



**Protecting health in an  
environment challenged  
by climate change:  
European Regional  
Framework for Action**





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### **Protecting health in an environment challenged by climate change: European Regional Framework for Action**

**Contribution of the Climate Change and Health Task Force**

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## **Acknowledgements**

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The development of the document was greatly assisted by comments received at the meeting of south-east European countries, kindly hosted by the ministries of health of Serbia and of Montenegro (Belgrade, September 2009), and the meeting on environment and health of the newly independent states, in Dushanbe, Tajikistan (October, 2009). During 2009, several policy dialogues and workshops were organized within the framework of planning for health adaptation to climate change in Albania, Cyprus, Kyrgyzstan, Malta, the Russian Federation, Tajikistan, the former Yugoslav Republic of Macedonia and Uzbekistan.

In December 2009, an interagency meeting was hosted by the European Environment Agency, with the European Commission, the European Centre for Disease Prevention and Control, the European Commission's Joint Research Centre, the Organisation for Economic Co-operation and Development, WHO and the World Meteorological Organization, to discuss the content and format of an information platform within the multiple developments at global and European levels.

## Climate change: the public health challenge of this century

*Every century has its own public health challenges; climate change is our century's challenge.*  
Dr Margaret Chan, Director-General, World Health Organization

1. Never has it been more evident that health and environment concerns are central to the changing climate. The findings of the Intergovernmental Panel on Climate Change (IPCC) and the report published jointly by the European Environment Agency (EEA), the European Commission's Joint Research Centre (JRC) and the World Health Organization (WHO) Regional Office for Europe (EEA, 2008a) provided evidence that impacts on natural systems and on health are already being observed, even at a temperature rise of, to date, about 1° C above the 1850–1899 average (IPCC, 2007) in Europe. Glacier shrinking, permafrost thawing, ecosystem changes, the 70 000 excess deaths from the European heat-waves in summer 2003, and the altered distribution of some infectious disease vectors are just a few examples.

2. Projections suggest temperature increases in the European Region of WHO of up to 6.0 °C by the end of this century (EEA, 2008b; IPCC, 2007), with serious consequences on water, air, soil, food, ecosystems, agriculture and economic productivity. Population health is strongly dependent on the stability, productivity and resilience of the natural environment. (McMichael et al., 2009).

3. The findings of several assessments, research projects and national health impact assessments have made it clear that climate change-related exposures of importance to human health in the next decades in the European Region are likely to (Menne et al., 2007):

- increase health effects from extreme weather events;
- increase malnutrition in areas where populations are particularly dependant on crop and livestock productivity;
- change foodborne disease patterns;
- change the distribution of infectious diseases and potentially contribute to the establishment of tropical and subtropical species;
- increase the burden of waterborne diseases in populations where water, sanitation and personal hygiene standards are already low;
- increase the frequency of respiratory diseases resulting from changes in air quality and pollen distribution;
- create displacement of populations because of shoreline erosion, coastal flooding and agricultural disruption.

4. Climate change will have adverse effects on economic growth and pose challenges to various economic sectors. Several estimates are available of global mean losses of gross domestic product (GDP); for example, Stern estimated that 1–5% of GDP could be lost for 4° C of warming, with substantial regional differences (Stern, 2006). Economic growth and equitable distribution are necessary to reduce poverty and pursue many health and environmental goals (IPCC, 2007).

5. While climate change will affect everybody, not everybody is equally vulnerable. The extent to which people's health will be endangered is determined by a number of factors, such as the severity of climate change, the resilience of the environment, inequalities and socioeconomic differences, support systems and opportunities, health system preparedness, health status, gender and age. Countries' ability to achieve sustainable development, as measured, for example, by long-term progress (on poverty and hunger, child mortality, environmental sustainability) towards the Millennium Development Goals, is projected to be affected.

