms and institutions that ensure ongoing protection based on scientific evidence. Whilst it is not perfect, EU legislation has helped to reduce public exposure to chemical pollutants linked to breast cancer.

This briefing, outlines how chemicals are currently regulated, what might happen to chemicals regulation as the UK withdraws from the EU, and what impact this could have on breast cancer prevention.

How are chemicals currently regulated?

Regulations

The EU's main chemical law is called REACH (Registration, Evaluation, Restriction and Authorisation of Chemicals), and has been in force since 2007. It aims to protect human health and the environment from the use of chemicals, allow the free movement of substances in the single market, and incentivise innovation in the EU chemicals industry.

REACH requires companies to provide and utilise safety information on chemicals, and provides mechanisms to ban or restrict the use of hazardous chemicals. It applies to both the trade in chemicals and chemical use within products, and has led to the restriction of numerous chemicals linked to breast cancer including BPA and formaldehyde.

There are other EU regulations, linked to REACH, that are also important in chemicals regulation. They include regulations on cosmetics, food contact materials (i.e. food packaging), and pesticides (for further details on some of the most relevant legislation and how they are linked to breast cancer, see Appendix A).

The precautionary principle

The precautionary principle is enshrined in EU (but not in UK) law, and is fundamental to the protection of human health. Under the precautionary principle, if there is evidence that a chemical is hazardous and poses a risk to human health or the environment, then action should be taken to restrict or ban its use. If a consensus develops that it does not pose a risk, then action can be taken to lift those restrictions.

For example, *fenarimol* is a fungicide and a potential endocrine disrupting chemical (EDC) that has been linked to breast cancer.¹ It was assessed under the EU's Plant Protection Products Directive, and while concerns were raised, there was no scientific consensus about the risk it posed to human health. Due to the uncertainty over the extent of the risk posed by *fenarimol*, in 2008 the Commission applied the precautionary principle and restricted its use (Dir 06/134/EC).²

What will happen to chemicals regulation after Brexit?

The Great Repeal Bill

The Government has stated that it will introduce a ['Great Repeal Bill'](#) to convert existing EU law into domestic (UK) law "wherever practical".³ This suggests that everything that currently applies to the UK will continue to do so after we leave the EU.

However, many EU regulations refer to EU definitions, EU institutions or other aspects of EU law which would no longer apply. REACH, for example, refers to the regulating authority: the European Chemicals Agency (ECHA), which would no longer have jurisdiction over the UK. The Secretary of State Department for Environment, Food and Rural Affairs, Andrea Leadsom highlighted some of these challenges when she explained, in October 2016, that two-thirds of the applicable EU environmental law will be able to be converted with some “technical changes”, but that “roughly a third won’t”.⁴

Further legislation will be needed to complete the conversion of EU law into UK law, and to make any changes to the laws that are converted.

Parliamentary scrutiny

It is not yet clear how much Parliamentary scrutiny and debate will be given to any changes that are made in chemicals regulation. The Prime Minister has stated that “any changes in the law will have to be subject to full scrutiny and proper Parliamentary debate”.⁵ However, this may not be possible for all regulations, given the enormous amount of legislation that must go through Parliament. Changes may be made by the Government through secondary legislation, which could allow the Government to make changes to the law without the need for full debate by Parliament.

We need to be sure that any changes to chemicals regulation will not damage public health. Therefore, it is important that any changes are made through primary legislation, so that MPs and Peers can properly scrutinise the Government’s plans.

Will the UK’s withdrawal from Europe affect consumer protections against harmful chemicals?

Whether consumer protections against harmful chemicals are effected by our withdrawal from the EU, depends on what system the UK chooses to put in place after we leave. Currently, the UK has several options:

1) A new separate system of chemicals legislation – ‘BREACH’?

The UK Government has indicated that it is considering the development of a separate, UK-only chemicals regulation system. The Parliamentary Under Secretary of State for the Environment and Rural Life Opportunities, Thérèse Coffey, suggested it might be called ‘BREACH’ (adding the word ‘British’ on to REACH). It is likely that such a system would be based on REACH, but Coffey has indicated that it might deviate from it in some ways, such as authorising the use of some chemicals more quickly.

