

Indoor Air Pollution

Stakeholder workshop

Date: 09/01/2017

Location: NICE offices, Manchester

Minutes: Final

Stakeholders present:	
John Kolm-Murray	London Borough of Islington
Paul Harrison	IEH Consulting Ltd
Leigh Greenham	Council of Gas Detection & Environmental Monitoring
Marcella Ucci	UK Indoor Environments Group
Isabella Myers	All Fuels Medical Forum Medical And Healthcare Sub-Group
Adrian McConnell	Gas Safety Trust
Sani Dimitroulopoulou	Public Health England (Topic Adviser)
Tom Woolley	Ecological Design Association NI
Dave Morley	Saint-Gobain
Rajat Gupta	Oxford Brookes University
Karen Galea	Institute of Occupational Medicine
Nicola Carslaw	University of York
Lena Ciric	University College London
Timothy Robinson	Waverton Analytics Limited
Ben Leaman	Calderdale Council
Patrick Saunders	Faculty of Public Health
Hilary Wareing	Improving Performance in Practice
Ian Colbeck	University of Essex
Chris Bielby	Gas Safety Trust

NICE Public Health staff attending the meeting:	
Kay Nolan	Associate Director
Rachel Kettle	Technical Lead
Chris Carmona	Senior Technical Analyst
Stephanie Fernley	Programme Manager
Lesley Owen	Technical Advisor
Jessica Fielding	Public Involvement Advisor
Toni Shaw	Information Specialist
Jenny Mills	Project Manager
Rukshana Begum	Project Coordinator

NICE staff observing the meeting:

Mark Rasburn	Public Involvement Advisor
Ruth Du Plessis	Public Health Registrar

1. Welcome, introductions and the aims of the day

The Chair welcomed the attendees and gave an outline of the workshop. The Chair encouraged a full and open discussion during the meeting.

The Chair informed the attendee's that NICE has worked with Public Health England in developing the draft scope of this guideline.

Stephanie Fernley (SF) provided a short presentation on what NICE guidelines are and how they are developed.

2. Role of the Committee

Chris Carmona (CC) and Rachel Kettle (RK) gave a short presentation on the need for the guideline and the role of the Committee.

RK noted that the scope would not cover outdoor air pollution as there is currently a guideline in development in this area which is out for public consultation.

3. Public Involvement Programme

Jessica Fielding (JF) gave a short presentation on the role of the Public Involvement Programme.

4. Presentation of the scope and key discussion areas

CC presented an overview of the topic including the proposed scope, the groups and settings that will be covered and provided the context for the questions (appendix A) that would be discussed by the group.

Stakeholders highlighted some initial key points that required further discussion during the next section.

Stakeholders noted that indoor air pollution has been a neglected area for years and this is a great opportunity to get this issue heard.

5. Group discussion

Prior to discussion on the draft scope, stakeholders commented that indoor air pollution is a new area of health for many statutory, voluntary and private organisations. For this reason and because of funding restraints, there are barriers

to engaging organisations around recognising the health impacts of indoor air pollution, in particular local authorities.

See appendix 1 for the questions discussed at the workshop

Question 1:

Stakeholders agreed with the populations included in the draft scope except for local authority 'planning', which was agreed to be ambiguous. It was requested that the following to be added/ amended:

- Local authority staff working in building planning and building control
- Building product and consumer product manufacturers
- Private rented sector landlords
- Facilities/ estates and care home managers
- Quantity surveyors and structural engineers

Stakeholders queried whether this guideline could also be for policy makers and Government but NICE explained that it is not within our remit to develop guidance for this audience. However, it was noted that NICE would engage with them.

Stakeholders queried whether there is scope to collaborate with certain key organisations to develop guidance. NICE explained that we would not collaborate as such but would engage with them to become stakeholders and encourage them to comment on draft versions of the scope and guideline at consultation.

In terms of the populations most at risk for this guideline, stakeholders suggested including the unborn child.

ACTION: NICE to consider the inclusion of the suggested populations and those most at risk.

