BC Breast Cancer UK UK Preventing breast cancer

Breast Cancer UK comments on the proposal to identify bisphenol A as a substance of very high concern (SVHC) meeting the criteria of Article 57 (c) of Regulation (EC) No 1907/2006 (REACH) owing to its classification in the hazard class reproductive toxicity category 1B

Submitted to the European Chemicals Agency (ECHA), 21/10/16

Breast Cancer UK is a charity which aims to prevent breast cancer by reducing public exposure to carcinogenic and other hazardous chemicals in the environment. We are especially concerned about the potential role of exposures to environmental chemicals such as bisphenol A (BPA) - especially *in utero* - in increasing breast cancer risk. We welcome the opportunity to comment on the proposal to identify BPA as a substance of very high concern (SVHC), in relation to its reproductive toxicity, which we support fully. We also support its identification as an SVHC based on its endocrine disrupting properties under Article 57 (f), and will submit a more detailed comment which considers its ED effects, in a separate consultation response.

The report provides strong evidence that BPA should be classified as a SVHC, based on its classification as a reproductive toxicant, on the basis of effects on female reproductive capacity, on female reproductive organs and male reproductive organs as outlined in the RAC opinion written in 2014. Since then California's Office of Environmental Health Hazard Assessment has added bisphenol A to the Proposition 65 list of chemicals, known to the state to cause reproductive toxicity and there has been numerous studies and review articles which support further this classification (e.g. see reviews¹,²). Numerous studies have shown that low-dose BPA exposure during pregnancy has multigenerational consequences. It can increase the likelihood of chromosomal abnormalities leading to miscarriages, death soon after birth or chromosomal abnormalities. Breast Cancer UK are especially concerned that early exposures may induce or predispose humans to an increased risk of breast cancer, and other cancers³.

Like many other organisations, scientific bodies and scientists, Breast Cancer UK believe exposure to BPA may be impacting human fertility⁴. BPA is widespread in the environment and is routinely found in freshwater, seawater and landfill leachates. It has been detected in human urine, blood, amniotic fluid, breast milk, fat tissue and the placenta⁵.

Classification of BPA as a SVHC will help reduce environmental exposures to humans.

Dr Margaret Wexler Science policy officer, Breast Cancer UK <u>margaret.wexler@breastcanceruk.org.uk</u> <u>http://www.breastcanceruk.org.uk/</u> Reg. Charity No: 1138866 | Reg. Company No. 7348408 ⁴ UNEP/WHO (2013). State of the science of endocrine disrupting chemicals 2012. Table 3.1, p190. http://www.unep.org/hazardoussubstances/Portals/9/EDC/StateOfEDCScience.pdf

¹ Ziv-Gal, A. & Flaws, J. A. (2016). Endocrine disrupting chemicals: female and male reproduction: Evidence for bisphenol A-induced female infertility: a review (2007–2016). Fertility and Sterility 106(4): 827-856.

² Srivastav, S et al. (2015). Bisphenol A: A Threat to Human Health? Journal of Environmental Health 77(6): 20-26.

³ Seachrist, D. D. et al. (2016). Title: A Review of the Carcinogenic Potential of Bisphenol A. Reproductive Toxicology 59: 167-182.

⁵ Vandenberg, L. N. et al. (2010). Urinary, Circulating, and Tissue Biomonitoring Studies Indicate Widespread Exposure to Bisphenol A. Environmental Health Perspectives 118 (8): 1055-1070.