

Operational framework for building climate resilient health systems



World Health
Organization

WHO Library Cataloguing-in-Publication Data

Operational framework for building climate resilient health systems.

I. World Health Organization.

ISBN 978 92 4 156507 3

Subject headings are available from WHO institutional repository

© World Health Organization 2015

All rights reserved. Publications of the World Health Organization are available on the WHO web site (www.who.int) or can be purchased from WHO Press, World Health Organization, 20 Avenue Appia, 1211 Geneva 27, Switzerland (tel.: +41 22 791 3264; fax: +41 22 791 4857; e-mail: bookorders@who.int).

Requests for permission to reproduce or translate WHO publications –whether for sale or for non-commercial distribution– should be addressed to WHO Press through the WHO website (www.who.int/about/licensing/copyright_form/en/index.html).

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. 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.

All reasonable precautions have been taken by the World Health Organization to verify the information contained in this publication. However, the published material is being distributed without warranty of any kind, either expressed or implied. The responsibility for the interpretation and use of the material lies with the reader. In no event shall the World Health Organization be liable for damages arising from its use.

Cover illustration: Building climate resilience requires strengthening of a range of health system functions, from disease surveillance, to enhanced health action in emergencies. Health facilities are at the front line. The photograph shows a health clinic in Nepal, which uses solar panels to ensure reliable energy access to provide essential medical services, including during extreme weather events.

Printed in Geneva, Switzerland.

Operational framework for building climate resilient health systems



World Health
Organization

Acknowledgements

Prepared by Joy Shumake-Guillemot (World Meteorological Organization (WMO)/World Health Organization (WHO) Joint Office), Elena Villalobos-Prats, Diarmid Campbell-Lendrum (WHO Public health, environmental and social determinants of health (PHE)).

WHO gratefully acknowledges the financial support provided by the Department for International Development (DFID), United Kingdom and comments and technical inputs from Guy Howard and Alexandra Chittenden at DFID.

This framework builds on relevant frameworks and work plans on climate change and health adopted across WHO regions such as the WHO Regional Office for Africa (AFRO) “Adaptation to climate change in Africa: Plan of action 2012–2016”; the WHO Regional Office for the Americas (AMRO) “Strategy and plan of action on climate change”; the WHO Regional Office for Europe (EURO) “Protecting health in an environment challenged by climate change: European regional framework for action”; the WHO Regional Office for South-East Asia (SEARO) “Regional strategy for protecting health from climate change”; and guidance given in resolutions on climate change and health by the WHO Regional Office for the Eastern Mediterranean (EMRO) and WHO Regional Office for the Western Pacific (WPRO).

It also benefits from the experience gained in country projects funded by Norway, Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ), the German Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU), Spain through the Millennium Development Goals Fund (MDG-F), and the Global Environment Facility (GEF).

WHO also wishes to extend its gratitude to the following reviewers within WHO:

Jonathan Abrahams, Magaran Bagayoko, Mariam Otmani del Barrio, Hamed Bakir, Carlos Corvalan, Nasir Hassan, Rokho Kim, Waltaji Terfa Kutane, Marina Maiero, Bettina Menne, Maria Neira and Jung Sub Yeom.

Furthermore, WHO acknowledges the insightful comments and contributions provided by the participants of the inception meeting of the DFID-funded project on “Building adaptation to climate change in health in least developed countries through resilient WASH”, held in Geneva, Switzerland in October 2013, and the final meeting of the GEF/UNDP/WHO Project Managers and International Project Board for the Global Project “Piloting health adaptation to climate change”, held in Bridgetown, Barbados in May 2015, who provided insightful inputs for the finalization of the framework. Participants of the first meeting were: Elias Bartholomew Maiga Chinamo, Semunesh Golla, AM Zakir Hussain, Iqbal Kabir, Neema Minja Kileo, Waltaji Terfa Kutane, Shamsul Gafur Mahmud, Abadh Kishore Mishra, Abul Khair Mohammad, Dorisia Mulashani, Sudan Raj Panthi, Badri Pokhrel, Khom Bahadur Subedi and Dangew Tadesse. Participants of the second meeting were: Tonya Brathwaite, Lester Cumberbatch, Steve Daniel, Rada Dukpa, Kris Ebi, Sally Edwards, Guto Galvao, Winfred Austin Greaves, Simon Hales, Joy St. John, Vladimir Kendrovski, Desmond King, Mazen Malkawi, Sonia Nurse, Kepha Ombacho, Meciusela Tuicakau, Dorji Wangchuk and Nima Wangchuk.