Question 2:

Stakeholders agreed with restricting the scope to places where people live but noted that the term 'dwellings' would need some careful definition. Stakeholders also noted some dwelling settings that could also be included as places where people live: mobile homes, university accommodation, boats and prisons.

ACTION: NICE to clearly define the term 'dwelling'.

Stakeholders also agreed with the exclusion of workplaces as these are already subject to regulation and would require a different set of interventions.

Following a stakeholder query, NICE explained that the guideline would be for both existing and new buildings and agreed to make this clearer within the scope.

Question 3:

Stakeholders noted that insulation and the control of pollution sources e.g. heaters, cookers and fires should be added to the list of areas to be covered.

Stakeholders suggested including ventilation not only in the bullet points of 3.3 but also in the heading of point 1 'Interventions to improve the structure of, and materials used in homes'. Stakeholders also felt that the stem of points 1 and 2 in section 3.3 should also be changed from 'improve' to 'alter' or 'change'. This is to indicate that some interventions may not result in an improvement to indoor air quality or improve air quality but to the detriment of other aspects of the internal environment. For example, increasing air tightness of properties may prevent outdoor air pollution from coming into the home but cause other pollutants originating indoors to accumulate.

Stakeholders noted that the use of 'low volatile organic compound (VOC) emissions' will require a clear definition as there are currently issues in setting limits for these emissions.

Stakeholders agreed that damp and mould should be made more explicit throughout the scope as landlords, housing associations and local authorities receive the greatest number of complaints about these issues. They can have a significant potential health impact, particularly for people with chronic respiratory conditions such as asthma.

One stakeholder also suggested that further biological contaminants such as dust mites, bacteria, pests and pet dander should be made clearer in the scope.

It was queried whether pesticides and personal hygiene products were included. The NICE team agreed they would consider including these suggestions.

Stakeholders suggested including noise from mechanical interventions NICE explained that this will be included as an unintended consequence of an intervention when considering outcomes that are reported in the literature.

Stakeholders queried whether advice to healthcare professionals on treatments to patients/ referral for treatment would be included. It was noted that this is a public health guideline which is about prevention and not treatment. However, the NICE team agreed to give this further thought outside of the meeting.

ACTION: NICE to consider the inclusion of suggested areas.

Question 4 and 5:

Stakeholders discussed the exclusion of Environmental tobacco smoke (ETS). A

small number of stakeholders agreed with the exclusion but many considered that this should be included. Those agreeing with the exclusion noted that the area is already covered in other guidelines and believed that it may potentially dominate the guideline. It was noted that the guideline would have a greater impact on other key issues related to indoor air pollution if ETS is not included. There is international consensus that there is no safe level of exposure to ETS. Stakeholders suggested instead including a sentence in the introduction of the guideline to adequately cover ETS.

Stakeholders in favour of including ETS in the scope were concerned that by excluding ETS, vaping would also be excluded. Active and passive vaping is an area where people want more guidance as it is an evolving issue. Stakeholders indicated they would be content if ETS was covered elsewhere in the NICE portfolio rather than in the indoor air pollution scope but emphasized that it needed consideration by NICE. Stakeholders also noted that if prisons were to be included then the drift effect from vaping would also be an issue to consider. NICE agreed to consider the inclusion of ETS and vaping outside of the meeting.

ACTION: NICE to consider the inclusion of ETS and vaping.

Stakeholders suggested that odorisation of dwellings e.g. air fresheners and scented candles should also be included.

Question 6:

Stakeholders suggested that the following outcomes should also be included in the scope:

- Still births and infant mortality
- Endocrinological and neurological health
- Biological metrics
- Ozone
- Carbon dioxide
- Absenteeism from work
- Polycyclic aromatic hydrocarbons
- Disability adjusted life years (DALYS)
- Clarity on 'cost per case avoided'.

ACTION: NICE to consider the inclusion of suggested outcomes.

Question 7:

NICE agreed to email workshop stakeholders asking them of any key research studies they are aware of.

ACTION: NICE to contact the workshop attendees asking them for any key research studies.

