

Compendium of WHO and other UN guidance on health and environment

2022 update



Compendium of WHO and other UN guidance on health and environment

2022 update



WHO/HEP/ECH/EHD/22.01

© World Health Organization 2022

Some rights reserved. This work is available under the Creative Commons Attribution-NonCommercial-ShareAlike 3.0 IGO licence (CC BY-NC-SA 3.0 IGO; <https://creativecommons.org/licenses/by-nc-sa/3.0/igo>).

Under the terms of this licence, you may copy, redistribute and adapt the work for non-commercial purposes, provided the work is appropriately cited, as indicated below. In any use of this work, there should be no suggestion that WHO endorses any specific organization, products or services. The use of the WHO logo is not permitted. If you adapt the work, then you must license your work under the same or equivalent Creative Commons licence. If you create a translation of this work, you should add the following disclaimer along with the suggested citation: “This translation was not created by the World Health Organization (WHO). WHO is not responsible for the content or accuracy of this translation. The original English edition shall be the binding and authentic edition”.

Any mediation relating to disputes arising under the licence shall be conducted in accordance with the mediation rules of the World Intellectual Property Organization (<http://www.wipo.int/amc/en/mediation/rules/>).

Suggested citation. Compendium of WHO and other UN guidance on health and environment, 2022 update. Geneva: World Health Organization; 2022 (WHO/HEP/ECH/EHD/22.01). Licence: CC BY-NC-SA 3.0 IGO.

Cataloguing-in-Publication (CIP) data. CIP data are available at <http://apps.who.int/iris>.

Sales, rights and licensing. To purchase WHO publications, see <http://apps.who.int/bookorders>. To submit requests for commercial use and queries on rights and licensing, see <http://www.who.int/about/licensing>.

Third-party materials. If you wish to reuse material from this work that is attributed to a third party, such as tables, figures or images, it is your responsibility to determine whether permission is needed for that reuse and to obtain permission from the copyright holder. The risk of claims resulting from infringement of any third-party-owned component in the work rests solely with the user.

General disclaimers. 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 WHO 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 and dashed 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 WHO 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 WHO 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 WHO be liable for damages arising from its use.

Design and layout by Lushomo.

Contents

| | |
|---|-----------|
| Preface..... | v |
| Acknowledgements | vi |
| Abbreviations | vii |
| Executive summary | viii |
| 1. Background | 1 |
| 1.1 Target audience | 2 |
| 1.2 Methods used for the development of the compendium | 2 |
| 1.3 How to use this compendium | 3 |
| 1.4 Links between diseases and environmental determinants of health | 6 |
| 1.5 Links with social determinants of health | 8 |
| 2. Air pollution | 9 |
| 2.1 Introduction | 9 |
| 2.2 Ambient air pollution..... | 10 |
| 2.3 Indoor air pollution: household air pollution, second-hand tobacco smoke, dampness and mould | 18 |
| 2.3.1 Particulate matter, carbon monoxide and other pollutants from incomplete combustion processes..... | 19 |
| 2.3.2 Second-hand tobacco smoke | 25 |
| 2.3.3 Dampness and mould | 28 |
| 3. WASH | 33 |
| 3.1 Introduction | 36 |
| 3.2 Water | 37 |
| 3.2.1 Drinking-water | 37 |
| 3.2.2 Recreational water..... | 43 |
| 3.3 Sanitation | 48 |
| 3.4 Personal hygiene..... | 52 |
| 4. Solid waste | 57 |
| 5. Chemicals | 63 |
| 5.1 Introduction | 63 |
| 5.2 Chemical safety | 64 |
| 5.3 Chemical incidents..... | 75 |

| | |
|---|------------|
| 6. Radiation | 84 |
| 6.1 UV radiation – natural and artificial | 84 |
| 6.2 Electromagnetic fields | 87 |
| 6.3 Radiation exposures in health care..... | 88 |
| 6.4 Radon | 89 |
| 6.5 Radioactivity in food and drinking-water..... | 91 |
| 6.6 Radiological emergencies | 92 |
| 7. Climate change | 97 |
| 8. Nature and health | 110 |
| 8.1 Protection of nature, biodiversity and ecosystems for health | 110 |
| 8.2 Vector control | 115 |
| 9. Safe environments and mobility | 123 |
| 9.1 Introduction | 123 |
| 9.2 Environments for safe and sustainable transport, active mobility and physical activity..... | 124 |
| 9.3 Safe environments to prevent drownings, falls and burns..... | 131 |
| 9.3.1 Drownings | 131 |
| 9.3.2 Falls..... | 133 |
| 9.3.3 Burns..... | 136 |
| 10. Safe and healthy food | 139 |
| 10.1 Food safety and the environment | 139 |
| 10.2 Healthy diets and the environment..... | 145 |
| 11. Environmental noise | 149 |
| 12. Priority settings for action | 155 |
| 12.1 Cities and other urban settlements | 155 |
| 12.2 Housing..... | 159 |
| 12.3 Workplaces | 163 |
| 12.4 Health care facilities | 170 |
| 13. Cross-cutting topics | 182 |
| 13.1 Children’s environmental health..... | 182 |
| 13.2 Health in All Policies | 183 |
| 13.3 Health Impact Assessment | 184 |
| Annex: Messages on health and environment for the general public | 186 |