6. A substantial reduction in greenhouse gases is needed to avoid adverse health impacts of climate change on millions of people in the world. According to the IPCC Fourth Assessment Report, to stabilize greenhouse gas concentrations, and not exceed a global average temperature increase of around 2.0–2.4 °C at equilibrium, would require that global greenhouse gas emissions in 2050 should be 50–85% lower than in 2000 (IPCC, 2007). Fifty-three European countries and the European Economic Community ratified the United Nations Framework Convention on Climate Change (UNFCCC) (UNFCCC, 2009a), with the ultimate goal of stabilizing greenhouse gas concentrations (United Nations, 1992). The Fifteenth Conference of the Parties to the Climate Convention took note of the Copenhagen accord, “recognizing the scientific view that the increase in global temperature should be below 2 degrees Celsius” and “deep cuts in global emissions are required” (UNFCCC, 2009b) in all sectors.

7. New emerging evidence shows that many of the measures to reduce greenhouse gas emissions have significant local and immediate health co-benefits (Chan, 2009; Haines et al., 2009). The stimulus of investing in reducing greenhouse gas emissions would be significantly higher if economic valuations also accounted for health benefits, energy security, new employment opportunities, stable agricultural production and food security. Not all mitigation and adaptation measures and technologies are considered to have health co-benefits.

8. Thirty-three out of forty-four WHO Member States in the European Region highlighted the importance of health impacts in their national communications to the UNFCCC. National and regional climate change and health impact vulnerability and adaptation assessments in the European Region have been instrumental in providing information about the range of risks to health, their differential distribution between groups and locations, and their likely time-course under several plausible trajectories of climate change, priorities for adaptation and financing. The challenge is to continue to undertake structured assessments of the health risks, in particular in those countries in the east of the Region that could receive sustained health adaptation funding and see important structural, technological and economic developments.

9. Adaptation is needed. Although many European Member States have started to take action, coordinated primary, secondary and tertiary prevention in the context of a changing climate require strengthening. For example:

- eighteen countries have developed a risk preparedness and response-specific approach to extreme events, such as heat health action plans;
- twelve countries have included health in overall national multisectoral adaptation strategies; and

- eight countries are developing health sector-specific adaptation plans to climate change (Menne et al., in press).

10. There is a need for intersectoral cooperation in developing integrated methods and tools for assessments; anticipatory information on potential risks and opportunities; monitoring of both trends and effectiveness of action over time; financing; and enhanced research to provide information for the above and to understand the complexity of interactions with other ongoing environmental and social changes (WHO, 2009).

11. Climate change and health has been dealt with by WHO at various levels since the late 1980s. In the European Region, it featured on the agendas of the first, third and fourth ministerial conferences on environment and health.<sup>1</sup> The recommendations and subsequent activities have guided subregional and national developments on climate change and health. The Sixty-first World Health Assembly adopted resolution WHA61.19 on climate change and health (WHO, 2008a), urging Member States and WHO to strengthen action. A global workplan for the WHO Secretariat was endorsed by the Executive Board in 2009 (WHO, 2008b).

12. After many years of action on climate change and health in the WHO European Region, European Member States, the European Commission and a variety of agencies have collaborated in developing the European Regional Framework for Action, recognizing that the WHO European environment and health process provides a unique platform where the environment and health sectors can closely cooperate with other sectors and partners in protecting health and the environment from adverse effects of climate change, and promoting health in other sectors.

## **The proposed European Regional Framework for Action**

13. The following framework is intended to support action by WHO Member States in the European Region, the WHO Secretariat and other partners. While consistent with the global workplan of WHO (WHO, 2008b), it refers to the European Region of WHO and takes into account the climates, cultures, socioeconomic development, environmental development, health systems, health status and vulnerability across Member States in the Region. It sets out: (a) its aim and key principles; (b) five strategic objectives; (c) specific actions to achieve the objectives; and (d) implementation.

### **Aim of the Regional Framework**

14. The Regional Framework for Action aims to protect health, promote health equity and security, and provide healthy environments in a changing climate in the WHO European Region.

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<sup>1</sup> In 1999, it was recommended to monitor, research and review the early human health effects of climate change, support the development of indicators, monitoring activities and national health impact assessments, and to review mitigation and adaptation options and strategies. In 2004, further action was recommended to reduce the current burden of disease resulting from extreme weather and climate events through a proactive and multidisciplinary approach, as well as to promote healthy, energy-efficient approaches in other sectors.

