



Expert consultation on risk communication and intervention to reduce exposure and to minimize the health effects of air pollution

12-14 February 2019

WHO Headquarters, Geneva, Switzerland

Room M505

Provisional Programme

11 February 2019

Background

Health effects of air pollution from particulate matter are well known, and worldwide efforts are being made to reduce both air pollution peaks and long-term exposure to harmful levels. However, air pollution episodes and sustained high levels still occur in various parts of the world.

As part of the “Road Map for an enhanced global response to the adverse health effects of air pollution” as it has been agreed by the World Health Assembly in 2016 (WHA69¹), WHO activities aim to address the urgent public health need to respond to the effects associated with air pollution. Key activities include informing policymakers and the broad public on the extent of population exposure to and health impacts from poor air quality, and strengthening the health sector with knowledge and tools to engage with other sectors and respond to air pollution episodes. In particular, it is important to provide evidence-based recommendations on the best ways to communicate potential risks to the public, to health care workers and to patients, and to offer indications on how to reduce air pollution exposure.

Consultation objectives

The objectives of this consultation are to discuss and agree on the best ways to communicate potential risks related to air pollution to different audiences, to health care workers and to patients, and to offer indications on how to reduce peoples’ exposure. To formulate expert suggestions, the Consultation will:

- Discuss the best approaches to communication about health risks of pollution from various sources.
- Review the available evidence on the use of Air Pollution Index (API) or Air Quality Index (AQI) and the limitation of current approaches to communicate the status of the air and the health risks.

¹ http://apps.who.int/gb/ebwha/pdf_files/WHA69/A69_18-en.pdf

- Review the available evidence to identify categories at risk and susceptible individuals and define which individuals are most likely to benefit from exposure reduction and personal interventions.
- Review the evidence on exposure reduction by avoiding places and times with high levels of air pollutants and discuss practical advice.
- Review the evidence on the benefit of physical activity versus the harms of air pollution, also in relation to population-specific characteristics and discuss practical advice.
- Review the current use of air filters, the evidence of possible benefits, and discuss practical advice.
- Review the current use of face masks, the evidence of possible benefits, and discuss practical advice.
- Discuss activities and reviews that would be needed to better inform the Secretariat and which could be presented at the next meeting of the Global Air Pollution and Health- Technical Advisory Group (GAPH-TAG), scheduled for 1-3 July 2019.

Consultation outputs:

- Snapshots of the current evidence on the above-mentioned topics, including identification of data gaps and research needs on the above mentioned topics;
- For each topic, experts suggestions that will serve as elements of guidance to derive specific and practical advice;
- Road map of activities and reviews that could serve to strengthen WHO's guidance on the above topics in the near future;
- Creation of a working group that shall report on this consultation to the GAPH-TAG.

DAY ONE : Review of evidence (Tuesday, 12 February)	
<i>From 09:30</i>	<i>Registration & Morning coffee</i>
09:45 – 10:00	Meeting opening and welcome <ul style="list-style-type: none"> The meeting will be opened by Dr Maria Neira, Director of Public Health, Environment and Social Determinants of Health Participants will be invited to introduce themselves Nomination of the chair(s) and rapporteurs Practical announcements
10:00 – 10:35	Introduction and objectives of the meeting <ul style="list-style-type: none"> Short introduction by WHO Headquarters (N. Roebbel, Coordinator, Air pollution and urban health unit) (5 mn) Experiences of WHO Regional offices in risk communication for air pollution - messages delivered & key challenges faced (20 mn): <ul style="list-style-type: none"> EURO (D. Jarosinska) EMRO (M. Malkawi) SEARO (L. Onyon) WPRO (R. Kim, remotely) Summary of the ATS workshop (R. Laumbach, 10mn)
Session 1 10:35 – 11:35 Presentation: M. Amann Discussant: K. Smith	Communication about sources of air pollution and related health impact Q1: What is the availability of evidence on the main sources of air pollution and related exposure in the different regions of the world? Q2: Can we estimate source-specific exposure and health impacts? Q3: Are we clear about source-specific air pollution reductions at which main efforts should be directed to protect population health? Q4: Are there successful communication approaches that can be considered on the way to reduce emissions from main sources?
<i>Coffee break</i>	
Session 2 12:00 – 13:00 Presentation: K. Cromar (20mn) Discussants: C. Daly / M. Sharma / B. Barrat	Available evidence on the use of Air Pollution Index (API) or Air Quality Index (AQI) and the limitation of current approaches to communicate the status of the air and the health risks Q1: What information about ambient air pollution is needed to inform the population about short- and long-term health risks? Q2: What are the health-based multi-pollutant indices that some countries and cities have adopted? Q2: What are advantages and disadvantages of Air quality/pollution index (AQI/API) or air quality/pollution and health index vs. communicating air pollution levels
<i>13:00 – 14:00</i>	<i>Lunch</i>
Session 3 14:00 – 15:00	Available evidence to identify categories at risk including age, socio-economic status and susceptibility and assess which individuals are most likely to benefit from exposure reduction and personal interventions

