

## **Climate change and health**

### **Report by the Secretariat**

1. There is a strong and growing, global, scientific consensus that warming of the climate system is a fact and is affecting human health. In view of the evidence, the Sixty-first World Health Assembly, in its resolution WHA61.19 requested the Director-General, inter alia, to consult Member States on the preparation of “a workplan for scaling up WHO’s technical support to Member States for assessing and addressing the implications of climate change for health and health systems”.
2. Accordingly, a workplan was prepared through a consultative process, building on regional committee resolutions and regional frameworks for action, and further incorporating suggestions from Member States submitted electronically and in a meeting attended by 22 countries<sup>1</sup> nominated by the WHO Regional Directors (Geneva, 9–10 October 2008). The resulting, proposed workplan<sup>2</sup> was reviewed and amended by the Executive Board at its 124th session in January 2009.<sup>3</sup>
3. The workplan is a framework for action by the Secretariat, taking into account the climates, cultures, socioeconomic development, health systems, health status and vulnerability across Member States. It is organized around four objectives. The central focus is on environmental risks to health (i.e. under strategic objective 8), but several actions require the incorporation of climate-change considerations into other strategic objectives, work on which is in hand. It will be implemented within the time frame of WHO’s Medium-term strategic plan 2008–2013.

### **OVERALL AIM**

4. The workplan aims to:
  - support health systems in all countries, in particular low- and middle-income States and small island States, in order to enhance capacity for assessing and monitoring health vulnerability, risks and impacts due to climate change;

---

<sup>1</sup> Bangladesh, Barbados, Brazil, China, Costa Rica, Denmark, El Salvador, Germany, India, Italy, Jordan, Madagascar, Maldives, Norway, Oman, Poland, Republic of Korea, Russian Federation, Samoa, Serbia, Spain, and United Kingdom of Great Britain and Northern Ireland.

<sup>2</sup> Document EB124/11.

<sup>3</sup> See document EB124/2009/REC/1, Annex 4.

- identify strategies and actions to protect human health, particularly of the most vulnerable groups; and
- share knowledge and good practices.

## **OBJECTIVES AND ACTION**

### **Objective 1. Awareness raising**

5. Raising awareness of the effects of climate change on health, in order to prompt action for public health measures. A better understanding of the risks and effects of climate change on health will motivate and facilitate both behavioural change and societal support for actions taken to reduce greenhouse gas emissions. Improved awareness will help health-sector professionals to provide leadership in supporting rapid and comprehensive strategies for mitigation<sup>1</sup> and adaptation<sup>2</sup> that will both improve health and reduce vulnerability.

#### **Action**

6. The Secretariat will undertake two actions, set out below.

*Action 1.1* Development of tools, guidance, information and training packages to support awareness and advocacy campaigns to protect health from climate change at national and regional levels.

7. This action will target different population groups, especially health professionals. Education packages for the general public, particularly vulnerable groups such as children and the elderly, will be produced in collaboration with national authorities and nongovernmental organizations.

*Action 1.2* Develop and run a global awareness-raising and advocacy campaign aiming to put health at the centre of the climate change mitigation and adaptation agenda at the international level.

8. This campaign aims to ensure that health is fully considered in the negotiations being carried out towards the 15th Conference of the Parties to the United Nations Framework Convention on Climate Change, scheduled to be held in Copenhagen, in December 2009. The campaign will also aim to clarify the role and necessary actions of the population, policy-makers and others for implementing health-related measures to enhance adaptation and reduce greenhouse gases. In this regard, the benefits for health of different choices in areas such as energy production and transport, will be clarified and quantified. The campaign will use standard methods and will also use innovative approaches on multimedia platforms. Relevant youth groups and nongovernmental organizations will be actively involved.

---

<sup>1</sup> In this context, mitigation means action to reduce human effects on the climate system, principally strategies to reduce emissions of greenhouse gases, or enhance their removal from the atmosphere.

<sup>2</sup> Adaptation means adjustment that moderates harm or exploits beneficial opportunities in natural or human systems in response to actual or expected climatic stimuli or their effects.

**Objective 2. Engage in partnerships with other United Nations organizations and sectors other than the health sector at national, regional and international levels, in order to ensure that health protection and health promotion are central to climate change adaptation and mitigation policies**

9. Partnerships will be sought at all levels. This requires the public health sector to play a stewardship role in fostering policy coherence across sectors, and to influence policies and actions that can benefit health.