Contents

Acronyms and abbreviations	iv
1. Introduction	1
2. Background	2
2.1 Public health rationale	2
2.2 Policy context	5
3. Applying a resilience approach to health systems	6
3.1 Goal and objectives	6
3.2 Introducing a resilience approach	6
3.3 Applying a resilience approach to health systems	8
3.4 Overarching considerations in building resilience	9
3.5 Connecting to the “building blocks” of health systems	10
3.6 Ten components for building climate resilience	12
3.7 How to use the framework	13
Components	14
4.1 Component 1: Leadership and governance	14
4.2 Component 2: Health workforce	16
4.3 Component 3: Vulnerability, capacity and adaptation assessment	19
4.4 Component 4: Integrated risk monitoring and early warning	21
4.5 Component 5: Health and climate research	23
4.6 Component 6: Climate resilient and sustainable technologies and infrastructure	25
4.7 Component 7: Management of environmental determinants of health	27
4.8 Component 8: Climate-informed health programmes	29
4.9 Component 9: Emergency preparedness and management	32
4.10 Component 10: Climate and health financing	34
5. Monitoring progress	36
6. Conclusions	43
Terminology	44
References	47

Acronyms and abbreviations

COP	Conference of the Parties
DFID	Department for International Development
EDRM-H	Emergency and Disaster Risk Management for Health
GEF	Global Environmental Facility
GFATM	Global Fund to Fight AIDS, Tuberculosis and Malaria
H-NAP	health component of NAP
IPCC	Intergovernmental Panel on Climate Change
NAP	National Adaptation Plan
UNFCCC	United Nations Framework Convention on Climate Change
V&A	vulnerability and adaptation
WHA	World Health Assembly
WHO	World Health Organization

Introduction

1

This document presents the World Health Organization (WHO) *Operational framework for building climate resilient health systems*. The framework responds to the demand from Member States and partners for guidance on how the health sector and its operational basis in health systems can systematically and effectively address the challenges increasingly presented by climate variability and change. This framework has been designed in light of the increasing evidence of climate change and its associated health risks (1); global, regional and national policy mandates to protect population health (2); and a rapidly emerging body of practical experience in building health resilience to climate change (3).

Primarily intended for public health professionals and health managers, this framework would also help guide decision-makers in other health-determining sectors, such as nutrition, water and sanitation, and emergency management. International development agencies could use this framework to focus investments and country support for public health, health system strengthening and climate change adaptation.

The objective of this framework is to provide guidance for health systems and public health programming to increase their capacity for protecting health in an unstable and changing climate. By implementing the 10 key components laid out in this framework, health organizations, authorities and programmes will be better able to anticipate, prevent, prepare for and manage climate-related health risks. Least developed countries and countries in the process of developing the health components of National Adaptation Plans (NAPs) under the UN Framework Convention on Climate Change (UNFCCC) (4) may find this document particularly useful in their efforts to design a comprehensive response to the risks presented by short-term climate variability and long-term climate change.

2 Background

2.1 Public health rationale

There is clear evidence that human actions, principally the burning of fossil fuels and associated release of climate pollutants, are causing significant changes in global climate. This in turn is creating observed consequences in environmental and social conditions across all continents (5). As many of the largest health concerns are strongly influenced by weather and climate conditions, this inevitably presents risks for human health that can be grouped into:

- Direct impacts, such as those arising from damages and illness due to increased frequency and severity of extreme weather events.
- Environmental system mediated impacts, such as rising air pollution and changing patterns of vector-, food- and water-borne diseases.
- Socially mediated effects that occur via effect of climate change on social and human systems, such as health effects resulting from undernutrition, occupational heat stress and mental illness, as well as potential increases in population displacement, slowing of economic growth and poverty aggravation.

Table 1 shows some of the main climate-related health risks, that have been assessed as having medium-to-strong evidence by the Intergovernmental Panel on Climate Change (IPCC). In addition, the IPCC identifies a series of key reasons for concern with regard to effects of climate change which are either particularly severe or irreversible (5). This includes the potential: (i) increase in severity and frequency of extreme weather events, such as storms and floods causing mass displacement and disruption of livelihoods in low-lying coastal zones and small island states due to storm surges and rise in sea level; (ii) breakdown of food systems resulting in food shortages and volatile prices, particularly in low- and middle-income countries; (iii) potential increase in risk of violent conflict associated with resource scarcity and population movements; and (iv) slowing down of economic growth and exacerbation of poverty, with associated reversal of global health progress, achievement

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_27403

