



WHITEHALL MUST URGENTLY FUND RESEARCH ON PLASTIC HEALTH IMPACT

We breathe in, drink and eat plastic particles every day. However, little research has been conducted to fully establish what risk this poses to human health.

When plastic gets into the body, it can spread. Particles emitted from plastic prosthetic implants have been found in human organs like the liver, spleen and placenta^{i,ii,iii}. Research has also shown how plastic particles may harm our immune system^{iv, v}.

Similarly, the presence of particles that the body can't break down, including from micro- and nano-plastic pollution, is associated with chronic disease including diabetes, cardiovascular and respiratory diseases^{vi,vii}.

Over the next 20 years, £1.6 trillion will be invested in plastic production, doubling the amount generated, tripling the amount flowing into our ocean and significantly increasing all our exposure to plastic^{viii}.

New clinical research on plastic and health is urgently required but is chronically underfunded. The UK Government is perfectly placed to change that.

This year Whitehall announced its commitment to making Britain a world leader in research and development across health, life sciences and manufacturing, by boosting total Government investment in R&D to some £15 billion in 2021/22.

Part of this budget must be ringfenced to urgently understand how increasing exposure to plastic particles affects human health. That's why today we're joining [Common Seas](#) in calling on the Government to rapidly introduce a new £15 million National Plastic Health Impact Research Fund.

For a commitment of just 0.1 percent of the UK's total Government R&D spend, Whitehall could transform humankind's understanding of what is set to become one of the most profound public health challenges in generations.

ⁱ Wright and Kelly, 2017. Plastic and human health: a micro issue? *Environmental science & technology*, 51(12), pp.6634-6647.

ⁱⁱ Ragusa et al, 2021. Plasticenta: First evidence of microplastics in human placenta. *Environment International*, 146, p.106274.

ⁱⁱⁱ van Haasterecht et al 2020. Label-free Stimulated Raman Scattering imaging reveals silicone breast implant material in tissue. *Journal of biophotonics*.

^{iv} Gopinath et al, 2019. Assessment on interactive prospectives of nanoplastics with plasma proteins and the toxicological impacts of virgin, coronated and environmentally released-nanoplastics. *Scientific reports*, 9(1), pp.1-15.

^v Hirt & Body-Malapel, 2020. Immunotoxicity and intestinal effects of nano- and microplastics: a review of the literature. *Particle and Fibre Toxicology*, 17(57).

^{vi} World Health Organization, 2018. *World health statistics 2018: monitoring health for the SDGs, sustainable development goals*. Geneva. ISBN 978-92-4-156558-5

^{vii} Landrigan et al. 2018. The Lancet Commission on pollution and health. *Lancet*. 2018; 391:462–512. doi: 10.1016/S0140-6736(17)32345-0.



SIGNATORIES:

Professor Susan Jobling, Professor of Environmental Toxicology, Director of the Institute of Environment, Health and Societies, Brunel University, UK

Professor Tamara Galloway, Professor of Ecotoxicology at The University of Exeter

Dr Stephanie Wright, Lecturer in Environmental Toxicology, Faculty of Medicine, School of Public Health, at Imperial College London

Professor Simon Capewell, Professor of Clinical Epidemiology at University of Liverpool

Professor Ruth Jepson, Professor of Public Health in Social Science; Director of Scottish Collaboration for Public Health and Policy

John Sauven, Executive Director of Greenpeace UK

Miriam Turner, Co-Executive Director of Friends of the Earth

Katie White, Executive Director of Advocacy and Campaigns at WWF-UK

Nicky Amos, Chair of the Public Affairs Committee, National Federation of Women's Institutes

