

# Update on WHO and TFH activities

Dr Dorota Jarosinska  
WHO European Centre for Environment and Health

Fifth Joint session of the Working Group on Effects and  
the Steering Body to EMEP  
Geneva, Switzerland, 9-13 September, 2019



# Presentation outline

- 22<sup>nd</sup> TFH meeting
- Implementation WP 2018-2019
- Relevant WHO activities
- Draft WP 2020-2021

# 22<sup>nd</sup> TFH meeting (15-16 May 2019)

- National and international policies and processes on air quality and health
- Review of the progress in research on health impacts of air pollution
- Update on AirQ+ software and capacity building activities
- Communication and public health messages for air pollution
- Discussion of current activities and work plan of TFH for 2020-2021

*\*Funding from Switzerland and Germany acknowledged*



# Implementation WP 2018-2019 (1/2)

Workplan item	Activity description/objective
1.1.1.25	<p><b>Consolidate existing evidence</b> on the health outcomes of exposure to air pollution</p> <ul style="list-style-type: none"><li>• Update of WHO Global Air Quality Guidelines: PM, O<sub>3</sub>, NO<sub>2</sub>, SO<sub>2</sub>, CO</li><li>• Consultation meeting on health impact assessment of NO<sub>2</sub> in the European Region (February 2019)</li></ul>
1.1.1.26	<p><b>Further develop methodologies</b> for assessment and quantification of direct and indirect effects of long-range transboundary air pollution on human health</p> <ul style="list-style-type: none"><li>• Updating AirQ+ software</li></ul>
1.1.1.27	<p>Evaluate the current knowledge on the health risk of <b>polycyclic aromatic hydrocarbons</b> and identify critical gaps.</p> <ul style="list-style-type: none"><li>• PAHs WG: Evaluate the current knowledge on the health risk of PAHs and identify critical gaps</li></ul>

# Implementation WP 2018-2019 (2/2)

Workplan item	Activity description/objective
1.2.3	<b>Capacity-building</b> for the health impact assessment of air pollution at the regional and subregional levels <ul style="list-style-type: none"><li>• Developed capacity building curriculum</li><li>• First training workshop on Air Quality and Health in Sarajevo, 2018</li></ul>
1.3.6	<b>Review the methods</b> used for estimating <b>burden of disease</b> attributable to air pollution <ul style="list-style-type: none"><li>• Through updating AirQ+ and regional input to global activities</li></ul>
1.3.7	<b>Review communication strategies</b> for health messages related to air pollution, including on short-term episodes and for susceptible groups <ul style="list-style-type: none"><li>• Regional input to global activities</li></ul>

# Consolidation of evidence: Update WHO Global AQGs (1)

**Table 1.1. The guideline development process at WHO**

Stage/primary contributor	Step	Chapter
<b>Planning</b>		
WHO Member State, WHO country office or public/private entity	Request guidance on a topic	1
WHO technical unit	Determine if a guideline is needed; review existing WHO and external guidelines	2
	Obtain approval for guideline development from the director of the relevant technical unit at WHO	2
	Discuss the process with the GRC Secretariat and with other WHO staff with experience in developing guidelines	2
	Form the WHO guideline steering group	3
	Identify sufficient resources; determine the timeline	2
WHO guideline steering group	Draft the scope of the guideline; begin preparing the planning proposal	2,4
	Identify potential members of the GDG and its chair	3
	Obtain declaration of interests and manage any conflicts of interest among potential GDG members	6
	Formulate key questions in PICO format; prioritize outcomes	5, 7
WHO guideline steering group and GDG		
WHO guideline steering group	Finalize the planning proposal and submit it to the GRC for review	4
GRC	Review and approve the planning proposal	4
<b>Development</b>		
Systematic review team	Perform systematic reviews of the evidence for each key question	8
	Evaluate the quality of the evidence for each important outcome, using GRADE as appropriate	9
WHO guideline steering group	Convene a meeting of the GDG	10,11
GDG	Formulate recommendations using the GRADE framework	10,11
WHO steering group	Draft the guideline document	10,11
External review group	Conduct external peer review	12
<b>Publishing and updating</b>		
WHO guideline steering group and editors	Finalize the guideline document; perform copy-editing and technical editing; submit the final guideline to the GRC for review and approval	12
GRC	Review and approve the final guideline	12
WHO guideline steering group and editors	Finalize the layout; proofread	12
	Publish (online and in print as appropriate)	12
WHO technical unit and programme manager	Disseminate, adapt, implement, evaluate	13
WHO technical unit	Update	12

GDG: guideline development group; GRADE: Grading of Recommendations Assessment, Development and Evaluation; GRC: Guideline Review Committee; PICO: population, intervention, comparator, and outcome.