Question 8:

Stakeholders noted that people's ability to take advantage of the advice that will be offered in the guideline may have a personal financial impact and this should be acknowledged within the equality impact assessment (EIA). Stakeholders also highlighted a Royal College of Physicians report which concludes that people from less affluent backgrounds may be at increased risk of poorer health outcomes through biological mechanisms.

ACTION: NICE to consider the inclusion of suggested EIA areas.

Question 9:

Stakeholders noted that the following areas should be prioritised:

- VOC from building material
- Damp and mould
- Environmental tobacco smoke
- Carbon monoxide at lower concentration levels (as opposed to acute exposure)

Stakeholders mentioned that the Department for Environment, Food and Rural Affairs (DEFRA) were currently doing some work around lead in paint and lead matter in dust. Stakeholders also noted that NICE should aim to get the biggest public health impact from this guideline.

Question 10:

The group suggested suitable topic expert roles that could be recruited to join the standing public health guideline the committee:

- Environmental health officer from Local Authority
- Someone working at an operational level at Local Authority
- Private and commercial property developer
- Someone from a Housing association/ social housing association
- Architect or structural engineer
- Universal health professional, e.g. health visitor, midwife.
- Academic
- Someone from the DIY market
- Lay member e.g. tenant from housing association

ACTION: NICE to consider recruiting the suggested roles for the Public Health Advisory Committee.

Question 11:

Stakeholders suggested a couple of government policies that the NICE team should be aware of including fuel poverty, building planning and a review of carbon monoxide alarms due in October 2017. NICE to ask for further suggestions following the meeting.

ACTION: NICE to contact the workshop attendees asking them for any further government policies that they are aware of.

Question 12:

ACTION: NICE to contact the workshop attendees asking them for any pieces of guidance from key organisations that they are aware of.

6. Key stakeholder organisations to include

Throughout the discussion the following organisations were suggested as potential stakeholders:

- Organisations involved with building regulations
- Energy efficiency organisations
- Planning organisations
- Building Engineering Services Association
- Chartered Institute of Housing
- Passive House Institute
- CIBSE – Chartered Institute of Building Services Engineers
- Royal Institute of British Architects
- Building Research Establishment

ACTION: PHQA to contact organisations and encourage them to register as a stakeholders.

7. Next steps and meeting close

The scope will be updated and the pre-consultation version will be quality assured before the public consultation period.

Stakeholders in attendance at the workshop will have a further opportunity to

comment on the draft scope during consultation.

The scope may be revised further after the consultation period before final scope publication and the start of guideline development.

Key dates:

Scope consultation starts: 10 February 2017

Scope consultation ends: 9 March 2017

Scope publication: May 2017

Development begins: May 2017

KN thanked stakeholders for their time and contributions and closed the meeting.

Appendix A: Questions on the draft scope

1. Looking at the list of who the guideline is for are there any omissions or any groups included that should be removed? Are these the people you would expect to implement the guidance?
2. The guideline will focus on dwellings, ie where people live. This will include private dwellings. Should it also include care homes, residential settings, children's homes and nursing homes? Are there any dwellings missing?
3. Looking at our list of key areas, are there any missing or any topics that should not be there?
 - a) Interventions to improve the structure of, and materials used in, homes
 - b) Interventions to improve people's knowledge, attitude and behaviour in relation to indoor air pollution
4. Looking at our areas that will not be covered, are these right?
 - a) Do you agree that environmental tobacco smoke should be excluded?' Why is that? What are the factors that drive your thinking?
 - b) Are there any other areas that are excluded here that shouldn't be? Why is that? What are the factors that drive your thinking?
5. For any suggested new additions - what are the specific activities that would therefore be in scope? What are the questions we need to ask to find the best available evidence?
6. Are there any important outcomes that are missing, or any that should not be there?
7. Are there any key research studies you aware of that would be relevant to this guideline?
8. What are the equality issues that need to be considered in the development of this guideline?

9. If we identify we have too much to cover within the resource available, which areas should be prioritised over others?

a) Why is that? What are the factors that drive your thinking?

b) Which areas are not a priority?

10. Who do stakeholders think are essential to have representation from on the Public Health Advisory Committee (PHAC) in the development of this guideline and why?

