TOWARDS A PUBLIC HEALTH RESPONSE TO CLIMATE CHANGE AND AIR POLLUTION IN THE EASTERN MEDITERRANEAN REGION

Objectives of the event

The objectives of the event are to:

- highlight health impacts of climate change and the need for a public health response to climate change in the Region;
- advocate for action to develop a public health response to climate change, focusing on air pollution;
- highlight benefits to health by addressing climate change.

Background

Climate change is one of the biggest global health threats of the 21st century. The WHO conference on health and climate in August 2014 reviewed strong scientific evidence of the adverse impact on health as a result of climate change. Climate change threats to global health arise from changing patterns of disease, water and food insecurity, air pollution, vulnerable shelter and human settlements, and extreme climatic events. Shortages in water and food and an increase in vector-borne diseases and allergic/respiratory diseases are likely to be the biggest adverse health effects. Direct health threats include excess heat-related mortality; increased heat exhaustion and heat stroke, particularly for outdoor labourers, athletes and the elderly; exacerbated circulatory, cardiovascular and respiratory diseases; increased premature mortality related to ozone; and air pollution, particularly during heat waves.

The World Health Assembly and the Regional Committee resolutions WHA61.19 and RC55/R8 in 2008 called upon Member States to take measures to protect health from climate change, and climate change and air pollution were identified as two of the seven strategic priorities in the regional strategy on environmental health. There is a rapidly expanding body of evidence of the negative impact on health as a result of climate change throughout the world, including within the Region in Islamic Republic of Iran, Jordan, Morocco, Pakistan, Tunisia and United Arab Emirates.

Outdoor and indoor air pollution cause several diseases, including: ischaemic heart disease; stroke; chronic obstructive pulmonary disease; lung cancer; and acute lower respiratory infections in children. In March 2014, WHO estimated that globally 7 million people, including 400 000 in the Region, are dying prematurely annually because of indoor and outdoor air pollution. There is now a unique opportunity to reduce these deaths while also reducing climate warming. Climate change exacerbates negative health impacts by causing additional allergies, respiratory and cardiovascular diseases associated with dust storms,
pollen production and ozone-related air pollution. A side event at the Sixty-sixth session of the World Health Assembly discussed linkages between health, climate change and air pollution and concluded that “Countries that act now to reduce short-lived climate pollutants, such as black carbon particulates and tropospheric ozone, can reap immediate health benefits and health cost savings – as well as reducing the hazards that may be expected from the pace of climate change in this century”.

Public health response to climate change and air pollution

The WHO conference on health and climate reiterated earlier warnings that the health community at global and national level must act assertively now in order to manage the health effects of climate change. The public health response is three-fold.

- Strengthening health resilience and preparedness to climate change by integrating climate capacities within the six recognized blocks of health systems: 1) developing a health and climate national policy and adaptation plan; 2) building the capacity of human resources for action on health and climate change; 3) establishing health and climate information systems with capacity for research, early warning, and vulnerability assessment; 4) advocating essential products and technologies for “greening” the health sector; 5) ensuring climate-informed preventative and curative health programmes and emergency preparedness; and 6) mobilizing health-specific resources for climate change action from national and international financing mechanisms.

- Strengthening the leadership, governance, guidance, regulatory and monitoring roles of public health for managing the environmental determinants of health working with priority health-determining sectors, such as water and sanitation, air quality management, and food security and safety.

- Engaging actively in national, regional and international policy processes on climate change. At national level, developing national health and climate change policies and action plans as the health component of national adaptation plans; and ensuring health benefits are realized from climate adaptation and mitigation policies in other sectors, particularly in relation to air pollution. At the international level, supporting negotiations towards a new health-promoting climate treaty under the United Nations Framework Convention on Climate Change (UNFCCC).

WHO will carry out the following actions to strengthen the positioning of health within ongoing international climate change processes: 1) report the outcomes of the health and climate conference to the climate summit hosted by the UN Secretary-General on 23 September 2014; 2) provide the outcomes of the health and climate conference to national delegations engaged in negotiating the new climate treaty to be finalized in December 2015; 3) propose a revision of the WHO work plan on health and climate change for consideration by Member States at the 136th session of WHO Executive Board in January 2015; 4) inform negotiations on the post-2015 sustainable development goals.

The clear linkages between health, climate change and air pollution make public health-based air quality management a good example to demonstrate the leadership, regulatory and monitoring roles that should be taken by the health sector, including: supporting framing of national policy to protect health from air pollution impacts; advocating for health-based air pollution control policy and management interventions by other relevant sectors; and promoting monitoring and surveillance of the health impacts of air pollution.

Cost-effective interventions to minimize human exposure to indoor and outdoor air pollution are available and their success has been demonstrated. Furthermore, obvious health gains achieved through mitigation of climate change will synergize efforts to reduce air pollutants, including the curtailment of greenhouse gas emissions.
Challenges for the Region

Within the Region, currently observed climate change effects are significant and include: rising average temperatures; aggravated water scarcity; frequent and severe heat waves; recurrent and strong dust storms; and lasting droughts, crop failures, and floods damaging human settlements and health facilities. Research evidence from selected countries, has documented numerous adverse climate impacts on health, including: increased incidence of waterborne diseases; under-nutrition, drowning, injuries and malaria in Pakistan; increased mortality and morbidity during heat waves and dust storms in the Islamic Republic of Iran; increased mortality due to cardiovascular and respiratory illnesses, and thermal stress in countries of the Gulf Cooperation Council; increased incidence of dengue fever, malaria and schistosomiasis in Egypt, Morocco, and Sudan; increased incidence of zoonotic cutaneous leishmaniasis in Tunisia; and increased allergic reactions and pulmonary diseases across the region due to dust storms.

In order to develop an effective public health response to climate change in Member States, there is a need to address the following challenges within the health sector: 1) low level of awareness of the strong linkages between climate and health; 2) lack of ownership/stewardship and engagement of the health sector in climate change processes; 3) weak technical capacity within the sector to strengthen its climate resilience and engagement in national and international climate negotiations; and 4) limited funding for a health response to climate change.

Excessive air pollution is often a byproduct of unsustainable policies in sectors such as housing, transport, energy, waste management and industry. While the health sector is already engaged in action to address air pollution, engagement is not always systematic and coordinated. Systematic surveillance of health impacts of indoor and outdoor air pollution is still a challenging endeavour in the Region. A recent assessment of air pollution conducted by the WHO Regional Centre for Environmental Health Action (CEHA) concluded that several countries in the Region still do not have adequate regulation and/or systems for monitoring and reporting on air pollution. Data from the WHO 2014 database on urban air pollution show that of the 1600 cities reporting data globally, only 26 cities are in the Region. Worldwide, only 12% of people living in cities, which report such data, reside in cities where the air quality complies with WHO air quality guideline levels, unfortunately in the Region this figure is close to 0%.

Expected outcomes

- Heightened awareness of health and climate linkages and need to develop a public health response to protect health from climate change in the Region, with a focus on air pollution.
- Heightened awareness of the serious health impacts of outdoor and indoor air pollution, and the need to strengthen the capacity of the public health sector as a regulator and advocate for monitoring, evaluating and catalysing actions to be undertaken by other relevant sectors.
- Consensus to address health and climate change, including air quality, water security and food safety implications at the Sixty-second session of the Regional Committee for the Eastern Mediterranean.
- Establishment of a platform to support countries in responding to climate change through WHO’s own mandates and programmes and collaboration with other stakeholders.