- Sept 2016: 1<sup>st</sup> Guideline Development Group (GDG) meeting
- Jan 2017: Guideline proposal approved by the WHO Guideline Review Committee
- 2017-18: Systematic reviews (SRs) of evidence on long- and short-term exposure to PM, NO<sub>2</sub>, O<sub>3</sub> and CO and selected health outcomes
- March 2018: 2<sup>nd</sup> GDG meeting
- 2018: Finalization of risk of bias assessment tool(s)
- June 2019: 3<sup>rd</sup> GDG meeting
  - Review of draft SRs
  - Adaptation of GRADE framework
  - Other relevant reviews
  - Approach to setting interim targets

# Consolidation of evidence: Update WHO Global AQRs (2)

**Table 1.1. The guideline development process at WHO**

Stage/primary contributor	Step	Chapter
<b>Planning</b>		
WHO Member State, WHO country office or public/private entity	Request guidance on a topic	1
WHO technical unit	Determine if a guideline is needed; review existing WHO and external guidelines	2
	Obtain approval for guideline development from the director of the relevant technical unit at WHO	2
	Discuss the process with the GRC Secretariat and with other WHO staff with experience in developing guidelines	2
	Form the WHO guideline steering group	3
	Identify sufficient resources; determine the timeline	2
WHO guideline steering group	Draft the scope of the guideline; begin preparing the planning proposal	2,4
	Identify potential members of the GDG and its chair	3
	Obtain declaration of interests and manage any conflicts of interest among potential GDG members	6
	Formulate key questions in PICO format; prioritize outcomes	5, 7
WHO guideline steering group and GDG		
WHO guideline steering group	Finalize the planning proposal and submit it to the GRC for review	4
GRC	Review and approve the planning proposal	4
<b>Development</b>		
Systematic review team	Perform systematic reviews of the evidence for each key question	8
	Evaluate the quality of the evidence for each important outcome, using GRADE as appropriate	9
WHO guideline steering group	Convene a meeting of the GDG	10,11
GDG	Formulate recommendations using the GRADE framework	10,11
WHO steering group	Draft the guideline document	10,11
External review group	Conduct external peer review	12
<b>Publishing and updating</b>		
WHO guideline steering group and editors	Finalize the guideline document; perform copy-editing and technical editing; submit the final guideline to the GRC for review and approval	12
GRC	Review and approve the final guideline	12
WHO guideline steering group and editors	Finalize the layout; proofread	12
	Publish (online and in print as appropriate)	12
WHO technical unit and programme manager	Disseminate, adapt, implement, evaluate	13
WHO technical unit	Update	12

GDG: guideline development group; GRADE: Grading of Recommendations Assessment, Development and Evaluation; GRC: Guideline Review Committee; PICO: population, intervention, comparator, and outcome.

## Next steps:

- Finalisation of SRs and submission to a peer-reviewed journal
- Feb 2020: 4<sup>th</sup> GDG meeting
  - Deriving guideline values and formulating recommendations
- Drafting of a guideline document
- Completion of first draft of a guideline document
- Development of complementary documents
- ....

*Funding/in-kind support from the European Commission (DG Env), Germany, Republic of Korea, Switzerland, and USA*

# Consolidate evidence: Expert Consultation on Health Impact Assessment (HIA) of NO<sub>2</sub> in the European Region

- Bonn, Germany, 26 - 27 February 2019
- 22 experts including the Chair of CIAM and Co-chair of TFIAM
- Discussed:
  - Relevant reviews of evidence
  - Exposure assessment
  - Methodological advances in health impact assessment
  - Communication
  - Knowledge gaps

*\* Meeting report is expected to be published in 2019*

# Develop methodologies: tools

AirQ+ - a software to quantify the health effects of air pollution, released in 2016

Uptake of the tool (2016-2019):

- Countries: 28 (2016-17); 84 (2016-19)
- Cities: 60 (2016-17); 164 (2016-19)
- Used mainly by Environment (50%) and Health sector (42%)
- For the purpose of research (73%) and policy interventions (34%)

Three language versions: English (2016), Russian (May 2018), French (Oct 2018)

Next steps

- Release a new version AirQ+ 2.0
  - Additional modules, such as multiple data entry
  - Revision of the methods for risk assessment of carcinogenic air pollutants, using Unit Risk
  - Identification of priority updates and improvements
- Production of additional supporting documentation
- Dialogue with other WHO tools

# Capacity building: WHO training workshop on Air Quality and Health

## First training workshop:

- Sarajevo, Bosnia and Herzegovina, 12-16 November 2018
- 26 public health and environmental experts from West Balkans
- Five-day long training with mixed training format: lectures, small group discussions, hands-on exercise
- Delivered in cooperation with UNECE and UNEP

