

Better homes, better air, better health



[#airquality](#)

[@ARCC_CN](#)

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Context

RCP & RCPCH

Bonfield Review

UKIEG workshop

NICE guidelines:

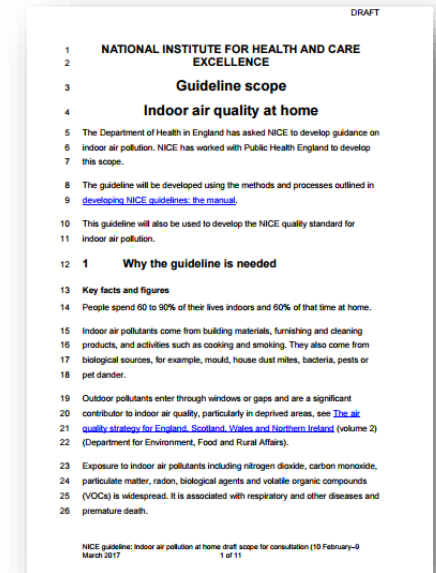
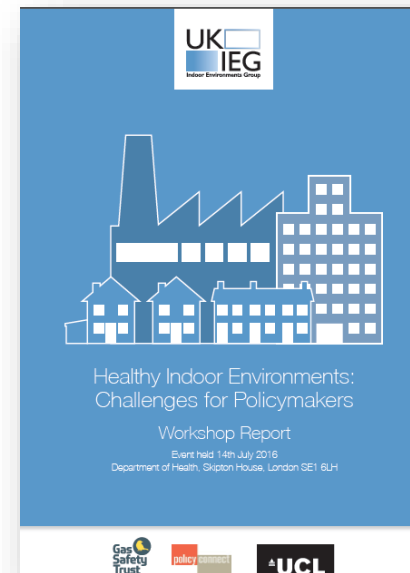
Published 2016

Published 2016

Event held 2016

Outdoor - imminent

Due to be published 2017 Indoor - due 2019



Recommendations

- Proactive clear communication to the public
 - “How to live, how to build, how to ventilate”. Suggestion that the scale of the national campaign needs to be the indoor air equivalent of the litter message.
- Making “normal” better, not just the (means accessible) options for home improvement
- Improve compliance and enforcement
- Define the economic impact of poor indoor air quality and the health benefits of healthy homes.
- Identify solutions to help tackle and reduce indoor-generated air pollution
- Strengthen understanding of the relationship between indoor air pollution, exposure and health impacts. Areas raised for future research included:
 - robust, longitudinal, shared Indoor Air Quality profiles, associated health consequences and datasets across the national housing stock
 - Identify from the long list of indoor air pollutants which are the most significant in health impacts across the entire life-course.



