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Всемирная организация здравоохранения
Европейское региональное бюро

Recent TFH activities on air quality and health

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LRTAP
Long-range Transboundary Air Pollution

Presentation outline

1. 17th meeting of the WHO TFH (14-15 May 2014)
2. Recent evidence on AQ and Health
3. Recent TFH activities
   a) WHO capacity building session on “Ambient air quality monitoring and applied health risk assessment”
   b) WHO Expert meeting on “Methods and tools for assessing the health risks of air pollution at local, national and international level”
   c) TFH paper on “Residential Heating with Wood and Coal: Health Impacts and Policy Options”

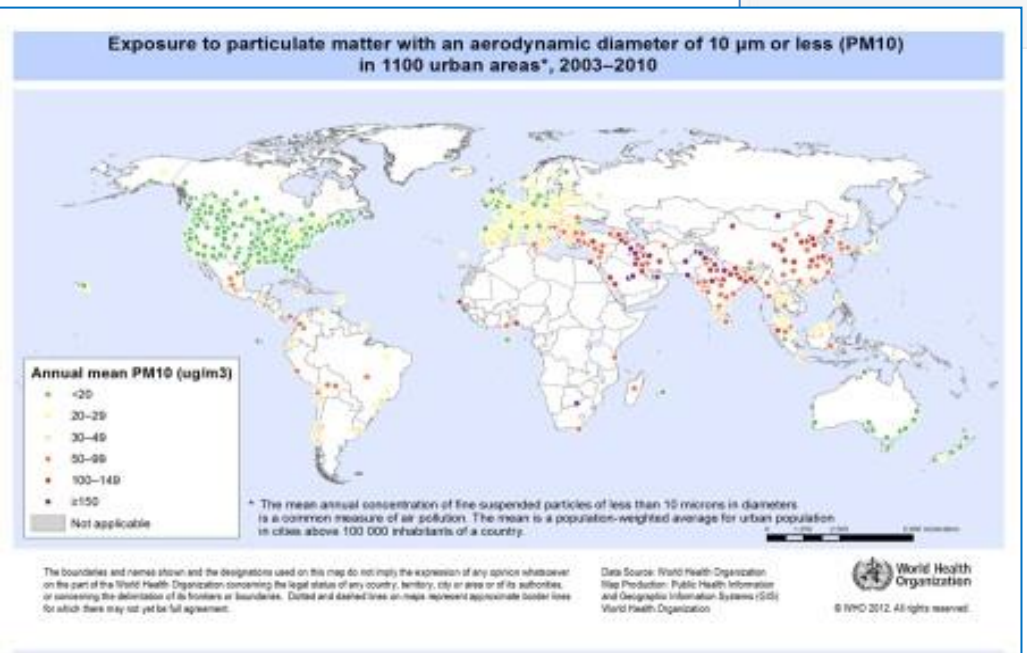
17th TFH meeting 14-15 May 2014, Bonn, Germany

1. Review of the progress in research on health impacts of PM and ozone;
2. Update on the revision of the EU air policy;
3. Discussion on WHO public health recommendations for air quality;
4. Methods and tools for assessing the health risks of air pollution at local, national and international level (summary of WHO Expert Meeting);
5. Monitoring and modeling of air pollution and its health impacts in countries;
6. Presentation of scientific evidence for communication with policy makers
   - Includes various national activities and update on publication on health effects of residential heating with wood and coal

- *50 participants from 34 countries and other international organizations*
- *Funding from Switzerland and Germany acknowledged*

Burden of disease in the WHO European Region

- Almost 600,000 deaths in the European Region in 2012
  - 482,000 attributable to ambient air pollution
  - 117,200 attributable to household air pollution



WHO Indoor air quality guidelines for household fuel combustion

- Provide guidance on policies and impact of different fuels and technologies (for cooking, heating and lighting) on health
- Recommendations for emission rate targets in order to meet the WHO ambient Air Quality Guidelines for CO and PM2.5
- Recommendations for household energy transition from traditional and low emission biomass to clean fuel use.
- *“Unprocessed coal should not be used as a household fuel”*
- *“Household combustion of kerosene should be discouraged while further research into its health impacts is conducted”*

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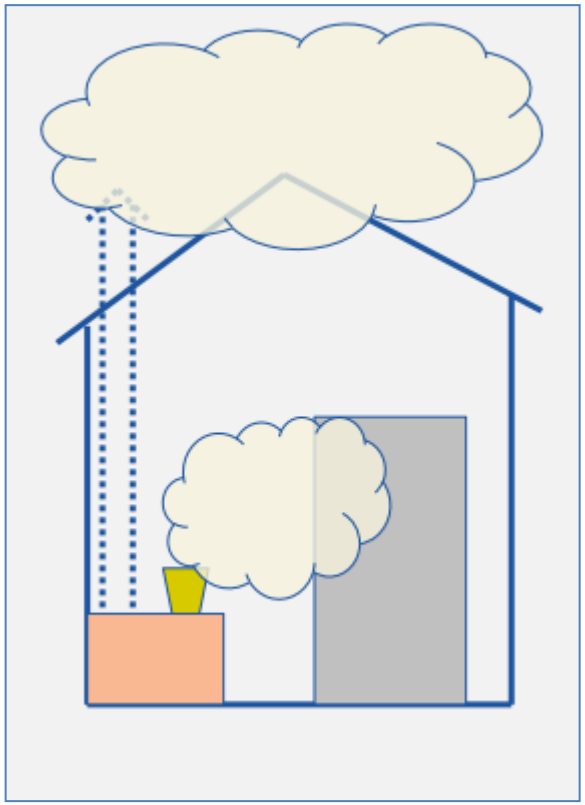
WHO Indoor air quality guidelines for household fuel combustion

