Air quality and health effects

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Air Pollution - one of the world’s largest single health risks
91% of the global population breathes polluted air
More than 3 billion people rely on polluting energy sources for cooking
Girls in households that cook with polluted fuels spent up to 35 hours a week collecting wood and water
Air pollution is affecting our health

Ambient air pollution (AAP)
4.2 million deaths/yr

Household air pollution (HAP)
3.8 million deaths/yr

Joint effects of HAP and AAP
7 million deaths/yr

In some areas, a significant fraction of ambient air pollution (AAP) is caused by household fuel combustion
What air pollution does to our lungs and our cardio-vascular system

https://www.indiatoday.in/education-today/gk-current-affairs/story/air-pollution-839089-2016-10-20
Air pollution is the second leading cause of non-communicable diseases (NCDs)

THE INVISIBLE KILLER
Air pollution may not always be visible, but it can be deadly.

- 29% OF DEATHS FROM LUNG CANCER
- 24% OF DEATHS FROM STROKE
- 25% OF DEATHS FROM HEART DISEASE
- 43% OF DEATHS FROM LUNG DISEASE

BREATHE LIFE.
Clean Air. Healthy Future.
From risks to solutions

**WHAT ARE THE SOURCES OF AIR POLLUTION?**

Outdoor air pollution affects urban and rural areas and is caused by multiple factors:

- **INDUSTRY & ENERGY SUPPLY**
- **TRANSPORT**
- **WASTE MANAGEMENT**
- **AGRICULTURAL PRACTICES**
- **HOUSEHOLD ENERGY**
- **DUST**

Countries cannot tackle air pollution alone. It is a global challenge we must all combat together.

**SOLUTIONS**

- **INVEST IN ENERGY-EFFICIENT POWER GENERATION.**
- **MAKE GREENER AND MORE COMPACT CITIES WITH ENERGY-EFFICIENT BUILDINGS.**
- **REDUCE AGRICULTURAL WASTE INCINERATION, FOREST FIRES AND CERTAIN AGRO-FORESTRY ACTIVITIES.**
- **PROVIDE UNIVERSAL ACCESS TO CLEAN, AFFORDABLE FUELS AND TECHNOLOGIES FOR COOKING, HEATING AND LIGHTING.**
- **BUILD SAFE AND AFFORDABLE PUBLIC TRANSPORT SYSTEMS AND PEDESTRIAN- AND CYCLE-FRIENDLY NETWORKS.**
- **IMPROVE DOMESTIC, INDUSTRY AND MUNICIPAL WASTE MANAGEMENT.**

**World Health Assembly Resolution A68.8 & Road Map**
There are many solutions
Catalyze more effective urban action on air pollution and other urban health risks:

- Provide urban leaders with health and economic arguments
- Mapping policies
- Provide alternative scenarios
- Build competencies
WHO knowledge goods for the dialogue across sectors

- Incorporating health in urban and territorial planning (with UN-Habitat, forthcoming)

- Housing and Health Guidelines
Analytical tools to support Health and Economic Impact Assessments

Development and application of analytical tools to support the assessment of the health and economic impacts of interventions in key sectors, including on transport, household energy, green space and land-use, solid waste management (open source, flexible, evidence-based tools)

- AirQ+ (air pollution)
- ISThAT (transportation)
- HEAT (walking and cycling)
- GreenS+ (green space)
- HOMES (household energy)
Strengthening local capacity on urban health and air pollution

Capacity building activities as part of Urban Health Initiative pilot project in Kathmandu, 2018

Regional training workshop on Environmental Health Impact Assessment, CEHA, Amman, Jordan, 2017

Capacity building activities as part of Urban Health Initiative pilot project in Accra, 2018

Urban Health Initiative and BreatheLife training event at the World Urban Forum, Kuala Lumpur, Malaysia, 2018
A global campaign to protect our health and climate by improving air quality
Addressing air pollution will have benefits for health and climate change
Expanding the knowledge base

- **Evidence of effectiveness** of sectoral policies
- Synthesis of **cost-effectiveness analysis** on air pollution / building the **investment case**
- Guidance to **apply methodologies** for cost-benefit analysis
- Updated and new guidelines and recommendations (sand, storms, low-cost sensors)
- **Institutional capacity exists** at the national and sub-national levels to conduct such analysis
Monitoring and reporting

- **Enhanced** global and regional monitoring and reporting on health trends associated with exposure to air pollution (SDG reporting)
- Expand database to other pollutants (e.g. NOx)
- New partnerships (e.g. NASA)
- Disaggregated data
- Joint reporting (UN DESA / UN Habitat)
- This is informed by national and sub-national (e.g. city-level) monitoring efforts
Global leadership and coordination

- Link to NCD agenda at global, national and local level
- Build strong partnerships with all levels and sectors of society and intergovernmental organizations (WB etc.)
- Health as the pulse of urban policies
- National and sub-national plans on air pollution and health aligned with regional and global processes and frameworks
Institutional capacity strengthening

- Enhance health sector capacity for addressing adverse effects of air pollution (global, regional and country levels) including in the context of other sector policy processes
- Enhance capacities in HiAP-governance
- Develop capacities to implement new guidelines (e.g. housing)
- National and/or sub-national strategies developed to support such action
Expenditure on Prevention and Public Health Services accounted for an estimated 3.6% of total health expenditures worldwide in 2013.

Opportunity 5: Primary Prevention

Source: WHO GHO, OECD, UK NHS, EIU, PHE Estimates
Our shared vision
Thank you!

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