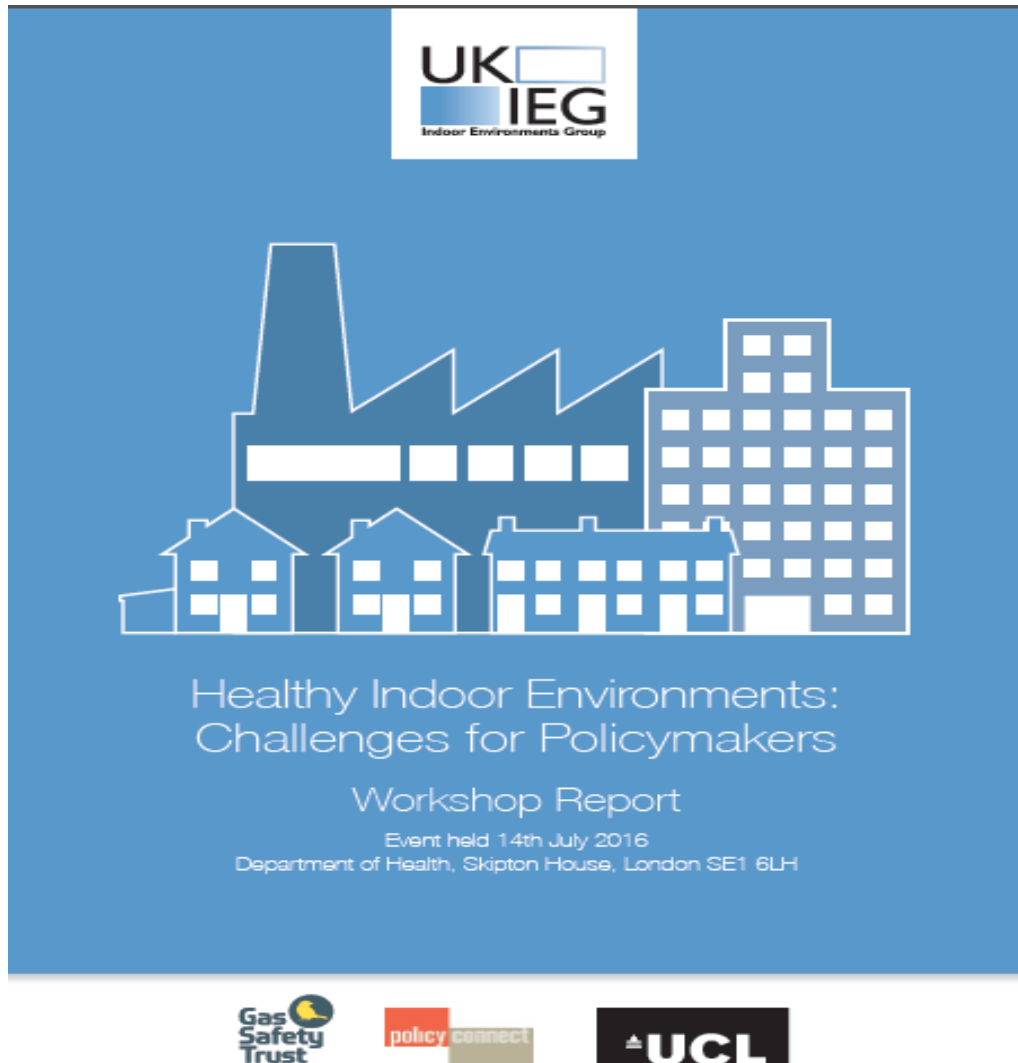
www.arcc-network.org.uk/better-air

*Note that the recommendations are not comprehensive. They are, in part, a reflection of the expertise amongst those that presented and took part in the event.

Ideas put forward during discussion and through submitted idea slips	Policy	Industry	Research
Household product labelling (of low emitting products)	✓	✓	
IAQ audit and grading for homes being bought/sold –incorporated into energy efficiency scoring system – could include option for Indoor Environmental Quality audit based on data collected over a period of a week (including IAQ and noise)	✓		
IAQ directory of solutions for healthy homes (updatable) for consumers and trade (that makes available latest research findings on health impacts and effectiveness of solutions)	✓	✓	✓
New hybrid market products and innovate existing home based financial and warranty mechanisms e.g. health-home insurance (encourage delivery of), building insurance & mortgages that reward and incentivise improvements to indoor air quality	✓	✓	
Testing of current and emerging technological solutions e.g. cooker hood cover extraction, air filters, hybrid ventilation solutions, smart windows, sensor based IAQ household awareness systems		✓	✓
Ensure effective compliance with existing regulation on ventilation (Part F)	✓		
Standards - BREXIT & Part F Update Approved Document F –provide better advice on air inlets to mitigate against pollution ingress EU developments in the Energy Performance of Buildings Directive –seek to transfer good practice related to IAQ	✓		
Support cross-government approach - support positive changes (courage in government) to tackle outdoor air quality control at all levels e.g. public transport and changes in energy mixes, particularly addressing concerns raised about increased uptake of biomass	✓		
Inventory of indoor pollutants -& IAQ metric development -health thresholds pollutant hierarchy –prioritised according to known health impact – might require inventory of biological, physiological and mental effects associated with each pollutant or class of pollutant.	✓		✓
Certification & professional bodies -IAQ integration into building management systems		✓	✓
Public health messaging and awareness raising- clear, consistent, simple, well researched, robust advice for households on improving air quality in current homes , contextualise effects in relation to other health risks & integration of IAQ awareness into the national curriculum	✓		
Research required: In-situ IAQ monitoring, (longitudinal studies and real-time monitoring across British housing stock types) pollution ingress and solutions, indoor-outdoor pollution-building interface, health effects of poor IAQ across life-course (new longitudinal young cohort study of individuals at risk of developing respiratory illness), health and cognitive effects of indoor pollutant exposure , actual ventilation rates for existing buildings pre and post retrofit, encourage material science focus on improvements to IAQ, need to understand health impact of multi-exposures	(✓)		✓