## Second training workshop:

- Tbilisi, Georgia, 12-15 November 2019
- Participants from Armenia, Azerbaijan, Georgia
- Four-day long training with mixed training format: lectures, small group discussions, hands-on exercise
- Delivered in cooperation with UNECE and EEA

# Relevant WHO activities

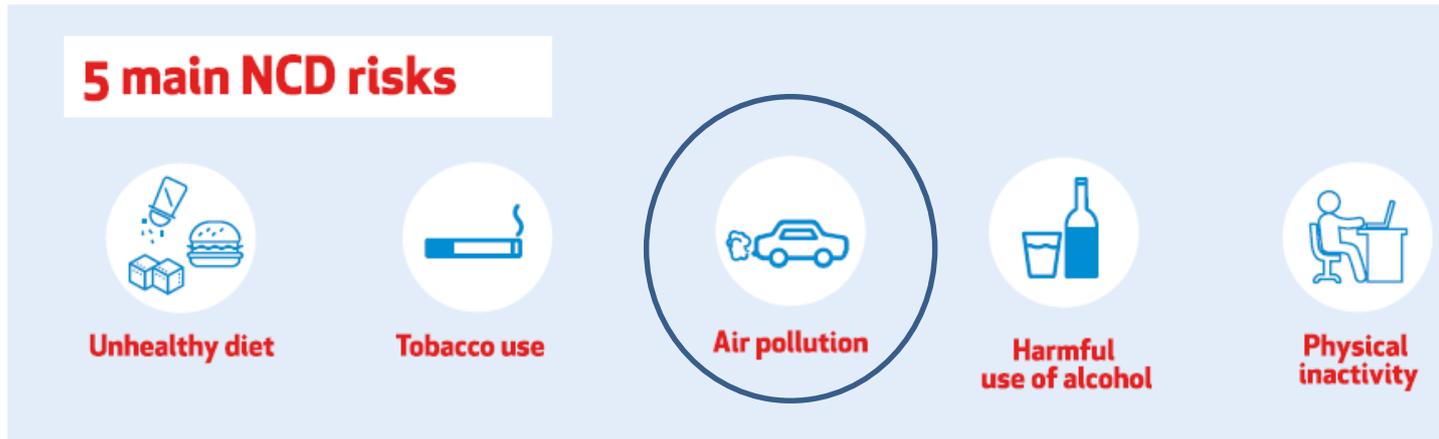
## **WHO Expert Consultation: Risk Communication and Interventions to Reduce Exposure and to Minimize Health Effects from Air pollution** (12–14 February 2019, Geneva, Switzerland)

- Objectives:
  - Discuss and agree on the best way to communicate potential risks related to air pollution to different audiences and to offer indications on how to reduce people's exposure
  - Provide practical advices, given the current evidence
  - Identify priorities for the next steps (incl. research gaps)
- WHO Summary report on expert advices and mapping priorities for the different topics
- Under revision by a wider group of experts and medical societies
- Expected release in 2019

# Relevant WHO activities

**WHO European High-level Conference on Non-communicable Diseases (NCDs): Time to deliver – meeting NCD targets to achieve Sustainable Development Goals in Europe (Ashgabat, Turkmenistan, 9–10 April 2019)**

**5 main NCD risks**



- Unhealthy diet
- Tobacco use
- Air pollution**
- Harmful use of alcohol
- Physical inactivity



**TIME TO DELIVER**

Third UN High-level Meeting on Non-communicable Diseases

Agenda included discussion how we do approach **actions on air pollution as part of the efforts to reduce the burden of NCD**



# Other relevant activities

## A Science-Policy Initiative: Air Pollution and Health



- A science-policy statement released in June 2019
- Private and public investments are insufficient and do not match the scale of the problem
- Air pollution is preventable
- With sufficient action suffering and deaths from dirty air can be avoided
- Clean air is as vital to life on earth as clean water.
- Air pollution control and reduction must be a priority for all
- Call for immediate action from all levels of society.

# Draft WP 2020-2021

- Consolidate existing evidence on the health outcomes of exposure to air pollution
- Further develop methodologies for assessment and quantification of direct and indirect effects of long-range transboundary air pollution on human health
- Evaluate the current knowledge on the health risk of polycyclic aromatic hydrocarbons and identify critical gaps.
- Capacity-building for the health impact assessment of air pollution at the regional and sub-regional levels
- Development of communication strategies for health messages related to air pollution in Europe

*\* Consulted with countries during 22<sup>nd</sup> TFH meeting in 2019 (15- 16 May 2019, Bonn)*

# Thank you for your attention



<http://www.euro.who.int/en/health-topics/environment-and-health>