15. The Regional Framework reaffirms several key principles:

- synergies with existing policies and legal structures;
- coherent approaches across sectors;
- effective collaboration between responsible agencies and parties;
- flexible approaches that respect both subsidiarity and the uniqueness of each Member State;
- solidarity within the Region and across the globe;
- equity; and
- promotion of health where possible and avoidance of negative health effects of measures.

### **Strategic objectives of the Regional Framework**

16. This Regional Framework is based on five strategic objectives, namely:

- to ensure that all current and future mitigation and adaptation climate change measures, policies and strategies integrate health issues at all levels;
- to strengthen health, social and environmental systems and services to improve their capacity to prevent, prepare for, and cope with climate change;
- to raise awareness to encourage healthy mitigation and adaptation policies in all sectors;
- to increase the health and environment sectors' contribution to reducing greenhouse gas emissions;
- to share best practices, research, data, information, technology and tools at all levels on climate change, environment and health.

### **Suggested action**

#### ***Objective 1. Ensure that all current and future mitigation and adaptation climate change measures, policies and strategies integrate health issues at all levels***

17. Provide clear directions in respect of climate change for planning actions and investments at the national level, ensuring joint responsibility and accountability for climate change policies at all levels within all sectors and ensuring technology transfer, development and assessment.

18. Promote:

- healthy, energy-efficient buildings and renewable energy;
- access to safe transport that encourages physical activity and social contact;
- improved outdoor and indoor air quality;
- the modification of carbon-intensive food choices and production practices.

19. Enforce, in the environment and other sectors, existing measures that have proved to be effective in reducing deaths, disease and greenhouse gas emissions.

20. Establish multisectoral processes that address climate change and health development at the national level.

21. Collect timely information, carry out research and regularly update assessments, including on:

- current, future and emerging environment and health hazards and risks resulting from climate change;
- the identification of vulnerable groups and subregions;
- current national and subnational capacities for addressing the health and environmental risks;
- co-benefits and risks for health and the environment of climate mitigation and adaptation measures, technologies and policies in other sectors, such as housing, energy, transport, agriculture, waste, water and sanitation, air quality and food safety;
- additional national, subregional and local level measures needed to protect population health, vulnerable groups and the environment;
- costing of the risks and opportunities, including the health costs of inaction;
- trends in adaptation and mitigation effectiveness.

22. Develop and implement national adaptation, preparedness and response strategies or action plans with a focus on health.

23. Facilitate pilot initiatives, especially on a transboundary level, and guide international resource allocation.

***Objective 2. Strengthen health, social and environment systems and services to improve their capacity to prevent, prepare for, and cope with climate change***

24. Engage ministries and key advocates in promoting the integration of health considerations in all policies.

25. Engage and provide leadership to public health professionals when developing and implementing national multisectoral adaptation strategies.

26. Improve and maintain:

- the provision of early warning systems and the development of extreme weather events action plans, disaster preparedness and response;
- climate-resilient health care and other public service infrastructure;
- early detection and warning of, and rapid response to, climate change-related disease outbreaks;
- monitoring of vector-borne diseases and zoonoses;
- integrated disease surveillance and monitoring;

- implementation of evidence-based prevention, treatment and control of communicable diseases (including immunization programmes, vector control, etc.);
- primary health care, public health and social services;
- medical, clinical and postgraduate training to deal with unfamiliar conditions;
- environmental services, such as water and waste management.

27. Promote local engagement and development, particularly of infrastructure to support the capacity of local communities to become resilient to climate-related health risks and implement adaptation and mitigation action.

***Objective 3. Raise awareness to encourage and facilitate healthy mitigation and adaptation policies in all sectors***

28. Develop special curricula, programmes and activities to improve health and climate change-related knowledge in education, from kindergarten to postgraduate level.

29. Train health and environment professionals on the health effects of climate change and co-benefits and risks of mitigation and adaptation measures.