Points for consideration raised by Prof Grigg

- consider excess heat as a pollutant
 - mitigating the urban heat island important for indoor air quality
- separate homes and sources
 - place more emphasis on assessment of the surrounding urban design's effect on ability of a home to be ventilated naturally



Recognising the cross-cutting nature of healthy indoor environments, and the significant challenge in achieving policy coordination, the UKIEG - with support from the Gas Safety Trust, Policy Connect and Professor the Baroness Finlay of Llandaff – organised a one-day workshop, held in London on 14th July 2016. The meeting brought together 15 attendees from different government departments, agencies, All Party Parliamentary Groups and sponsor organisations. The discussion addressed:

- issues and priorities from the perspectives of different government departments and agencies;
- opportunities and challenges presented in addressing this issue;
- whether better coordination might be required and, if so, how this could be achieved.

The [full workshop report](#) has been launched at the 2017 UKIEG Conference in Glasgow (26 April 2017).

A [summary briefing](#) of this report was presented at an event organised by the [All Party Parliamentary Group on Healthy Homes and Buildings](#) held on the 4th July 2017.

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www.ukieg.org

UKIEG Policy Workshop Report

Some Key Conclusions and Recommendations

- Importance of considering cross-cutting themes, synergies and unintended consequences.
- A holistic approach to addressing healthy indoor environments will require cross government working and local authority involvement.
- A lead Government Department should be designated to head up development of national strategy and policy, and co-ordinate cross-government department work on the issue of health and wellbeing in the indoor environment.
- Research in this area is needed (e.g. indoor exposures) – multidisciplinary nature does not readily fit in Research Councils structures.

Next Steps from the Better homes, better air, better health event:

- Encourage a commensurate approach - on average the proportion of the average person's time is 92% indoors, 8% outdoors
- Continue to support evidence based policy making through relevant knowledge exchange networks' brokerage function including [ARCC](#), [HEMAC](#) and [UKIEG](#)
- Support the RCPCH effort to establish a Working Party on the adverse effects of exposure to indoor-generated air pollution on children (in homes and schools)
- Continue to build the community of interest

Next steps –setting up the Working Party

Being led by the RCPCH with the support of RCP and BRE – likely to take 18months, initial meeting in Autumn to scope appropriate Working Party membership with formal meetings commencing in January 2018

From the thoughts voiced at the April event, it is likely the working party will have a focus along the lines of:

- The adverse effects of exposure to indoor air pollution on children. The main aim of the Working Party will be to raise awareness of the issues affecting the health of children exposed to indoor air pollution in homes and schools generated outdoors and indoors.

Working party output –a report similar in style to the ‘Every breath we take’ report

- The Working Party will review evidence of the causes and ways in which indoor-generated air pollution in homes and schools adversely affects the health of children.
- The Working Party will produce a report that makes recommendations to influence the renovation of current housing and school stock, and the planning and building of new homes and schools in order to mitigate risk. Particularly looking at solutions focussed on:
 - improving the health of children
 - attenuating the consequences of exposure in childhood on health effects across the lifecycle.
- The Working Party will also seek to highlight the effects of climate change on this problem.