

Better homes, better air, better health



In 2016, both the RCP & RCPCH working party report [Every breath we take](#) and The Bonfield Review [Each home counts](#) recommended taking action to tackle poor indoor air quality. Later this year, NICE will publish guidance on Outdoor Air Quality and are developing guidelines on [Indoor Air Quality](#).

Given the numerous calls to action to tackle both indoor air pollution in homes, and exposure from external air pollution, we are bringing the built environment and medical research and practice communities together. We'll review the evidence and establish recommendations for research, development and application of solutions to reduce exposure to indoor air pollution in existing and planned housing stock.

Our event aims to encourage industry and research leaders to think about, and inform the action group's brief of, solutions for reducing exposure to air pollution when indoors:

- what solutions can be enacted now?
- what solutions do we potentially have, but do not yet know enough about? and
- what knowledge gaps do we have that need research and innovation effort?

Programme

Please note: Sessions one to three are Chatham House rules.

- 09:00** Registration & refreshments
- 09:30** Chair's welcome & housekeeping
- 09:35** **Host's welcome**
Professor Jonathan Grigg, RCPCH
- 09:40** **Launch of the action group for tackling indoor air pollution in homes**
Professor Stephen Holgate
- 09:50** **Each home counts**
Peter Bonfield, CEO of BRE

10:00 Session one: Setting the scene – Poor indoor air quality, the health impact and the solutions available now

Professor Jonathan Grigg, Queen Mary University of London

Dr Marcella Ucci, Chair of the UK Indoor Environments Group & University College London

Dr Andy Dengel, Director, BRE Environment

Q&A

10:30 Session two: The impacts of air pollution outside on the breathed environment indoors

Dr Gary Fuller, King's College London

Prof Martin Williams, King's College London

Dr Ben Jones, University of Nottingham

Table discussion and work. Each table will identify :

- what solutions can be enacted now,
- what solutions we potentially have but don't know enough about and
- what knowledge gaps do we have that need research and innovation effort.

11:15 Coffee break

11:30 Session three: The breathed environment indoors

Dr Paul Harrison, IEH Consulting

Dr Sani Dimitroulopoulou, Public Health England

Colin King, Director of BRE Wales

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12:15 Establishing the brief for the Working Party – open to the press

Welcome and overview from Professor Stephen Holgate

Professor Paul Linden, University of Cambridge

New engineering solutions for environmental control of the urban environment

- Reporting back from Sessions one to three – table chairs
- Discussion about the priorities for a Working party and other activities for the action group
- First pledges of support announced for the action group

13:00 Lunch

14:00 Event close

www.arcc-network.org.uk/better-air

About the speakers

(In order of place in the programme)

Professor Stephen Holgate CBE

Chair of the Royal College of Physicians working party which published the report Every breath we take: the lifelong impact of air pollution in 2016. Professor Holgate is the Medical Research Council Clinical Professor of Immunopharmacology and Honorary Consultant Physician within Medicine at the University of Southampton. His current research focuses on stratified medicine, the role of the epithelium in orchestrating asthma and the evolution of asthma across the lifecourse.

Dr Peter Bonfield, CEO of BRE and author of the independent Bonfield review

The Bonfield Review 'Each Home Counts' was published in 2016. Dr Peter Bonfield joined BRE as a research scientist in 1992 and became Chief Executive Officer of the BRE Group of companies in January 2012. Peter is also Chairman of the Health, Safety and Environment committee for AIRTO – the Association for Independent Research and Technology Organisations. He is a Vice President and Trustee of the Institution of Engineering and Technology and is a Fellow of Institution of Civil Engineers, Institution of Engineering and Technology, Institute of Materials, Minerals and Mining and the Chartered Institute of Building.

Professor Jonathan Grigg, Queen Mary University of London

Professor Grigg is a Professor of Paediatric Respiratory and Environmental Medicine. He was vice chair of the RCP/RCPCH working party on the long term effects of air pollution and is a member of the committee of the medical effects of air pollutants (COMEAP).

Dr Marcella Ucci, Chair of the UK Indoor Environments Group (UKIEG) & University College London

UKIEG is a multidisciplinary network for UK activity concerned with indoor environments, health and well-being. Dr Ucci's expertise includes building monitoring and modelling, health impact of buildings (especially biological such as dust mites), application of epidemiological methods to built environment studies, and operational aspect of buildings – especially occupant behaviour.

Dr Andy Dengel, Director, BRE Environment

Andy joined BRE in 2006, and currently leads the Indoor Air Quality (IAQ) team, along with those dealing with air pollution, lighting and HVAC engineering. Andy also leads BRE's research and consultancy activities on the physical monitoring of indoor environments.

Dr Gary Fuller, King's College London

Dr Fuller is an air pollution scientist in the Environmental Research Group at King's College London. His research focuses on the sources of urban air pollution, particularly PM10, and how these affect people's health. He has led the development of the London Air quality Network, now the largest urban network in Europe. Dr Fuller is a member of the MRC-PHE Centre for Environment and Health and the National Institute for Health Research Health Protection Research Unit in Health Impact of Environmental Hazards.

Professor Martin Williams, King's College London

Professor Williams' research focuses on the relationship between air quality and health, and on the linkages between air quality and climate change. He also chairs the Executive Body of the UNECE Convention on Long Range Transboundary Air Pollution, and chairs the Modelling Review Steering Group for Defra.

Dr Ben Jones, University of Nottingham

Dr Jones' work focuses on measurement, analytical, and modelling approaches to the indoor environment in order to create a low-carbon and healthy building stock. He is currently investigating the infiltration of air into UK housing stock, the energy required to heat that air, and examining fine particles emitted during home cooking and methods of reducing exposure to them. Dr Jones is a UK representative on the board of the Air Infiltration and Ventilation Centre, and the secretary of the Chartered Institution of Building Services Engineers Natural Ventilation Group.

Professor Paul Harrison

Independent consultant toxicologist and Director of IEH Consulting Ltd. Prof Harrison chaired the EU Working Group on 'Lowest Concentration of Interest', developing a system establishing limits for acceptable level of emissions of hazardous substances from building products. He was a co-author of the recent RCP/RCPCH report "Every breath we take".

Dr Sani Dimitroulopoulou, Public Health England

Dr Sani Dimitroulopoulou is a Senior Environmental Scientist within the Environmental Change Department at PHE's Centre for Radiation, Chemical and Environmental Hazards. She has expertise on indoor and outdoor air quality, ventilation and population exposure. She represents PHE as the policy lead in the Cross Government Group on Gas Safety and Carbon Monoxide Awareness (COCGG) and she is the Secretary of the UK Indoor Environments Group and Member of the British Standards Committee on Indoor Air Quality.

Colin King, Director of BRE Wales

One of the UKs foremost experts on refurbishment with key responsibilities at BRE of being the lead officer on retrofit, refurbishment and Hygrothermal performance of Buildings. He sits on numerous technical groups including the DECC Moisture Advisory Group, DCLG Part C, currently delivering Welsh Government revisions to Part A, B and C of the Building Regulations, and BRE member of the UKCMB (UK Centre for Moisture in Buildings).

Professor Paul Linden, University of Cambridge

Principle Investigator and Project Lead for the MAGIC project and Director of the Cambridge Forum for Sustainability and the Environment. Paul's research focuses on environmental fluid mechanics. The Environmental and Industrial Fluid Dynamics group at the University of Cambridge conducts experimental and theoretical research on problems associated with our environment and the processes that affect and are impacted by climate change.

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