30. Promote and facilitate the development and implementation of communication strategies and advocacy campaigns, engaging the media and using effective dissemination channels to raise public awareness of the health impacts of, and adaptation and mitigation measures and personal action to reduce, greenhouse gas emissions.

31. Involve children and young people, adults, scientific, technical and managerial personnel in settings such as schools, hospitals and workplaces in promotional activities.

32. Ensure public participation and access to information on climate change, its effects, and adequate responses<sup>2</sup> to facilitate informed choices.

33. Promote dialogue among public authorities and provide health expertise in the negotiation of international multilateral environment agreements for informed decisions.

***Objective 4. Increase the health and environment sectors' own contribution to reducing greenhouse gas emissions***

34. Promote actions that ensure energy- and resource-efficient management of energy, food supply, buildings, transport, waste, water supply and sanitation, within the health and environment sectors, in view of sustainable (renewable) financial and adaptation benefits.

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<sup>2</sup> Guided by Article 6 of the UNFCCC (United Nations, 1992) and the UNECE Aarhus Convention (UNECE, 1998).

35. Encourage individual action by all stakeholders (e.g. employees, managers and patients) to reduce greenhouse gas emissions and minimize adverse health effects of climate change.

**Objective 5. Share best practices, research, data, information, technology and tools at all levels**

36. The WHO Regional Office for Europe, in collaboration with relevant partners, such as the European Commission, as well as European Union agencies, including the EEA and the European Centre for Disease Prevention and Control, the World Meteorological Organization and other interested organizations, is invited to discuss the development of an information platform by 2014, building on available tools and information gathering processes. It should contain:

- practical tools for:
  - health impact, vulnerability and adaptation assessments;
  - health impact assessment of mitigation and adaptation measures;
  - effective public health adaptation, effective preventive measures, preparedness and response action;
  - economic assessments of the health impacts of climate change and adaptation/mitigation measures;
  - assessment of the health co-benefits of adaptation and mitigation measures;
  - best practices;
- guidance on best practices on carbon-neutral health care services;
- early warning on extreme weather events and potential infectious disease threats, as well as relevant models of preparedness and response or action plans;
- trends over time resulting from lessons learnt and thorough indicator assessments on climate, environment and health impacts and response measures;
- research results;
- opportunities for environment and health research, financing adaptation projects and carbon-neutral developments in health.

37. Member States in the WHO European Region are called on to contribute, and support the provision of, regular information to the platform, on:

- national health impact assessments
- adaptation plans and strategy developments
- trends in climate change, environment and health indicators
- case studies of best practices and health co-benefits;
- pilot project funding and research opportunities;
- effectiveness of adaptation and mitigation measures.

38. The global research priorities identified by WHO in the area of climate change and health (WHO, 2009) should be addressed.

## Implementation

39. Consistent with the Declaration of the Fifth Ministerial Conference on Environment and Health, the European Regional Framework for Action will be used as a set of recommended actions by WHO Member States in the European Region, the WHO Secretariat and its partners committed to the WHO European environment and health process, in accordance with existing treaties, national laws and regulations, taking into account the principles for action enunciated in the Framework.

40. The Framework suggests objectives and actions that require adaptation to the needs and specificities of each country, and the specification of roles and responsibilities, as well as the commitment of adequate resources.

41. As a first step, and within the overall European Environment and Health Process, Member States could set up a network of national focal points on climate change and health which would facilitate the exchange of information between countries and the coordination of relevant priorities and activities.

42. Based on the current political climate, there is a need to massively invest over the next two years into awareness-raising on climate change and health as a priority for action, and to actively build capacity in countries.

43. There is a need to enhance partnership between European and other international institutions to ensure the implementation of the Framework and the information platform, and that an international body such as the WHO Regional Office for Europe takes an active lead in coordination.

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## The WHO Regional Office for Europe

The World Health Organization (WHO) is a specialized agency of the United Nations created in 1948 with the primary responsibility for international health matters and public health. The WHO Regional Office for Europe is one of six regional offices throughout the world, each with its own programme geared to the particular health conditions of the countries it serves.

### Member States

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