

AIR QUALITY INFORMATION SYSTEM REVIEW STEERING GROUP

MEETING FIVE: MINUTES

Friday 14th October 2022
14:00 – 16:30

VIRTUAL MEETING via Microsoft Teams

ATTENDANCE		
<u>Chair:</u>	John Newington	<i>Department for Environment, Food and Rural Affairs (Defra)</i>
<u>Members:</u>	Ally Lewis Harriet Edwards John Newington Matthew Clarke Andrew Grieve Gillian Mawdsley Angela Hands Jo Feary Karen Exley	<i>Air Quality Expert Group (AQEG)</i> <i>Asthma + Lung UK</i> <i>Defra</i> <i>Hertfordshire County Council</i> <i>Imperial College London</i> <i>Lay Representative</i> <i>Office for Health Improvement and Disparities (OHID)</i> <i>Respiratory Consultant</i> <i>UK Health Security Agency (UKHSA)</i>
<u>Guest Attendance:</u>	Larissa Lockwood Helena Wehling	<i>Global Action Plan</i> <i>UKHSA</i>
<u>Secretariat:</u>	Shaun Brace Sarah Haley Stuart Aldridge Naomi Earl Alison Gowers	<i>Defra</i> <i>Defra</i> <i>UKHSA</i> <i>UKHSA</i> <i>UKHSA</i>
<u>Observers:</u>	Lesley-Ann Black Funmi Folaranmi Ilana Conn Aran Prince-Tappe Christina Shrestha Sarah Peters Noel Nelson Priscilla Tiigah Sarah Robertson	<i>Digital, Data & Technology Services (DDTS)</i> <i>DDTS</i> <i>DDTS</i> <i>Defra</i> <i>Defra</i> <i>Department for Health and Social Care</i> <i>Met Office</i> <i>OHID</i> <i>UKHSA</i>
<u>Apologies:</u>	Anna Hansell Bill Parish Kirsty Smallbone	<i>Committee on the Medical Effects of Air Pollutants (COMEAP)</i> <i>Defra</i> <i>University of Brighton</i>

ABRIDGED MINUTES

ITEM 1: Welcome and Introductions:

- 1.1. Meeting chaired by John Newington in Bill Parish's absence.
- 1.2. Members, observers, and the secretariat were welcomed to the meeting.
- 1.3. Harriet Edwards was introduced as the temporary replacement for Rob Day, representing Asthma+Lung UK on the steering group.
- 1.4. All actions from the last meeting are progressing – members were reminded to continue feeding back updates from any discussions with advisory networks.

ITEM 2: Intelligence Sharing:

- 2.1. The chair updated members on changes in Defra Ministers. Ministers remain firmly supportive of the AQIS review and the work of the steering group.
- 2.2. The Office for Health Improvement and Disparities (OHID), Healthy Places Team, will be leading on DHSC's interests in air quality and health. The team's portfolio includes collaboration with Defra on access to green spaces and with DfT on active travel.
- 2.3. The Air Quality Expert Group (AQEG) has progressed several projects of interest to steering group members:
 - The Indoor Air Quality report has been finalised and is progressing towards publication.
 - AQEG has been involved with peer reviewing the Chief Medical Officer's report on Air Quality – which is due to be published by the end of the year
 - AQEG is currently working on a technical report on methods of detection for PM.
- 2.4. A selection of members from the Committee on the Medical Effects of Air Pollutants (COMEAP) have reviewed the technical specification for commissioned research project which aims to understand the groups at increased risk from air pollution due to their individual circumstances.
- 2.5. The London Air Quality and Health Programme Office has been set up following the Greater London Authority Clear Air Summit which took place in February. The role of the Programme Office is to co-ordinate and take forward pan-London joint work on air quality across the health and care system.

ITEM 3: Reflection on Progress to Date and Forward Look:

- 3.1. The chair outlined the objective of this agenda item:
 1. To ensure that the group are still aligned in their understanding of what each workstream is expected to deliver – and that the steering group have given some forethought to what outputs from the workstreams will mean in terms of returning AQIS recommendations.
 2. To share progress towards delivering workstreams and to identify any risk of pervasive evidence gaps.
- 3.2. The secretariat presented slide pack *AQIS_SG05_01_Workstream Progress Slides* reflecting on the workstream priorities and initial thinking on the sorts of recommendations that might be relevant to them. Members were asked to consider and comment on the below questions:
 1. *Do the research priorities and recommendations on the slides align with how you expect the workstreams to progress?*

2. *Is anything included in the slides that you would considered out of scope or not possible to complete in this review period?*
3. *What is missing at this stage? (appreciating that new recommendation topics may be added as new evidence emerges).*