Henry Smith, Conservative MP for Crawley

Mick Whitley, Labour MP for Birkenhead

Rt Hon Alistair Carmichael, Liberal Democrat MP for Orkney and Shetland

Ian Paisley Jr, Democratic Unionist Party MP for North Antrim

Claire Hanna, Social Democratic & Labour Party MP for Belfast South

Monica Lennon, Scottish Labour MSP for Central Scotland

Mohammad Yasin, Labour MP for Bedford

Rosie Cooper, Labour MP for West Lancashire

Andrew Gwynne, Labour MP for Denton and Reddish

Kenny MacAskill, Alba Party MP for East Lothian



Claudia Webbe, Independent MP for Leicester East

Baroness Bakewell of Hardington Mandeville

Pauline McNeill, Scottish Labour and Co-operative MSP for Glasgow Region

Ben Bradshaw, Labour MP for Exeter

Kenneth Gibson, Scottish National Party MSP for Cunninghame North

Mark Rose, Chief Executive Officer of Flora & Fauna International

Sandy Luk, Chief Executive Officer of the Marine Conservation Society

Mary Rice, Executive Director, Environmental Investigation Agency

James Thornton, Chief Executive Officer, ClientEarth

Hugo Tagholm, Chief Executive of Surfers Against Sewage

Rt Hon Lord Beith

Lord Jones of Cheltenham

Lord Rooker

Baroness Meacher

Tommy Sheppard, Scottish National Party MP for Edinburgh East

Lord Knight of Weymouth

Baroness Cox

Baroness Royall of Blaisdon

Baroness Harris of Richmond

Lord Wigley

Baroness Masham of Ilton

Angela Crawley, Scottish National Party MP for Lanark and Hamilton East



Eleonora Evi, Group of the Greens/European Free Alliance MEP for Italy

Baroness Healy of Primrose Hill

Lord Haworth

Professor James Mair, Professor of Marine Biology at Heriot-Watt University

Dr Kylie Baldwin, Senior Lecturer in Medical Sociology at De Montfort University

Miguel Barbosa, Associate Lecturer, Centre for Biological Diversity, University of St Andrews

Professor Antonio Ragusa, Head of the obstetrics and gynaecology, Fatebenefratelli Hospital Isola Tiberina, Rome

Professor Dr. Elvira Mass, Developmental Biology of the Immune System, Life & Medical Sciences Institute (LIMES), University of Bonn

Professor Dick Vethaak, Environmental health and ecotoxicology scientist

Ast. Professor Chelsea Rochman, Department of Ecology and Evolutionary Biology, University of Toronto.

Professor Laura Depero, Head of Chem4Tech Lab, University of Brescia, Italy

Sian Sutherland, Co-Founder of A Plastic Planet

Kate Metcalf, Co-director, WEN (Women's Environmental Network)

Lorraine Platt, Founder of Conservative Animal Welfare Foundation

Ian Campbell, Associate Director of Policy and Campaigns at PADI AWARE

Richard Ballantyne Chief Executive, British Ports Association

Pierre Paslier, Co-Founder & Co-Chief Executive Officer at Notpla

Dominic Dyer, Wildlife Protection & Animal Welfare Campaigner

Mindy Byrns O'Brien, Co-ordinator at VOICE of Irish Concern for the Environment

Saasha Celestial-One, Co-founder of Olio

Juliet Gellatley, Founder and Director of Viva



Dhruv Boruah, Founder at Borah Foundation

James Banks, Head of External Relations at AECOM

Duncan O'Brien, Founder of Dalstons Soda

David Noble, Communications Director of Bluewater

David Gordon, Founder of Bamboo Clothing

Paul Sng, Filmmaker

Natalie Fee, Founder of City to Sea

Antoinette Vermilye, Co-Founder of the Gallifrey Foundation

David Azoulay, Managing Attorney the Director of CIEL's Environmental Health Program

Maria Westerbos, Founder & Director of Plastic Soup Foundation

Delphine Levi Alvares, European Coordinator, Break Free From Plastic and Rethink Plastic Alliance

Muriel Papin, Founder of No Plastic in My Sea

Marko Košak, Waste Programme Coordinator, Zelena Akcija / FoE Croatia

Sarah Dunlop, Director, Plastics and Human Health, Minderoo Foundation

Matt Prindiville, CEO at UPSTREAM

Jo Royle, Founder and CEO of Common Seas