Whilst authorising chemicals isn’t always a quick process, there are good reasons for this. We need to be sure that a chemical is not going to damage our health or the environment before we allow it to be used. This saves money in the long run; as Harvey Bradshaw, Executive Director of Environment and Business at the Environment Agency, has said: “...once chemicals get into the environment they are very, very expensive indeed to get out.”⁶

A separate UK chemicals regime could increase the costs to businesses if they had to comply with two regulatory systems (REACH and BREACH) – an issue for many businesses whose products may end up in the EU, either through direct export or as components in another product. Breast Cancer UK is concerned that the UK might try to compensate for these extra costs by developing a weaker, less effective regulatory system. This could impact on the safety of the goods on our shelves and the chemicals in our environment.

2) Withdraw from the EU but remain within REACH

The Government has indicated that its preferred outcome from negotiations is a free trade deal between the EU and the UK. Under these circumstances, the UK can leave the EU and still stay within the EU chemicals regulation system – in particular, staying in REACH. This outcome would have to be agreed as a

part of the Brexit negotiations. Breast Cancer UK believe that staying within REACH may be the best way of making more progress to reduce our exposure to chemicals linked to breast cancer.

3) New trade deals

Currently the UK is party to trade deals with other countries through the EU. Once the UK leaves the EU, this may no longer be the case, and the Government may want to secure new trade deals with other countries.

Whilst trade deals are partly about tariffs on goods and services, they are also about agreeing on regulations and standards. This can include regulations that affect the environment and public health, such as chemicals regulation. Many countries outside of the EU have weaker systems of chemicals regulation, so it's possible trade deals with other countries will place pressure on the UK to lower regulatory standards. Breast Cancer UK will be calling for reassurances from the UK Government that it maintains and improves regulatory standards on chemicals regulation if it negotiates trade deals with these countries.

Will Brexit affect our ability to prevent breast cancer?

The system of regulating chemicals determines which chemicals are in our environment – our water, our air, our soil – and which chemicals are in the products on our shelves. Research into how different chemicals can affect our health is ongoing, including for chemicals linked to breast cancer, such as carcinogens and endocrine disrupting chemicals (EDCs). The task of regulating these chemicals is complex but vital in protecting our health and the environment.

The UK's withdrawal from the EU may see us withdrawing from one of the most effective chemical regulation systems in the world. If this withdrawal leads to a situation in which the UK operates a less effective system of regulation, we could have more chemicals in our products and in our environment that pose a risk to our health. This would undermine efforts to prevent breast cancer due to chemical exposure. If the UK does adopt its own chemicals regulation system, it is vital that it is based on the precautionary principle, and prioritises the protection of public health and the environment.

What is Breast Cancer UK calling for?

- The UK to stay in REACH, to protect public health and the environment, while minimising regulatory costs. The UK can leave the EU, but stay within the EU's chemicals regulation system.
- Any changes to EU derived chemicals legislation and regulation following Brexit to be subject to full Parliamentary scrutiny and debate.
- The UK to make the protection of public health, and consumer and environmental regulation a priority in any future trade deals.
- The UK to continue to apply the precautionary principle in the development of health, environmental and chemicals policy.
- A clear plan for transposing and administering all relevant consumer chemical and environmental regulations and ensuring ongoing compatibility with EU regulations.

