OVERVIEW OF THE ENVIRONMENTAL HEALTH SITUATION IN THE ARAB REGION

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Regional Center for Environmental Health Action
In the Eastern Mediterranean Region

Tuesday, 10 November 2020
Global Perspectives on Health, Environment and Climate Change

- **No healthy community in a contaminated environment**, nor a clean environment in an unhealthy community (Health equity is intimately linked to socio-economic equality and environmental justice)

- **One quarter of disease burden** caused by unhealthy environment. Through health protection and promotion, preventive action in relevant sectors and healthy living can manage environmental risks on health.

- **COVID-19 and clean environment**: an opportunity for resilient green recovery.

- The traditional therapeutic approaches that focus on treatment of individual diseases/symptoms, rather than **improvement of determinants of health**, is insufficient to reduce modern environmental health risks.

- About **10%** of global gross domestic product (GDP) is being spent on healthcare, but less than **0.5%** goes on primary prevention.
WHO strategy on Health & the Environment

- **Scaling up primary prevention**: Effective and equitable action will be put in place on the drivers of environmental risks to health.

- **Cross-sectoral action**: Address health determinants in policies in all sectors.

- **Strengthen the health sector**: Leadership and coordination roles, working together with other sectors.

- **Building support**: Strengthen governance mechanisms and create a demand for healthy environments.

- **New evidence**: Evidence-based communication and building the case for influencing investments.
Arab Environmental Health Priorities

The Regional Strategy & Guideline of Action Outlined (9) nine health and environment priorities:
- Water, Sanitation and Health
- Air Pollution
- Food Safety
- Chemical Safety
- Wastes Management and Environmental Health Services
- Environmental Health Emergency Management
- Climate Change and Health
- Sustainable Development and Health
- Occupational Health and Safety
<table>
<thead>
<tr>
<th></th>
<th>Water, sanitation &amp; Hygiene</th>
<th>Indoor air pollution</th>
<th>2nd hand tobacco smoke</th>
<th>Noise</th>
<th>Chemicals</th>
<th>Housing risks</th>
<th>Recreational environment</th>
<th>Water resources</th>
<th>Built environment &amp; Housing</th>
<th>Other community risks</th>
<th>Radiation</th>
<th>Occupation</th>
<th>Climate change</th>
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<tbody>
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<td>1. Ischemic Heart Disease</td>
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<td>4. Respiratory infections</td>
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<td>5. Cancers</td>
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<td>7. Neonatal Conditions</td>
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<td>8. COPD</td>
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<td>9. Drownings</td>
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## Arab Countries Groupings & Environmental Health Priorities

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<thead>
<tr>
<th></th>
<th>Group 1</th>
<th>Group 2</th>
<th>Group 3 &amp; 4</th>
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<tbody>
<tr>
<td><strong>Income</strong></td>
<td>High</td>
<td>Middle</td>
<td>Low</td>
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<tr>
<td><strong>Level of Service</strong></td>
<td>Good</td>
<td>Endeavoring</td>
<td>Lacking</td>
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</table>
| **Environmental Health and Food Safety Priorities** | • Air Pollution  
  • Exposure to Chemicals  
  • Occupational Risks  
  • Climate Change  
  • Food Safety (Chemical Hazards) | • WASH  
  • Air Pollution  
  • Exposure to chemicals and wastes  
  • Occupational Risks  
  • EH services in Emergencies  
  • Climate Change  
  • Food Safety (Biological and Chemical Hazards) | • WASH  
  • Air Pollution  
  • Exposure to wastes  
  • EH services in Emergencies  
  • Climate Change  
  • Food Safety (Biological and Chemical Hazards) |
## Projected Impact of Environmental Risks on Health:

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<th>G1</th>
<th>G2</th>
<th>G3, G4</th>
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<tr>
<td><strong>Communicable Diseases CDs</strong></td>
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<tr>
<td><strong>Non-Communicable Diseases NCDs</strong></td>
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<td><strong>Injuries</strong></td>
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Mortality Attributable to Environmental and Food Safety Risks

Environmental Burden of Disease 23%
Annual premature Mortality 675,000
DALYs over 25 Million yearly

Other Deaths 77%
Aggravated by Climate Change and Emergencies

- Air Pollution: 56%
- Toxic Chemicals: 11%
- Occupational Risks: 11%
- WASH: 9%
- Food Borne Diseases: 4%
- Other Environmental Risks: 9%

Health and the Environment in Arab Countries
Causes of death attributable to the environment in the world and the Arab Region

- Non-Communicable Diseases
- Communicable Diseases
- Injuries

Globally vs Arab Region
Annual Deaths Attributable to Environmental Risks

Age-standardized deaths / 100,000 capita

Countries: Somalia, Comoros, Mauritania, Sudan, Djibouti, Yemen, Iraq, Egypt, Syria, Algeria, Morocco, Saudi Arabia, Jordan, Libya, UAE, Tunisia, Oman, Lebanon, Kuwait, Bahrain, Qatar
Diseases with strongest linkages with Environmental Risks

- Unipolar Depressive Disorders
- Asthma
- Falls
- Fires, heat and hot substances
- Back and Neck Pain
- Drowning
- Malaria
- Neonatal Conditions
- Road Traffic Accidents
- COPD
- Cancers
- Lower Respiratory Infections
- Diarrheal Diseases
- Ischemic Heart Disease
- Stroke

Fraction of total burden of Disease (%)

- Environmental Fraction
- Non Environmental Fraction

0 2 4 6 8 10 12 14
Annual average (population-weighted) exposure to outdoor fine particulate matter air pollution (PM2.5) in µg/m³, 2016

Western Pacific (Low and Middle Income)
Western Pacific (High Income)
South East Asia
Europe (Low and Middle Income)
Europe (High Income)
Eastern Mediterranean (Low and Middle Income)
Eastern Mediterranean (High Income)
Americas (Low and Middle Income)
Americas (Low Income)
Africa

WHO Recommended Level

Total Urban
Increase in life expectancy (Years) in case of meeting the WHO PM$_{2.5}$ guideline*

50 million have no access to basic drinking water services; 74 million have no access to basic sanitation services, and 25 million are still practicing open defecation.
Figure (4) Regional Food Safety System Profile
Total Food Safety Capacity by Group

TOTAL CAPACITY LEVEL

Lacking  Endeavoring  Adequate
21%  23%  27%  27%  36%  37%  39%  43%  47%  53%  53%  59%  61%  69%  71%
Health Burden attributable to climate change

- Western Pacific
- South East Asia
- Europe
- Eastern Mediterranean
- Americas
- Africa

The bar chart shows the relative health burden attributable to climate change across different regions, with Africa having the highest burden.
Deaths attributable to occupational risks by disease

- Cancers: 27%
- COPD: 29%
- Asthma and other respiratory diseases: 7%
- Unintentional Injuries: 36%
- Other Diseases: 1%

13th Annual Report of Arab Forum for Environment and Development (AFED)
Opportunities Outlook

WHO GPW13-SDGs Agenda 2030 targets and indicators relevant to the Health and Environment for WHO, globally:

• Reduce the mortality rate attributed to household and ambient air pollution by 5%
• Reduce mortality from climate-sensitive diseases by 10%
• Provide access to safely managed drinking water services for 1 billion more people
• Provide access to safely managed sanitation services for 800 million more people
Thank You