



HEALTH AND CLIMATE CHANGE:

the "now and how" A policy action guide

- Concerns and recommendations for policy action: the "now and how" ---->
 - - Threat-based concerns and policy recommendations
 - Is Europe ready to adapt to the changing climate?





ENERGY, ENVIRONMENT AND SUSTAINABLE DEVELOPMENT





HEALTH AND CLIMATE CHANGE:



the "now and how" A policy action guide





ENERGY, ENVIRONMENT AND SUSTAINABLE DEVELOPMENT

ABSTRACT

This document presents a brief summary of the results of the research project "Climate change and adaptation strategies for human health in Europe" (cCASHh) (May 2001-July 2004), coordinated by WHO and supported by the Energy, Environment and Sustainable Development Programme in the frame of the Fifth European Union Framework Programme for Research and Development. Current climate trends point to the likelihood that southern Europe will become drier in the future, while northern Europe is likely to become warmer and wetter. Extreme events are expected to increase in frequency and severity, particularly heat-waves, droughts and intense rainfall events. cCASHh identified a range of options that have been taken or could be taken by European policy-makers to prevent, prepare and respond to the effects of weather and climate variability on people's health. These measures are classified into general and specific. General measures include better cooperation between health and climate institutions, building capacity for action now and communication. The specific measures include information for the prevention of health effects from heat stress, floods, vector, rodent and food borne diseases.

Keywords

CLIMATE GREENHOUSE EFFECT METEOROLOGICAL FACTORS NATURAL DISASTERS DISEASE TRANSMISSION RISK ASSESSMENT POLICY MAKING GUIDELINES

Address requests about publications of the WHO Regional Office for Europe to: Publications WHO Regional Office for Europe Scherfigsvej 8 DK-2100 Copenhagen Ø, Denmark Alternatively, complete an online request form for documentation, health information, or for permission to quote or translate, on the WHO/Europe web site at http://www.euro.who.int/pubrequest.

Design and Layout: Emilio Dotto English editing: Thomas Petruso Cover photos: Dr Jürg Alean; Dan Chung, Reuters; Waltraud Grubitzsch, dpa.

© World Health Organization 2005

All rights reserved. The Regional Office for Europe of the World Health Organization welcomes requests for permission to reproduce or translate its publications, in part or in full.

The designations employed and the presentation of the material in this publication do not imply the expression of any opinion whatsoever on the part of the World Health Organization concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Where the designation "country or area" appears in the headings of tables, it covers countries, territories, cities, or areas. Dotted lines on maps represent approximate border lines for which there may not yet be full agreement.

The mention of specific companies or of certain manufacturers' products does not imply that they are endorsed or recommended by the World Health Organization in preference to others of a similar nature that are not mentioned. Errors and omissions excepted, the names of proprietary products are distinguished by initial capital letters.

The World Health Organization does not warrant that the information contained in this publication is complete and correct and shall not be liable for any damages incurred as a result of its use. The views expressed by authors or editors do not necessarily represent the decisions or the stated policy of the World Health Organization.

FORFWORD

FOREWORD I

- It is now five years since the Intergovernmental Panel of Climate Change (IPCC) in 2001 concluded on the basis of new and stronger evidence, that not only was most of the global warming observed over the past 50 years attributable to human activities but that climate change could affect human health. The effects can be direct – due to increased heat stress, floods and storms – or indirect – causing changes in the ranges of disease vectors such as ticks and water-borne pathogens, water and air quality and food availability and quality.
 - **Health** authorities had already expressed concern about climate change and its impact on human health. Three years earlier, at the World Health Assembly in 1998, they had recognized that climate change could be a potential threat to human health. In 1999, at the Third Ministerial Conference for Environment and Health, ministers of health and environment from the WHO European Region had acknowledged that "human-induced changes in the global climate system and in stratospheric ozone pose a range of severe health risks and potentially threaten economic development and social and political stability". They also called for national action by all countries to reduce and prevent as far as possible these environmental changes and to limit the exposure of human populations in Europe to climate change and increased ultraviolet irradiation, thus addressing the likely health risks over the coming decades.
 - **These** statements posed a great challenge to WHO and to Member States. Scientific evidence showed very clearly that climate change was already starting to occur, and even in the best scenario the human population was going to face direct and indirect health effects over the coming decades. Adaptation strategies were needed based on thinking about the types of risks that European populations might face. With this in mind and in order to fill this knowledge gap, we developed the network and the content of the "Climate change and adaptation strategies for human health" (cCASHh) project. The WHO and its collaborators aimed to describe with facts and figures the early observed effects of climate change on health and to identify public health measures to cope with the additional risks. We also aimed to assess the benefits of acting sooner as opposed to later, and to develop the necessary policies to support decision-makers in addressing these issues.
- During the project (2001–2004) the WHO European Region was hit by a major flood in 2002 and by a severe heat-wave in 2003. Experience seemed to confirm what models had predicted. Although one record heat-wave and flood do not prove that Europe is getting hotter or the weather more extreme, the impacts made by these events highlighted shortcomings in existing public health preparation and responses, particularly the lack of knowledge of effective preventive measures and the few mechanisms in place to predict or prevent the health effects, or even to detect them rapidly. I believe the cCASHh project has produced very important results, both in the content and in the methods used. It shows that the concurrent work of different disciplines in addressing public health issues can produce innovative and useful results, providing an approach that can be followed on other public health issues. The project has shown that information on potential threats and impacts can be developed and can be extremely useful in preparing the public for adverse events as well as facilitating the response when the events occur. This is a new dimension for public health which reverses the traditional thinking: from describing what has already occurred and identifying and reducing specific risk factors, to taking action on the basis of prediction and early warning to prevent health consequences in large populations. We hope this approach will be further developed and tested, particularly where emerging environmental risks are concerned.