3.3. Members discussed the following comments:

- A challenging element of the AQIS review is the variety of types of behaviours - public, professional, healthcare – that effective air quality communications might seek to change. Different behaviours and audiences may require different types of interventions. It was suggested that the steering group think carefully about desired behavioural outcomes and be explicit about which groups these are expected to come from.
- Members agreed that the social and behavioural elements of this work programme will be integral when making recommendations. It was noted that while a lot of technical work would go into message development, it is likely that a very simple message will be what is required.
- The steering group acknowledged that there is overlap in what the workstreams will deliver. There was some uncertainty around the mechanism by which the steering group members will balance different sources of evidence when making recommendations. This remains open to discussion.
- On the scope of the work programme, a point was raised that it may not be possible for all work to be delivered within the timeframe of the steering group, but that the steering group may make recommendations on how to take further work forward.

3.4. The secretariat updated members on the progress of research being commissioned to support the review:

- A contract has been awarded for a rapid evidence assessment with the aim of identifying the existence of and strength of evidence that may provide a medical rationale for revising the groups that are defined as “at-risk”, due to their individual characteristics, when targeting air quality information and associated health advice. This project will be completed by the end of the financial year.
- A specification for a quick scoping review exploring patterns of exposure is in draft, the work is expected to be commissioned this calendar year and finalised by March.
- The secretariat are currently exploring the options for further progress on workstream 4 (influencing behaviour): evidence is likely to be generated through a combination of desk-based research and new quantitative, and qualitative research, exploring barriers to change, preferred messengers and effective framing. The commissioning process for these projects is yet to start.

3.5. Ally Lewis provided an update from workstream 2:

- The summary paper from the expert roundtable on strength, limitations and opportunities of existing approaches to air quality forecasts and measurements was presented at the AQEG meeting of September 7th. The following points of feedback were raised by AQEG:
 - There is potential to improve air quality advice by using time-resolved data from model forecasts - eg 'exercise in the morning rather than later afternoon'
 - Annual summaries of pollution at the postcode/street level may help bridge the gap with day-to-day perception of discrepancy between observations and models
 - Pollutant specific forecasts may be valuable – actions to mitigate differ depending on source of pollution
 - Forecasts could be better framed around actionable information to avoid pollution arising, not just personal avoidance of exposure
- Initial takeaway from the expert round table is that the that the technological capacities of existing models is already high and therefore our ability to model and forecast air quality should not be viewed as a significant barrier to making progress - the technology to provide granular, detailed advice already exists, but information systems have not caught up.

- It was recommended that workstream 2 be paused until the steering group has provided a headline recommendation about what sort of data tool would be useful when providing the public with air quality information.
- 3.6. The steering group were positive about current progress of the workstreams. The following additional points were raised for consideration:
- The review may benefit from linking up with the Met Office on the work they are doing reviewing health and wellbeing forecasts.
 - Defra's Digital Data and Technology Services (DDTS) team have carried out some initial user research work on UK-Air which should be fed in.
 - A helpful next step may be to consider the tensions that may arise from different types of advice - for example advising individuals not to exercise outdoors but active travel reduces contribution to air pollution.

ITEM 4: Presentation from Global Action Plan (GAP):

- 4.1. Larissa Lockwood (GAP) presented slide pack *AQIS_SG05_02_GAP Presentation to AQIS_Slides_(GAP)* introducing members to GAP's remit and activities:
- GAP is an environmental charity, mobilising actions to tackle the root causes of climate change and natural crises through research, campaigns and collective action. Strategic objective is the end of fossil fuel burning in urban areas by 2030.
 - GAP hosts the Clean Air Hub website, run a quarterly Clean Air Public Insights tracker and organise Clean Air Day.
- 4.2. An overview and findings from two GAP research projects were presented to steering group members:
- 4.3. GAP has been commissioned by the Met Office to design a suite of air quality science tools for adults and children. Relevant findings include:
- It is important to tailor messaging to make health, harm, hope and behaviour relevant to different audiences.
 - Each audience has key insights, and different messages should be tested for effectiveness.
 - Children are already concerned about pollution but don't know what to do.
 - Adults with health conditions are more concerned but less informed.
 - Older adults believe it's the government's responsibility and place responsibility on bigger systems for providing change.
 - Younger adults are aware and concerned about climate change and air pollution, very engaged and enthusiastic. GAP is looking at what can be done with this groups to help them impact a wider audience.
 - Messaging targeted at pregnant women should take care not to overwhelm them.
 - Lower socio-economic groups are at high risk but may lack the agency to make changes to behaviour.