11. Are you aware of any pieces of government policy that could be relevant to this guideline? How do you see this guidance adding value to current policy, and to which policies? How will this guideline fit with them?

12. Is there any guidance from key organisations such as the Chartered Institute for Environmental Health or the Local Government Association? if so what is the extent and general content of this guidance and where can NICE recommendations add value to this existing guidance?

Appendix B – Declarations of interest

Name	Job title, organisation	Declarations of Interest, date declared
John Kolm-Murray	Seasonal Health & Affordable Warmth Co-ordinator, London Borough of Islington	<p>Currently Energy Strategy & Advice Manager at London Borough of Islington where my team provides advice to the public and work on projects related to ventilation, dampness, mould growth, and carbon monoxide. Also National Chair of the Association of Local Energy Officers, a Director of the National Right to Fuel Campaign, a Trustee of the British Gas Energy Trust and a member of the steering group of the End Fuel Poverty Coalition. All of these organisations have an interest in addressing dampness, mould growth, carbon monoxide and ensuring adequate ventilation alongside energy efficiency improvements.</p> <p><i>December 2016</i></p>
Paul Harrison	Director, IEH Consulting Ltd	<p>Member of the recent Royal College of Physicians (RCP) working party on air pollution and co-author of the ensuing report “Every Breath We Take”. Unpaid position.</p> <p>Committee member of the UK Indoor Environments Group (UKIEG). Unpaid position.</p> <p>Past member of an EC committee on harmonising product emission safety evaluations. Unpaid position.</p> <p>Director of IEH Consulting Ltd and PTCH Consultancy Ltd, both of which companies may undertake paid consultancy work relating to indoor air quality. In connection with this, they were recently commissioned to help run a UKIEG indoor air policy workshop, and advise Which? Magazine (Consumers Association Ltd) on the conduct of a small study on indoor pollution in the home.</p> <p><i>December 2016</i></p>

Leigh Greenham	Director, Council of Gas Detection & Environmental Monitoring	<p>I am a Chartered Electronic Engineer and an independent consultant running my own business (Electromagnolia Ltd). I have a contract to represent the UK trade association CoGDDEM (Council of Gas Detection & Environmental Monitoring) in projects where knowledge of gas detection or gas sensors is required. Some of the companies who are members of CoGDDEM make sensors or instruments that could be used to measure gases that may be present when Indoor Air Pollution occurs.</p> <p><i>December 2016</i></p>
Marcella Ucci	Chair, UK Indoor Environments Group	<p>I am Chair of the UK Indoor Environments Groups, an independent and impartial multidisciplinary network of professionals and academics working in the field of health, wellbeing and indoor environments (www.ukieg.org). Membership of the UKIEG is free. All Committee members are unpaid for this role. We charge a registration fee for attending the UKIEG Annual conference to cover expenses such as food, room hire etc. The Gas Safety Trust and Policy Connect contributed financially to support a workshop with policy leads focusing on the challenges and opportunities for health and wellbeing in UK indoor environments. This involved payment to a few UKIEG Committee members for their time in organising, presenting at the meeting and producing a report.</p> <p>I have done work for the UK Centre for Moisture in Buildings, at University College London, which was supported by a donation from Saint Gobain (which designs, manufactures and distributes building materials and solutions). The work was a review of evidence on the links between moisture in buildings and health.</p> <p>I have presented aspects of my work at various industry events. On selected occasions I was reimbursed for the train ticket (from Chartered Institution of Building Services Engineers and from the Alliance for Sustainable Building Products).</p>