We would like to take this opportunity to express our gratitude to the many scientists and stakeholders, including policy-makers at different levels, who contributed to the development of the project. Without this constructive and extremely collaborative critical mass the research results would have been less timely and perhaps less relevant. We would also like to thank the European Commission Directorate General for Research for its generous contribution and the attention and support with which it has followed the implementation of the project.

> This research has generated a number of conclusions and recommendations for action by Member States and the international community. The challenge is now to translate these actions into policy and to monitor their effectiveness and impact. With this in mind we worked with Member States to include in the final Declaration of the Fourth Ministerial Conference on Environment and Health held in Budapest in June 2004 recommendations on the public health response to extreme weather events and a renewed commitment to address in a proactive and anticipatory manner the consequences on health of climate change.

> We hope that the implementation of effective adaptation policies together with effective mitigation actions will limit the impact of climate change and protect the health of present and future generations. We believe this project has made a significant contribution to this vital endeavour.

Roberto Bertollini, Director, Special Programme on Health and Environment WHO Regional Office for Europe



FOREWORD II

It is an honour for me to write a few introductory lines for this publication, which represents the results of the research project "Climate change and adaptation strategies for human health in Europe" (cCASHh) (May 2001-July 2004), coordinated by WHO and supported by the Energy, Environment and Sustainable Development Programme in the frame of the Fifth European Union Framework Programme for Research and Development.

cCASHh aimed to:

- identify the vulnerability of human health to adverse impacts of climate change;
- review current measures, technologies, policies and barriers to improving the adaptive capacity of populations to climate change;
- identify the most appropriate measures, technologies and policies to successfully adapt European populations to climate change; and
- provide estimates of the health benefits of specific strategies or combinations of strategies for adaptation under different climatic and socioeconomic scenarios.

The flood events in 2002 and the heat-wave of August 2003 in Europe showed that no one is on the safe side when it comes to the impacts of climate change. Though some may dispute whether these extreme weather events are linked to global change, they revealed in a rather drastic way our vulnerability and unpreparedness. Preparedness for extreme weather events requires cooperation at all levels and throughout disciplines. The cCASHh project was able to contribute timely results on both occasions. I would like to take the opportunity to congratulate the consortium for this successful endeavour.

These types of research activities need an interdisciplinary approach, of which the cCASHh project was a good example. Projects supported during the Sixth Framework Programme and hopefully also during the Seventh Framework Programme continue and further develop this important work.

Karin Zaunberger, Project Officer, European Commission, DG Research European Commission



EXECUTIVE SUMMARY – POLICY BRIEF

The longer that greenhouse gas reduction measures are slowing to be in place, the greater the need to understand how people and systems can effectively adapt to new climate patterns and potential threats, and what needs to be done now to avoid the human suffering and deaths that may result. This paper summarizes the findings of the Climate change and adaptation strategies for human health in Europe (cCASHh) project, coordinated by WHO to assess current health impacts of climate change and policy responses to it.

Current trends, discussed in the cCASHh studies, point to the likelihood that southern Europe will become drier in the future, while northern Europe is likely to become warmer and wetter. Extreme events are expected to increase in frequency and severity, particularly heat-waves, droughts and intense rainfall events.

During the cCASHh project (2001–2004) the WHO European Region was hit by a major flood in 2002 and by a severe heat-wave in 2003. Lessons learned point to a need for strengthening policies that will help societies better adapt to such extreme weather changes. cCASHh European surveys confirmed that while the characteristics of the population, access to health services and types of exposure are important determinants of health outcomes, effective policies can make a difference.

The findings are organized in two sections. The first addresses some prerequisites of adaptation, such as the need for better linkage between health and climate authorities and enhancing policy-makers' capacities to act and communicate. The second addresses some specific policy-driven action options (how) to reduce the health impact of heatwaves and floods, and changes in the ranges of vectors, allergens and foodborne diseases attributable to climate change (now).

Integration

Addressing the health impacts of climate change requires integration of public health and climate change knowledge. Integration requires reciprocal understanding of terminology, goals and methods. Beyond this it requires working together to achieve the goal of reducing deaths, disease and disabilities. lead time; decisions have long-term effects; and there is a need to reverse trends that threaten adaptive capacity.

Communication

cCASHh surveys reveal a limited public or policy-maker appreciation of the risks of climate change and variability and what to do about them, partly because of the perception that the problem is too big to manage, lies outside of the health sector

Action

预览已结束, 完整报告链接和二维码如下:

https://www.yunbaogao.cn/report/index/report?reportId=5 29994