Resources will be tested ahead of being made available on the Met Office website at the end of 2023.

- 4.4. GAP were commissioned by Defra to carry out work looking at how GPs can better advise patients on air pollution:
- The project aimed to increase awareness of the health harms of air pollution among GPs to enable them to provide vulnerable patients with reliable and accurate information on air pollution.
 - Outcome of project:
 - 40 GPs trained,
 - Protocol for discussion developed,
 - Information materials distributed by GPs,
 - Insights:

- It does not take long to train GPs, just need to get the simple key messages out.
 - Three repetitions of information are sufficient for it to be understood if it is presented in simple, clear ways: (eg training, posters, phrases to use during a consultation, leaflets).
 - Air pollution needs to be included in standard learning pathways.
 - GPs have limited opportunities to incorporate air pollution as an addition to current standard consultations but hearing clean air messaging from different sources/contexts supports GPs' engagement with patients.
- 4.5. Members were enthusiastic about this work and recognised the importance of training GPs and health professionals. One member shared their experience of being told by a GP that air pollution is simply not a problem in Scotland.
- 4.6. There was some discussion on the merit of cascading GAP's work from primary care to secondary care and members queried the possibility of creating materials such as posters to put in the hospitals.
- 4.7. Members considered the use of COM-B behaviour change model positive and appropriate, and considered understanding of behaviour change models important for AQIS work.

ITEM 5: Update from UKHSA on Asthma Work:

- 5.1. Helena Wehling (UKHSA) presented slide pack *AQIS_SG05_03_Asthma DAQI Research_Slides_(UKHS)* summarising the work of the UKHSA behavioural science team:
- The team conducted focus groups with clinicians to identify suggestions for improving air quality advice for people with asthma
 - 14 doctors and nurses were recruited via professional networks.
 - Focus groups started by showing the current DAQI and alternative messages and asking health-care professionals (HCPs) how they currently provide air quality advice
 - HCPs reported infrequent usage of the DAQI due to various barriers such as inconsistency, lack of time, low awareness amongst patients, low perceived need, and not finding it easy to access. The personalised asthma action plan was the preferred tool for discussing air quality.
- 5.2. The research produced the following general recommendations:
- Language used should frame advice as optional and realistic requiring small adjustments.
 - A 3-category traffic light system was preferred, due to simplicity and consistency with asthma care plan. All attendees who commented on the banding were against adding a purple (high) colour band.
 - Physical activity advice should be framed as encouraging adjustments to, rather than avoidance of, exercise.
 - Advice should increase focus on indoor exercise and accurately reflect indoor vs outdoor pollution levels.
 - However, advice should consider the low accessibility of indoor exercise options (especially for low-income groups).
 - A clearer definition of different levels of physical activity would be useful.
 - External resources may be sign posted through hyperlinks/ QR codes..
 - Consider provision of advice specific to indoor environments and associated risks.
 - Several participants expressed intentions of using an improved version of the DAQI in their work practice as follow-up information, rather than during consultations.
 - HCP expressed additional training could be helpful.
- 5.3. AQIS may also want to consider:
- Employing education campaigns in workplaces and schools.

- Targeting non-English communities using culturally sensitive versions of materials and create alternative routes to access those with low digital literacy – e.g. via road signs/ TV bulletins

- 5.4. The presentation was received positively by members of the steering group.
- 5.5. The presentation stimulated a short discussion on indoor air quality. It was noted that AQEG have struggled to find evidence that indoor air is less polluted than outdoor – which is problematic for advice which encourages at risk groups to move their exercise indoors. Further research may be needed on indoor air quality to make improvements to air quality advice.

ITEM 6: Year One Report:

- 6.1. The Secretariat proposed that that the steering group might produce a one-year report for the AQIS review. This would be an outward looking document, to be published on UK-Air, briefly summarising the key themes that have emerged during the first 12 months and how work will be taken forward into the next year. The report will also act as a test on how the groups recommendations will be presented at the end of the process.
- 6.2. Due to time constraints no comments were made on this item.

ITEM 7: Next Steps and AOB:

- 7.1. The chair briefly summarised the actions to be completed ahead of the next steering group meeting.
- 7.2. UKHSA highlighted that they will be hosting their annual air quality stakeholder event on December 1st. This event is well attended by Local Authorities and may be an opportunity to engage with a wider network on AQIS. Members were encouraged to contact UKHSA directly for further information.
- 7.3. No further items of AOB raised.

**Air Quality Information Systems (AQIS) Steering Group Secretariat
October 2022**