		<p>I was a member of the working group of the UK Green Building Council on homes and health & wellbeing which launched its report in July 2016. I did not receive any honorarium for this.</p> <p>I am Deputy Editor of Indoor and Built Environment, a peer-review journal. In the past I have been Guest Editor for Special Issues on: low carbon-design and health/wellbeing; energy use and people. I am currently acting as Editor in Chief for a Special Issue on Fuel Poverty. I was also Guest Editor on a Special Issue around active design aspects for the Building Research Information Journal.</p> <p>I have published papers on the various matters, particularly around indoor air quality (especially house dust mites, moisture), active design in buildings, and modelling of energy/air quality aspect.</p> <p>I am Course Director for a new Master's course on Health, Wellbeing and Sustainable Buildings at University College London, which will start in Sept 2016.</p> <p><i>December 2016</i></p>
Isabella Myers	Chairman, All Fuels Medical Forum Medical And Healthcare Sub-Group	<p>Independent Consultant on Health, Policy and the Environment.</p> <p>Cranfield University: Research Fellow - carbon monoxide</p> <p>Associate: IEH Consulting.</p> <p>Policy Connect: Chairman – Carbon monoxide medical sub-group (COMed);</p> <p>Advisory Board Member - All Fuels Action Forum</p> <p>Member – All Fuels Action Forum.</p> <p>UK Indoor Environments Group: Committee Member.</p> <p><i>December 2016</i></p>
Adrian	Trust Manager, Gas	I am manager of the Gas Safety Trust, a UK based charity funding research into

McConnell	Safety Trust	CO. I am on the Advisory Board of the CO All Fuels Action Forum which is part of the All Party Parliamentary CO Group. <i>December 2016</i>
Tom Woolley	Director and Environmental Consultant, Ecological Design Association NI	Book: Building Materials, Health and Indoor Air Quality Published by Wiley 2017 Chair of Ecological Design Association NI. <i>January 2017</i>
Dave Morley	Technical Engineer, Saint-Gobain	Technical Engineer for a construction materials manufacturer. These materials are sometimes used in Healthcare environments when specified by external designers (e.g. Architects etc). <i>December 2016</i>
Rajat Gupta	Professor of Sustainable Architecture and Climate Change, Oxford Brookes University	None. <i>January 2017</i>
Karen Galea	Section head – Exposure science, Institute of Occupational Medicine	I have no personal financial or non-financial interests to declare. I am an employee of the Institute of Occupation Medicine (IOM). The IOM is a not-for-profit charitable organisation, engaged in scientific research intended for publication. The IOM carries out research funded by a wide variety of organisations, including public bodies, research charities and industry, subject to the requirement that the IOM can do the work independently and impartially and that the results, whatever they may be, will be published. IOM's wholly owned subsidiary IOM Consulting Ltd provides services to industry

		<p>and others on a confidential-to-client, fee-for-service basis. Sometimes this includes services to companies who operate in the same sector as, or otherwise have a commercial interest in, some of the topics on which we carry out research. Provision of these services by IOM Consulting Ltd gives no direct or indirect specific influence on or preferential access to the conduct of IOM's research, including the research reported here. Insofar as an individual IOM employee is involved in other research studies or provision of services to companies which may give rise to conflicts of interest, whether actual, potential or perceived, these are identified separately. This includes where an author is not involved directly in the service / consultancy work but is aware of it through another role, e.g. as a member of senior management.</p> <p><i>December 2016</i></p>
Nicola Carslaw	Reader in Air Pollution, University of York	<p>Member of COMEAP (DoH Committee on the Medical Effects of Air Pollution).</p> <p><i>January 2017</i></p>
Lena Ciric	Lecturer in Environmental Engineering, University College London	<p>None.</p> <p><i>January 2017</i></p>
Timothy Robinson	Director, Waverton Analytics Limited	<p>I am a director of Waverton Analytics Limited, a company which provides a commercial laboratory service for indoor air quality testing. The tests provided include volatile organic compounds (VOCs), Formaldehyde and tobacco smoke.</p> <p><i>January 2017</i></p>
Ben Leaman	Consultant in Public Health, Calderdale Council	<p>None.</p> <p><i>December 2016</i></p>

Patrick Saunders	Board Member, Faculty of Public Health	None. <i>December 2016</i>
Hilary Wareing	Director, Improving Performance in Practice	None. <i>January 2017</i>
Ian Colbeck	Professor, University of Essex	Funding from NERC “Rapid monitoring of bioaerosols in Urban, Agricultural and Industrial Environments” EU “Human exposure to aerosol contaminants in modern microenvironments”. <i>January 2017</i>
Chris Bielby	Gas Safety Trust	None. <i>January 2017</i>