PAHO’s Action Plan on Air Quality and Health: An Overview and Linkages to Earth Observations

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Air Pollution, A global menace

7 million deaths linked to air pollution world-wide

http://maps.who.int/airpollution/
AP is a common health challenge for the Americas

- + 250 million Latin Americans live in areas where WHO air quality guidelines are exceeded.

- + 300,000 deaths linked to air pollution in the region.

- Air pollution is the largest environmental health threat in the Americas.

- Externalities are about 2-4% of GDP in developing countries.

http://maps.who.int/airpollution/
Driving Forces

• Public transport is a dominant mode in transport supply, but fleet is aged
• LAC has the largest motorization rate in the world
• Major forces driving motorization in the region:
  • Rising incomes
  • Expanding middle classes
  • Availability of low-cost vehicles
  • Poor land use and transport planning and oriented to car use
  • Insufficient sustainable mobility options.
• Use of solid fuels/biomass for heating and cooking (some cities)
• Industry and mining activities could be a major source of emissions
• Wildland forest fires
Monterrey, México
Guatemala
Fuente: Ilse Ruiz. UC Berkeley
Objective
Strengthen the capacity of health actors in all sectors to address and adapt to EDHs, prioritizing those living in conditions of vulnerability.

Goal
Reduce the burden of disease and inequity in health attributable to environmental risks in the Region.

Strategic Objectives
- Primary prevention
- Cross-sectoral action
- Strengthened health sector
- Building political and social support
- Enhanced evidence and communication
- Monitoring

PAHO Plan of Action 2020-2030
How will the Plan of Action be implemented?

**Strategic Actions**

- Improve the performance of environmental public health programs and institutions
- Strengthen environmental public health surveillance
- Foster an environmentally sustainable and resilient health sector
- Promote environmentally healthy and resilient cities and communities

**Thematic Areas**

- Climate Change and Health
- Chemical Safety
- Food Safety
- Water, Sanitation and Hygiene
- Air Quality and Health
A great opportunity
What we aim for – Air Quality and Health:

**Goal:** To reduce the burden of disease and inequity in health attributable to air pollution

**Objective:** strengthen the capacity of health actors to address environmental determinants of health, prioritizing populations living in situations of vulnerability

**Strategic Areas:**

- Improve the performance of environmental public health programs
- Strengthen environmental public health surveillance
- Foster an environmentally responsible and resilient health sector
- Promote environmentally healthy and resilient communities.
**PAHO Technical Cooperation**

<table>
<thead>
<tr>
<th>Strategic Lines of Actions</th>
<th>Main Actions</th>
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<tbody>
<tr>
<td>Improve the performance of environmental public health programs</td>
<td>Support integrating health in air quality policies and plans</td>
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<td>and institutions on air quality</td>
<td>Support promoting setting of air quality objectives based on WHO health</td>
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<td></td>
<td>guidelines</td>
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<td></td>
<td>Enhance capacity of health workforce</td>
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<tr>
<td>Strengthen environmental public health surveillance on air quality</td>
<td>Support measurement and assessment of SDG indicators 3.9.1, 7.1.2, 11.6.2 –</td>
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<td>PM2.5</td>
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<td>Incorporation of air quality related indicators in national public health</td>
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<td>surveillance systems</td>
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<tr>
<td>Foster an air quality responsible and resilient health sector</td>
<td>Promote use of clean energy in health sector</td>
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<td>Exposure reduction in health care facilities</td>
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<td>Promote environmentally healthy and resilient cities and</td>
<td>Implement initiative for elimination of polluting cooking fuels</td>
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<td>communities on air quality</td>
<td>Promote cleaner air in urban areas</td>
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<td>Implementation of early warning systems</td>
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The issue of monitoring in the Americas

- Air pollution risk is unevenly distributed within the region.
- Just 2 cities in LAC; accounting for 7.3 million inhabitants meet WHO recommendation.
- Nearly 115 million in LAC live in cities of more than 500,000 inhabitants where there is not ground AQM information.
- 20 countries have air quality standards but only 13 have laws, policies, or regulations.
- 20 countries have information on ground level outdoor air quality but only nine have QA/QC procedures.
- Absence of QA/QC practices limits implementation of new technologies.
- Limited forecasting capabilities and capabilities to assess regional phenomena.
A way forward: Using Earth Observations to Enhance Technical Cooperation

- Focus on vulnerable population.
- Identifying AP events in areas with limited ground monitoring information – One of the most common consultations we receive (COL, VEN, BAR, DOM).
- Enhancing AP burden of disease estimations.
- Early responses to wildfires events.
- Identifying large –and hidden- emissions sources.
- AQ Modeling, Forecasting and Early Warning Systems
- Improving enforcement.
- Training & Capacity Building
Shared responsibility...
## WHO Collaborating Centers - AQ

<table>
<thead>
<tr>
<th>Name</th>
<th>Main areas of collaboration</th>
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<tbody>
<tr>
<td>Instituto Nacional de Salud Pública de México</td>
<td>Measurement and assessment of SDG indicators 3.9.1, 7.1.2, 11.6.2</td>
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## Reference Institutions

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<tr>
<th>Institution</th>
<th>Area of collaboration</th>
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<tbody>
<tr>
<td>Clean Air Institute, USA</td>
<td>Air quality objectives, policies, and plans Setting of air quality objectives Cleaner air in urban areas</td>
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<tr>
<td>Health Care without Harm</td>
<td>Use of clean energy in health sector</td>
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<tr>
<td>Clean Cooking Alliance</td>
<td>Initiative for elimination of polluting cooking fuels</td>
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<tr>
<td>Climate and Clean Air Coalition (CCAC)</td>
<td>Mitigation of SLCP</td>
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## Key Stakeholders

- Country Governments (i.e. MoHealth, Ministry of Environment, Ministry of Energy, etc)
- Global/Regional Platforms (i.e CEPAL, PNUMA, SICA, OLADE)
- Sector partners (i.e GIZ, WB, IADB)
- National Institutes of Health
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Climate Change and Environmental Determinants of Health
Communicable Diseases and Environmental Determinants of Health
The BL Network in The Americas

- North America
  - Canada: Montreal & Vancouver
  - México: Campeche, Jalisco, Morelos, Mexico City
  - USA: San Antonio, Washington DC

- Central America
  - Honduras
  - Panama: Panama City

- South America
  - Argentina: Chaco
  - Colombia: Aburra Valley, Barranquilla, Bogota, Cali, Caldas and Medellín.
  - Chile: Chiguayante, Concepción, Hualqui, Santiago, Talca
  - Ecuador: Azuay
  - Peru: Lima

- The Caribbean
  - Dominican Republic: Santo Domingo
  - Trinidad & Tobago

18 cities,
1 metropolitan area
5 States
4 Countries
+ 400 million people
Milestones and Key Actions

• Communication and Outreach:
  • Strengthening communication through stories highlighting city achievements and best practices
  • 2018-2019 Quarterly Regional Webinar Series with participation of BL members showcasing implementation strategies

• Technical Cooperation:
  • Workshop in Colombia (2017 and 2019)
  • City and Region AQ, Climate, and Health Road Maps (Honduras and Lima)
  • AirQ+ and BenMAP training

• Resource Mobilization:
  • Preparation of funding proposals to CCAC Action Program and Expert Assistance
  • Support the preparation of proposals to European Union Funding