Presentation: R. Laumbach Discussants: GC Khilnani/ F. Forastiere /D. Pope/J. Fairburn (remotely)	Q1: What are the specific diseases, medical conditions or personal characteristics that confer increased risk of adverse health after short- or long-term exposures? Q2: What is the relation between socio-economic status and the risk to air pollution? Q3: How can we prioritize personal susceptibility in risk communication, considering relative importance of air pollution compared to other risk factors in susceptible groups?
Session 4 15:00-16:00 Presentation: B. Barrat Discussants: A. Hiddinga / S. Medina / A. Shahsavani (remotely)	Available evidence on exposure reduction by avoiding places and times with high levels of air pollutants and discuss practical advice Q1: What is the main basis for recommendations such as “Staying indoors and/or reducing physical activity”? Q2: How may these recommendations fit the needs of people at risk? Q3: Which variables influence exposure and inhaled dose of air pollutants during transportation, considering mode of travel, proximity to sources (nearby vehicles), type and age of vehicles, operating mode (filtration and open/closed vents or windows), and level of physical activity (ventilation rate)? Q4: How to build and produce effective communication material on “hot spots” avoidance?
<i>16:00 – 16:30</i>	<i>Coffee break</i>
Session 5 16:30-17:30 Presentation: D. Rojas Discussants: A. De Nazelle (remotely) / H. Riojas	Review the evidence on the benefit of physical activity [definition of PA, cycling to work, leisure or work with heavy exercise] versus the harms of air pollution, also in relation to population specific characteristics and discuss practical advice Q1: What are the long-term benefits of physical activity? Q2: Should we suggest curtailing activity to reduce inhaled doses of air pollutants and what are the possible net adverse effects on health? Q3: What kind of practical advice should be given to the general public, children and specific at-risk groups (which include here outdoor workers)?
17:30 – 18:00	General discussion
18:00	Closure of Day 1

DAY TWO: Review of evidence (continued) (Wednesday, 13 February)	
8:45-9:00	Wrap-up of day 1 (by the Chair)
Session 6 09:00 – 10:00 Presentation(s) : W. Huang Discussants: L. Morawksa/ C. Huson (tbc) / H. Kipen	Indoor air filters : Review of the current use of air filters, the evidence of possible benefits and practical advices Q1: What is the evidence that use of air filters reduces exposure to PM2.5? Q2: What is the evidence that use of air filters reduces health effects from PM2.5 exposure? Q3: How should this evidence be reflected in communication activities and what studies are needed?
Session 7 10:00 - 10:30 Presentation: M. D'Alessandro Discussants: WHO Medical Services / G. Boulanger	Technical aspects regarding face masks Q1: What kinds of face masks are available on the market? Q2: What kind of fit procedures for face-masks should be used? Q3: What are the existing recommendations and protocols to use these masks in different places?
<i>10:30 – 11:00</i>	<i>Coffee Break</i>
Session 8 11:00 – 12:00 Presentation: W. Huang Discussants: G. Boulanger / A. Hiddinga	Review the current use of face masks, the evidence of possible benefits, and discuss practical advice Q1: What is the evidence that use of face masks reduces personal exposure to PM2.5? Q2: What is the evidence that use of face-masks reduces health effects from PM2.5 exposure? Q3: How should this evidence be reflected in communication activities and what studies are needed?
Session 9 12:00 – 13:00 Introduction by WHO (P. Mudu) Presentation: A. Wojcik Discussants: P. Powell/ D. Xu / A. Kumie /J. Ahn	Air pollution as a community or as an individual problem: perceptions, actions and communications Q1: What is perceived as a responsibility at community or individual level concerning reduction of air pollution risks to the individual and the community? Q2: What are the differences in air pollution risk perceptions in different cultures and areas of the world? Q3: How should risk communication be adapted to reflect the different ways people perceive their responsibilities concerning air pollution?
<i>13:00 – 14:00</i>	<i>Lunch</i>
Session 10 14:00 – 15:00 Presentation: D. Fecht Discussants: N. Bin Mohamed / C. Wright/A. Shrivastava (remotely)	Equity issues to consider when recommending personal interventions Q1: How equitable is it to leave it to the individual to decide? Q2: What are the costs associated with adopting individual interventions to reduce individual exposure and health risks from air pollution? Q3: How should these costs be distributed?

	Q4: How should the welfare and health care services limit and/or adsorb those costs? Q5: What are the implications for risk communication?
Session 11 15:00 – 16:00 Presentation: B. Hoffmann Discussants: K. Cromar / P. Powell/ P. Orris	Development of clinical practice guidelines, role of medical societies and patients’ organizations Q1: What are patients’ groups that may need clinical guidelines? Q2: How should these guidelines be elaborated? distributed? Q3: What is the role of medical societies and patients’ organizations?
<i>16:00 – 16:20</i>	<i>Coffee Break</i>
Session 12 16:20 – 17:00 Roundtable discussion (H. Adair-Rohani)	Risk communication in household energy interventions
17:00 – 17:30	Wrap-up of the day and general discussion
17:30	Closure of Day 2
19:00	Fondue aux Bains des Pâquis

DAY THREE: Summary document discussion (Thursday, 14 February)	
9:00 – 9:15	Recap of Day 1 and 2 (by the respective Chairs)
9:15 – 11:15	Discussion and edit of the Summary document
<i>11:15- 11:45</i>	<i>Coffee break</i>
11:45 – 12:30 S. Gummy	Next steps Discuss activities and reviews that would be needed to better inform the Secretariat.
12:30 – 13:00	Wrap-up
13:00	Closure of the meeting

Meeting Documents

Document 1. Meeting Programme

Document 2. List of Participants

Document 3. Logistics Note for Participants

Background Documents

Document 1. Report on the Air Quality Index

Document 2. Efficiency of air filters

Document 3. Efficiency of face masks

Document 4. Air pollution & physical activity

Document 5. Abstracts of the sessions