**Action**

10. The Secretariat will undertake three actions.

*Action 2.1* Participate in the relevant mechanisms and coordination activities within the United Nations system.

11. Particular attention will be given to the United Nations Framework Convention on Climate Change, Nairobi Work Programme on impacts, vulnerability and adaptation to climate change. The Secretariat will work to ensure that health concerns are fully taken into account in decision-making, resource allocation and outreach activities.

*Action 2.2* Exercise WHO stewardship role with other sectors and related United Nations organizations.

12. Interaction with other sectors will be enhanced through the production of specific tools and information material to clarify the impact that different development choices (e.g. in the transport and energy sectors) could have in promoting and protecting health. Joint projects with other sectors (e.g. agriculture and emergency management) will address the need for intersectoral collaboration in order to improve effectiveness of adaptation responses.

*Action 2.3* Provide the health sector with information, tools and advice so it can actively participate in national, regional and international mechanisms.

13. Health representatives need to ensure that health concerns are adequately integrated into national committees, National Adaptation Programmes of Action and regional and international adaptation and mitigation strategies. The Secretariat will provide Member States with information and data as well as advocacy instruments in order to support the preparation of the necessary documentation at country level, to facilitate access to resources and strategically position health into current and future national and international policies.

**Objective 3. Promote and support the generation of scientific evidence**

14. There are some important gaps in our knowledge, in particular about the current and potential future impacts of climate-related risks, the degree of population vulnerability, characteristics of vulnerable groups, the type of surveillance and alert and emergency management systems, the most useful indicators for monitoring and evaluation of the criteria for action, as well as the comparative effectiveness of different adaptation and mitigation policies for health promotion and protection.

## Action

15. The Secretariat will undertake seven actions.

*Action 3.1* Assess the burden of disease attributable to climate change and project it to future years using existing and new approaches.

16. The Secretariat will work closely with other relevant scientific bodies to update earlier estimates and include new indirect outcomes not considered in previous calculations. Existing tools to facilitate the application of the outcomes to regional, national and local levels will be revised and enhanced.

*Action 3.2* Review and develop methodologies and guidelines on how to evaluate vulnerability to climate change-related health effects at local, national and regional levels.

17. Vulnerability assessments provide a better understanding of current and future risks to health, along with associated uncertainties. They also facilitate the identification of the interventions that can reduce pressure on climate-sensitive health determinants, increase population resilience to climate change, and enhance capacity for preparedness and response to emergencies.

*Action 3.3* Develop a clearinghouse of existing health protection strategies in Member States and make the information widely available. Assess comparative effectiveness, including cost-effectiveness.

18. Some countries and regions are undertaking or planning strategies and actions. There is a need to document and disseminate these developments, and share and assess their effectiveness.

*Action 3.4* Support and monitor research to improve public health knowledge on the health risks of climate change and on the most effective interventions to manage those risks.

19. WHO has held a formal consultation process with leading researchers, bodies in the United Nations system, nongovernmental organizations and donors, and has defined priority areas for future research under the headings defined in resolution WHA61.19. It will work with these and other relevant partners to establish the financial and coordination mechanisms necessary to address the identified knowledge gaps and build the necessary research capacity, particularly in developing countries.

*Action 3.5* Assess the health impact of adaptation and mitigation policies in other sectors and identify the most effective actions which have the potential to benefit health.

20. The choices made by other sectors, such as energy, agriculture and transport, have a direct impact on human health. A clarification of the health implications of mitigation and adaptation decisions in these sectors and the development of tools for their evaluation at regional, national and local level will support achievement of health benefits, and avoidance of health risks.

*Action 3.6* Identify and develop indicators to monitor climate change-related health outcomes within surveillance systems.

21. Existing surveillance systems will be reviewed to identify indicators that could be used for identifying and assessing climate-related health risks and the effectiveness of actions. New indicators will be proposed if necessary.

*Action 3.7* Work with other relevant scientific organizations to develop a comprehensive international assessment of the economic costs associated with the health effects of climate change under different scenarios of adaptation and mitigation action and/or inaction. Provide Member States with means for conducting such assessments at the national level.

22. The Intergovernmental Panel on Climate Change, Fourth Assessment Report (2001) and the Stern Review on the Economics of Climate Change (2006) have clarified the economic impact of climate change in society as a whole and in specific economic sectors. A similar assessment for the health effects would benefit policy development and strengthen the argument for appropriate action to mitigate and adapt to climate change.