Appendix A: EU legislation of interest to Breast cancer UK

EU Legislation	What it does	Links to breast cancer
Cosmetics Regulation	Regulates all stages of the development of cosmetics products, from the choice of ingredients to the placing on the market of the product.	Some ingredients used in cosmetics, such as certain parabens and phthalates, may increase breast cancer risk.
Food Contact Materials (FCMs)	Sets out provisions for safety, manufacture, and quality of FCMs. There are also specific rules on some starting substances used to produce FCMs, such as plastics.	Some ingredients used in FCMs have been linked to breast cancer, including a group of chemicals called bisphenols and most notably bisphenol-A (BPA).
Plant Protection Products Regulation and Biocidal Product Regulation	Legislation regulating the placing of pesticides on the market in the EU	Several pesticides with links to breast cancer have been restricted under these regulations. Debate is currently focused on the regulation of glyphosate.
Polluter pays principle	<p>The 'polluter pays' principle is implemented by the Environmental Liability Directive (ELD), which aims to prevent or otherwise remedy environmental damage.</p> <p>Operators of certain activities, such as activities that involve discharging substances into waters, must prevent damage to the environment. If damage has already occurred, they must take measures to remedy it and pay for the costs.</p>	This principle helps reduce the levels of pollution in our environment, and thereby reduces our exposure to chemicals linked to breast cancer.
POPs (Persistent Organic Pollutants)	<p>POPs are chemical substances that persist in the environment because of their resistance to degradation.</p> <p>EU regulations aim to control, and ultimately eliminate the production and use of the internationally recognised POPs.</p>	<p>POPs bioaccumulate through the food chain.</p> <p>POPs include industrial chemicals, such as polychlorinated biphenyls (PCBs), which have been linked to breast cancer.</p>
Precautionary principle	<p>A risk management tool that may be invoked when there is scientific uncertainty about a suspected risk to human health or to the environment emanating from a certain action or policy.</p> <p>For instance, to avoid damage to human health in case of doubt about a potential dangerous effect of a product, it may be</p>	Where there is uncertainty about whether exposure to a chemical could increase the risk of breast cancer, precautionary measures should be taken by regulators.

	<p>banned or restricted if uncertainty persists following scientific evaluation.</p> <p>Such measures must proportionate, and reviewed once more scientific information is available.</p>	
<p>REACH (Registration, Evaluation, Authorisation and Restriction of Chemicals)</p>	<p>The aim of the REACH regulation is to provide better protection for humans and the environment from possible chemical risks and to promote sustainable development.</p> <p>REACH introduced a single system for all chemicals and transferred the burden of proof concerning the risk assessment of substances from public authorities to companies.</p> <p>It calls for the most dangerous chemicals to be substituted by suitable alternatives.</p>	<p>REACH is the main route through which we regulate chemicals, and identify substances that could pose a risk to human health. It is central to reducing exposure to chemicals linked to breast cancer.</p>
<p>Safer detergents</p>	<p>Harmonises the rules on the biodegradability of surfactants, the restrictions and bans on surfactants, the information that manufacturers must provide, and the labelling of detergent ingredients.</p>	<p>It is important that consumers know what ingredients are in detergents, so that they can avoid chemicals such as synthetic musks and phthalates, which have been linked to breast cancer.</p>
<p>Water Framework Directive (WFD)</p>	<p>The WFD establishes a framework for the protection of inland surface waters, transitional waters, coastal waters and groundwater, to prevent and reduce pollution, promote sustainable water use, protect the aquatic environment, improve the status of aquatic ecosystems and mitigate the effects of floods and droughts.</p>	<p>Chemicals linked to breast cancer can find their way into our waters, for example through pesticide run-off or through sewage. We can be exposed to these chemicals through water that we drink or swim in.</p>

¹ Vinggaard, Anne Marie; Breinholt, Vibeke; Larsen, John Christian (1999). 'Screening of selected pesticides for oestrogen receptor activation in vitro'. Food Additives and Contaminants.' 16 (12): 533–542.

<http://www.tandfonline.com/doi/abs/10.1080/026520399283678>

² European Commission, EU Pesticides Database: Fenarimol <http://ec.europa.eu/food/plant/pesticides/eu-pesticides-database/public/?event=activesubstance.detail&language=EN&selectedID=1331> [Accessed 21/04/2017]

³ Gov.uk, 'Government announces end of European Communities Act', 2 October 2016 [Accessed 21/04/2017]

⁴ [Environmental Audit Committee Oral evidence: The Future of the Natural Environment after the EU Referendum](#), HC 599, 25 October 2016

⁵ Conservatives.com, 'Prime Minister: Britain after Brexit: A Vision of a Global Britain'
<http://press.conservatives.com/post/151239411635/prime-minister-britain-after-brexit-a-vision-of> [Accessed 21/04/2017]

⁶ [Environmental Audit Committee Oral evidence: Oral evidence: The Future of Chemicals Regulation after the EU Referendum](#), HC 912, 7 March 2017