
Andrea Leadsom MP
Secretary of State for Environment, Food and Rural Affairs
Defra
Nobel House
17 Smith Square
London
SW1P 3JR

01 September 2016

Dear Ms. Leadsom,

On behalf of Breast Cancer UK, I would like to congratulate you on your recent appointment as Secretary of State for Environment, Food and Rural Affairs and to introduce you to the work of Breast Cancer UK.

Breast Cancer UK works on the primary prevention of breast cancer, including environmental and chemical risk factors. Studies suggest that our environment is a key factor in breast cancer risk. Exposure to harmful chemicals from air pollution, plastic pollution and our over reliance on synthetic chemicals in every day products could be contributing to the rising incidence rates for breast cancer (which have risen year on year for the last 5 decades¹.)

For example, a recent report from the Royal College of Physicians and the Royal College of Paediatrics and Child Health estimates that air pollution from particulates and NO₂ contributes to the premature death of 40,000 people in the UK each year.² Several air pollutants, including NO₂, are designated carcinogens and have been linked to an increased risk of developing breast cancer. Other research^{3 4}, acknowledged by Defra⁵, focuses on pollution from microplastics. These tiny particles of plastic can contain known carcinogens

¹ Cancer Registration Statistics, England: 2014:

<http://www.ons.gov.uk/peoplepopulationandcommunity/healthandsocialcare/conditionsanddiseases/datasets/cancerregistrationstatistics/cancerregistrationstatisticsengland>

² The Royal College of Physicians and the Royal College of Paediatrics and Child Health. 'Every breath we take: the lifelong impact of air pollution'. February 2016.

³ Dris, Rachid, Johnny Gasperi, Vincent Rocher, Mohamed Saad, Nicolas Renault, and Bruno Tassin, "Microplastic Contamination In An Urban Area: A Case Study In Greater Paris", Environ. Chem., 12 (2015), 592 <http://dx.doi.org/10.1071/en14167>

⁴ Dris, Rachid, Johnny Gasperi, Mohamed Saad, Cécile Mirande, and Bruno Tassin, "Synthetic Fibers In Atmospheric Fallout: A Source Of Microplastics In The Environment?", Marine Pollution Bulletin, 104 (2016), 290-293 <http://dx.doi.org/10.1016/j.marpolbul.2016.01.006>

⁵ Written evidence submitted by Defra to the Environmental Audit Committee's environmental impact of microplastics inquiry, 26 April 2016

such as vinyl chloride and styrene, and hormone disrupting chemicals, such as bisphenol A, that have implications for hormonal cancers such as breast cancer.^{6 7}

DEFRA has a crucial role to play in helping to protect our environment, but by implication have an important role to play in protecting our health - especially in relation to diseases like cancer.

Therefore, once you have had a chance to settle in to your new role, perhaps we could meet to discuss what measures could be put in place to help reduce the number of harmful pollutants in our environment that could be contributing to the rise of diseases like breast cancer. It would also be useful to get your assessment of the environmental implications of the UK's eventual withdrawal from the EU. Specifically, in respect to the body of EU Regulations that currently protect UK citizens from chemicals that have been linked to breast cancer.

I look forward to hearing from you.

Yours sincerely,



Lynn Ladbrook
Chief Executive

⁶ Brandt-Rauf PW, Li Y, Long C, Monaco R, Kovvali G, Marion MJ. Plastics and carcinogenesis: The example of vinyl chloride. *J Carcinog* 2012;11:5

⁷ J. Huff and P. F. Infante, "Styrene Exposure And Risk Of Cancer", *Mutagenesis*, 26 (2011), 583-584