**Objective 4. Strengthen health systems to cope with the health threats posed by climate change, including emergencies related to extreme weather events and sea-level rise**

23. Health-system action to protect populations from the impacts of climate change will need to encompass public health interventions within the formal health sector, such as control of neglected tropical diseases and provision of primary health care, and actions to improve the environmental and social determinants of health, ranging from access to clean water and sanitation to enhancing the welfare of women. A common theme must be ensuring equity and giving priority to protecting the health security of particularly vulnerable groups.

24. In addition, there is a particular need to control and reduce health risks, and strengthen coordinated preparedness and response in respect of the health effects of acute emergencies and other crises that may be exacerbated by climate variability and change.

**Action**

25. The Secretariat will undertake six actions.

*Action 4.1* Provide technical support for building capacity to assess and monitor vulnerability to climate change-related health risks.

26. The Secretariat will collaborate with countries to develop national capacity for hazard, vulnerability, risk and capacity assessments with a particular focus on low- and middle-income countries and on small-island developing States. This will include training in the use of specific tools prepared in the different relevant technical areas.

*Action 4.2* Advocate for the strengthening of primary health care (including primary prevention) services to support capacity of local communities to become resilient to climate-related health risks.

27. Many of the responses to the health challenges posed by climate change will require primary health care, including primary prevention, interventions in areas such as vector management, environmental health protection, and disease surveillance.

*Action 4.3* Mobilize and guide international support for the urgent strengthening and financing of public health systems at the national level.

28. The Secretariat will support the health sector in Member States to engage in international climate change-related mechanisms, in order to access the necessary financial and political support to implement effective health adaptation responses to climate change. The development of health

infrastructure must take account of the risks of climate change to ensure that it is safe and can function in emergencies.

*Action 4.4* Support the preparation, implementation and evaluation of regional and national mitigation and adaptation plans requiring health-system action.

29. The Secretariat will work with countries to establish and evaluate action plans both in the area of specific responsibility of the health sector and in other sectors where actions have an impact on health and on health-sector resources. The need for incorporating climate change into existing health programmes and scaling-up of disaster risk reduction, emergency preparedness and response capacities in order to meet the increased risk of emergencies, will be strongly emphasized. In addition, support will be provided to Member States that want to reduce greenhouse gas emissions within their health sector.

*Action 4.5* Standardize and support the development of early warning systems related to the health consequences of climate change and climate variability.

30. Several countries use warning systems to inform the population on how to prepare for, and cope with, health risks associated with weather-related events. WHO will work with other actors such as meteorological agencies, and participate in experience-sharing, standardization, and wider implementation of effective strategies.

*Action 4.6* Support the assessment of the effectiveness of health emergency management measures in reducing the impact of extreme events on health with the development of appropriate evaluation methods and pilot studies.

31. The Secretariat will support more systematic evaluations of the accuracy of warnings, and the effectiveness of the social, preventive and clinical responses, in protecting health in vulnerable population groups. The effects of climate change on health, the long-term risks stemming from drought and sea-level rise that could affect water and food security and safety, competition for resources, and displacement of populations with humanitarian needs, should all be integrated into early warning systems with appropriate evaluation schemes.

## **IMPLEMENTATION**

32. The activities described in this workplan will be implemented in support of countries through the WHO network at all levels as well as by making effective use of the relevant WHO collaborating centres and the expertise of other relevant bodies such as the Intergovernmental Panel on Climate Change. If necessary, new WHO collaborating centres will be designated to support implementation in some geographical areas and on specific issues. Collaboration with national and international centres of scientific excellence will be enhanced, with particular emphasis on working with institutions from those countries that are most vulnerable to the effects of climate change on health. Monitoring and evaluation will be carried out through the mechanisms and indicators included within WHO's Medium-term strategic plan 2008–2013 as well as the programme budget of each relevant biennium. It is estimated that, despite the sharp increase in activities, the budget for the bienniums 2008–2009 and 2010–2011 will cover the needs. However, the planned budget for the biennium 2012–2013 should be re-assessed on the basis of the actions being developed over the present and next bienniums, and the requirements of Member States for collaboration and support.

33. At its 124th session the Executive Board discussed an earlier version of this report. It adopted resolution EB124.R5, in which it endorsed the workplan on climate change.

**ACTION BY THE HEALTH ASSEMBLY**

34. The Health Assembly is invited to consider resolution EB124.R5.

= = =