

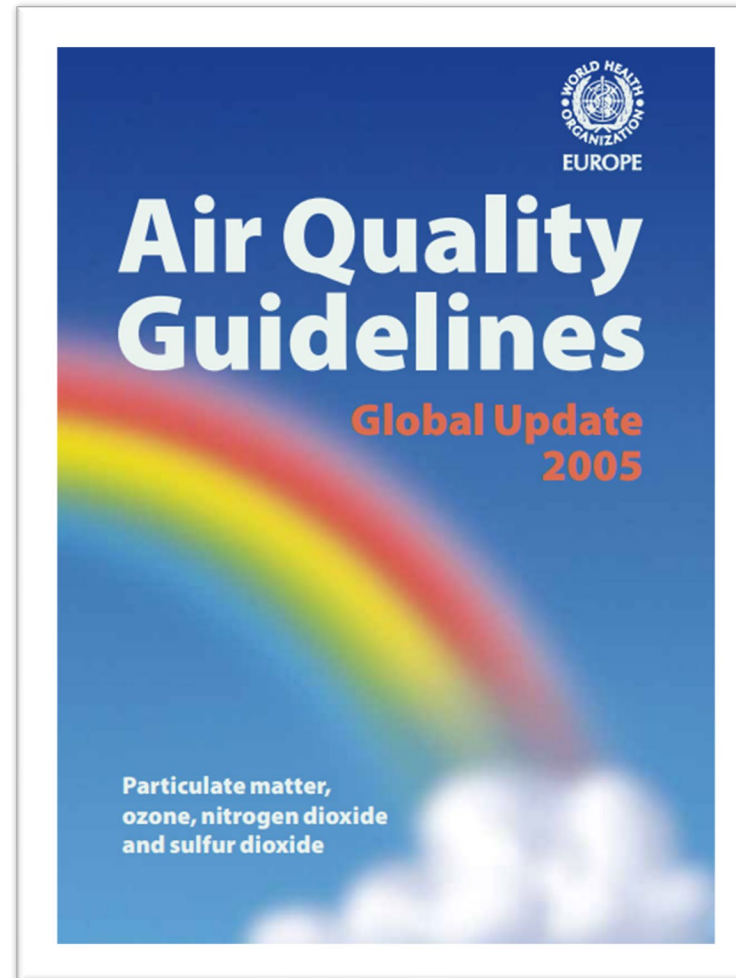
# The Joint Task Force on the Health Aspects of Air Pollution



**Regarding the questions raised in the framework of the amended Gothenburg Protocol review**

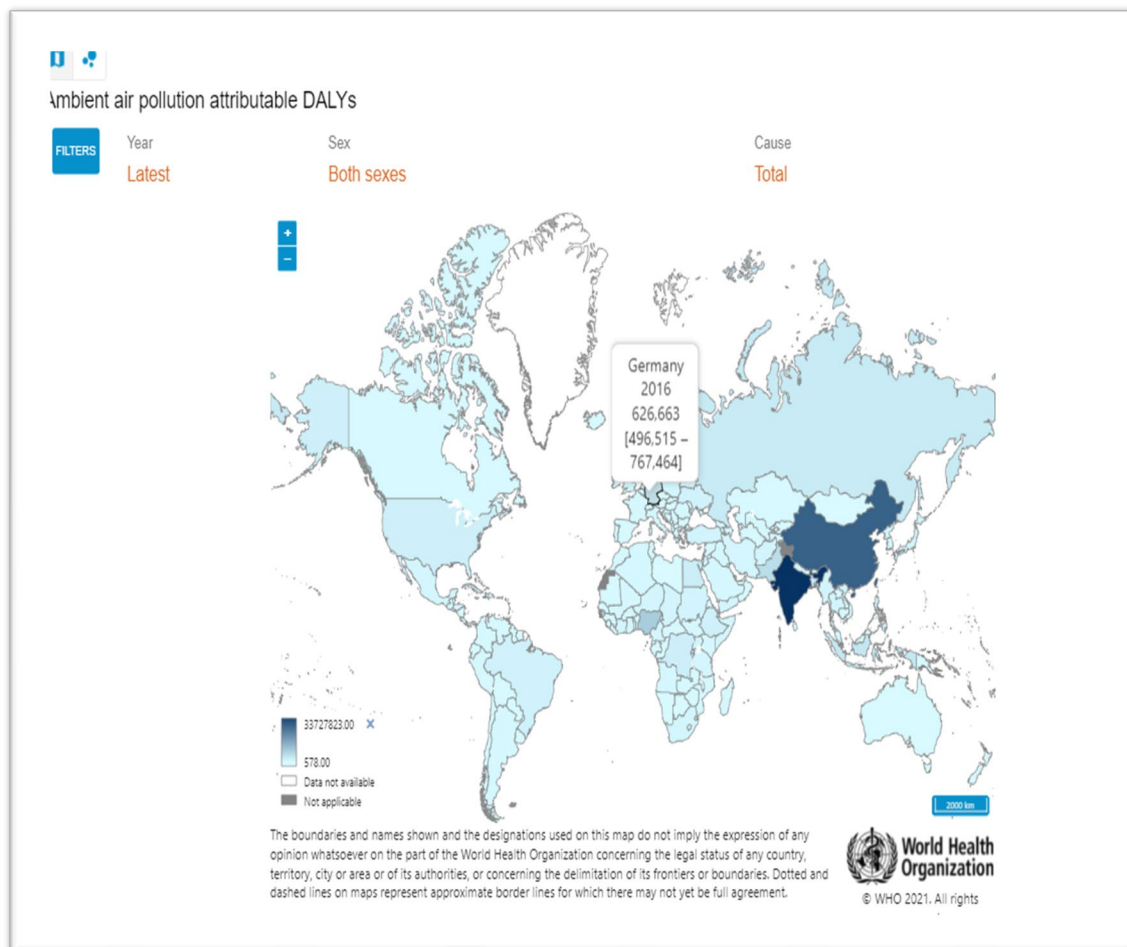
The Seventh Joint Session, 16 September 2021