Preface

Environmental pollution and other environmental risks cause almost a quarter of the worldwide disease burden. To eliminate or at least substantially reduce this disease burden and to address the challenges in health, environment and climate change being faced, bold preventive action at national, regional, local and sector-specific level is needed. Policy-makers and other actors are increasingly prepared to take action on health and the environment, often as a result of requests by citizens and organizations, and need to be supported by adequate resources.

The World Health Organization (WHO) and various other United Nations (UN) organizations offer guidance on effective actions on health and the environment distributed over hundreds of different reports. This compendium consists of a systematic compilation of WHO and other UN guidance that addresses all major areas of health and the environment into one resource. Unlike regular reports, this compendium presents a database or repository extracting the relevant guidance for policy-makers and other key target audiences on health and the environment and refers to the original reports if more detail is needed.

This compendium supports the strategic objectives and their implementation at country-level of the WHO Global Strategy on Health, Environment and Climate Change to scale up action on health determinants in all policies and in all sectors for health protection and improvement. It further supports the implementation of the 2030 Agenda for Sustainable Development to address environmental risks through a shift towards primary preventive actions and the promotion of healthy choices.

In publishing this compendium, WHO seeks to assist policy-makers and other actors in countries to take actions to improve the health of people and the environment and reduce health inequities and provide assistance with implementation of norms and solutions. It does this by summarizing in one resource the most crucial policy recommendations to improve health and reduce the disease burden coming from environmental risks; it further provides guidance on the ways in which policy-makers and other actors can raise awareness of the risks being faced and the healthy practices people can take to reduce them.

Acknowledgements

Thanks are due to Heather Adair-Rohani, Marcel Alers, Jacqueline Alvarez, Amina Benyahia, Sophie Boisson, Francesco Branca, Marie Noel Brune-Drise, Valentina Buj, Fiona Bull, Diarmid Campbell-Lendrum, Shelly Chadha, Andreia Costa Santos, Jennifer de France, Mandeep Dhaliwal, Florence Fouque, Monica Gaba Kapadia, Sabrina Gander, Bruce Gordon, Julia Gorman, Sophie Gumy, Thiago Herick de Sà, Suvi Huikuri, Ivan Ivanov, Robert Jakob, Dorota Iwona Jarosińska, Kelvin Khoo, Marianne Kjellen, Nenad Kostanjsek, Richard Madden, David Meddings, Rory Moses McKeown, Pierpaolo Mudo, Maria Neira, Muhammed Omotola, Vinayak Prasad, Pierre Quiblier, Mashida Rashid, Nicholas Rees, Ajiniyaz Reimov, Angella Rinehold, Nathalie Roebbel, Cristina Romanelli, Pilmu Ryu, Kerstin Schotte, Erin Shutes, Soraya Smaoun, Abheet Solomon, Jennifer Stevenson, Joanna Tempowski, Nhan Tran, Nicole Valentine, Claudia Valicki, Emilie van Deventer, Román Pérez Velasco, Raman Velayudhan, Carolyn Vickers, Elena Villalobos Prats, Joanne Adrienne Vincenten, Douglas Webb, Xiaofang Zhou, and Cristina Zucca for their valuable inputs.

The World Health Organization is grateful for the valuable inputs received from the United Nations Development Programme, the United Nations Environment Programme and the United Nations Children's Fund during the review phase, and for joint coordinated action in view of implementation.

Jennyfer Wolf, Annette Prüss-Ustün, Alexandra Egorova, Ramona Ludolph and Kersten Gutschmidt were part of the drafting team; Kai Lashley assisted as editor. Annette Prüss-Ustün was the coordinator of the project and Maria Neira provided overall guidance.

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_30974