- The home does not exist in isolation:
  - Household emissions enter ambient air, re-enter homes and lower IAQ: hence, total emissions should be minimized.
  - Local ambient air quality (from homes and other sources) affect IAQ: this must be considered in order to achieve clean indoor air
- Based on evidence, exclusive use of clean fuels is required to achieve WHO AQG (PM2.5)
- Launch of guidelines later in 2014



Recent WHO/EURO activities: capacity building

- WHO training workshop on "**Multiple exposures and risks: evidence review, knowledge transfer and policy implication"**
  - Held 16-18 October 2013 in Bonn, Germany
  - One-day session on ***Ambient air quality monitoring and health impact assessment***, attended by 28 national experts
  - Simultaneous interpretation in Russian

Recent WHO/EURO activities: expert meeting on HRA

- WHO expert meeting on **"Methods and tools for assessing the health risks of air pollution at local, national and international level"**
  - Held 12-13 May 2014 in Bonn, Germany
  - Attended by 50 experts
  - Propose an overview of available indoor and outdoor air pollution methods and tools
  - Identify general principles and appropriate methods and tools for conducting assessments for various scenarios and purposes
  - ➢ *Advice will inform a variety of HRA efforts (activities under UNECE TFH and TF HTAP, CCAC, others...)*

Outcome of the WHO expert meeting

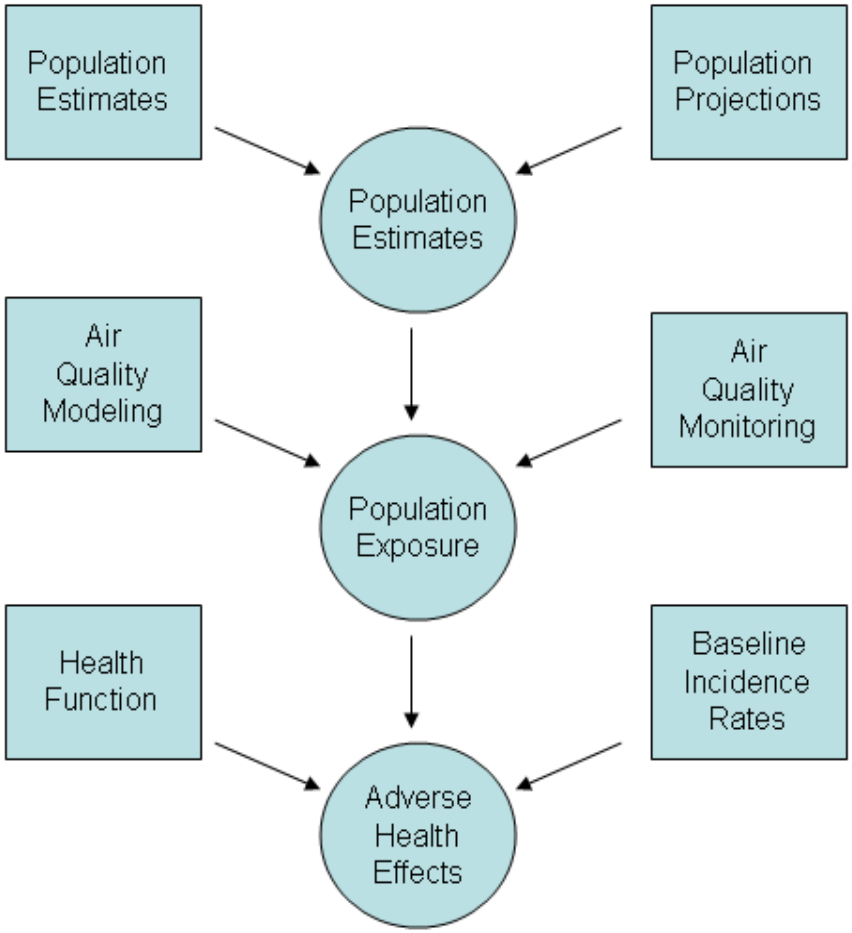
- Discussions and advice from the meeting will be used for the development of WHO publication
- Target audience:
  - community of policy makers;
  - health risk assessment practitioners at local, national and international level;
  - end users from various sectors in international agencies, research and advocacy groups.

Quantifying the health risks from air pollution

Health risk assessment combines information on :

- Population estimates: local/national/ global, past/current/future
- Population exposure: from measurement stations, satellites, models, …
- Adverse Health Effects: Baseline disease/mortality rates in the population, and exposure”-response relationships derived from scientific studies

…to provide a quantification of the risk for a given scenario



TFH paper on residential heating

- Policy-relevant summary of health impacts and implications
  - Geographic scope: Europe and North America
  - Types of fuel: Wood and coal
  - Type of heating: Single-home residential heating
  - Type of exposure: population-level exposure to ambient air pollution from heating appliances
- Paper for submission as informal document to LRTAP EB
- Development of WHO publication

Contents of paper

- Air pollutants produced by residential heating with wood and coal
- Contribution of residential heating with solid fuels as a source of air pollution
- Evidence linking solid fuel heating emissions to health effects
- Regulatory and voluntary measures available to reduce emissions from wood heating in developed countries
- Interventions to decrease emissions, improve outdoor and indoor air quality, and human health
- Co-benefits for health and climate of reducing residential heating emissions

THANK YOU!

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