## 2.3.a. What is the observed and projected trend in ozone exposure of the population above critical levels?



- O<sub>3</sub> concentrations
    - In relation to the EU target value threshold
    - In reference to the WHO air quality guidelines (AQGs)
  - Population exposure
    - 4% of all stations and 7 of 560 rural background stations below the WHO AQG level for O<sub>3</sub>\* in 2018
- \* 8-hour mean of 100 µg/m<sup>3</sup>

## 2.4.a. What is the observed and projected trend in life years lost due to exposure to ozone, particulate matter and nitrogen dioxide?



### ○ WHO

- Most recent data for year 2016
- New estimates expected as part of the SDG reporting
- Mortality and morbidity attributed to PM<sub>2.5</sub>

### ○ EEA

- Premature deaths, years of life lost attributable to PM<sub>2.5</sub>, NO<sub>2</sub> and O<sub>3</sub> exposure
- 41 European countries in 2018

### ○ Different sources

- Recommendations from the HRAPIE project

## 2.4.b. What are observed and projected trends for other health metrics, e.g. morbidity?

- New morbidity study is expected to generate morbidity estimates

## 2.7. Is the monitoring and modelling system of the Convention sufficient to observe, assess and project air pollution and its effects related to the Gothenburg Protocol in the ECE region? If no, what are the main challenges and what is needed to meet them?

- Monitoring and modelling system improved along the years
- Challenges
  - To integrate the knowledge on transboundary air pollution and local sources
  - Source apportionment studies to detail the contribution of each sector

## 2.8. What are the expected impacts of new scientific findings on environmental and health effects assessments?

- Update of the WHO Global AQGs
  - To be launched on 22 SEP 2021
  - Recommendations (AQG level) for PM<sub>2.5</sub>, PM<sub>10</sub>, O<sub>3</sub>, NO<sub>2</sub>, SO<sub>2</sub> and CO
  - Good practice statements for BC/EC, UFP and particles originating from sand dust storms
- Human health effects of PAHs as ambient air pollutants
  - To be published in the 4th quarter of 2021
- Refinement of the exposure response functions
- Importance of low levels of exposure for health impacts
- Issue of the effects not just related to a single pollutant but to multiple pollutants
- Work on source apportionment, economic effects of air pollution

# Draft report on the review of the Protocol to Abate Acidification, Eutrophication and Ground-level Ozone

- Distinguish between the WHO AQG published in 2005 and those to be published next week, and specify the averaging time for air pollutant

*Section IV, point 25: Around half of the EMEP sites have recorded exceedances of the WHO air quality guidelines (AQG) for PM<sub>2.5</sub> in recent years. (page 5)*

*Section IV, point 27: the WHO air quality guideline value for PM<sub>2.5</sub> (yearly and daily) is expected still to be exceeded in some areas (page 5)*

- Revise some article after the publication of updated WHO AQG

*In Section V, point 29: Population exposure and health risks: updated WHO air quality guideline values, relative risk factors, as well as no-effect/counterfactual values will become available in autumn 2021 (Page 5)*

# Thank you

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