

Scaling up climate action for health in the WHO European Region - focus on the health sector

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Symposium Green Deal Duurzame Zorg-Welzijn

Leuven, 18 November 2022



World Health
Organization

European Region





World Health Day 2022

7 April 2022

Our planet, our health

Reimagine a world where:

- clean air, water and food are available to all?*
- economies are focused on health and well-being?*
- cities are liveable and people have control over their health and the health of the planet?*

- ✓ Climate crisis is a health crisis
- ✓ Globally and in the European Region
- ✓ Everyone and everywhere is at risk

 World Health Organization

WHO CALLS FOR CLIMATE ACTIONS TO IMPROVE #HealthForAll



-  **1 Safeguard nature**
-  **2 Ensure access to clean water**
-  **3 Ensure a quick healthy energy transition**
-  **4 Promote healthy, sustainable food systems**
-  **5 Build healthy, liveable cities**
-  **6 Stop funding pollution**

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Statement – Climate change is already killing us, but strong action now can prevent more deaths

Statement by WHO Regional Director for Europe Dr Hans Henri P. Kluge

7 November 2022 | Statement | Reading time: 4 min (1042 words)

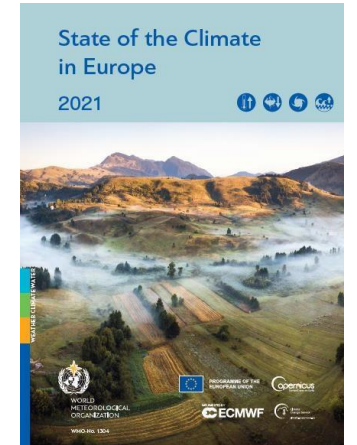
Extreme weather events in the European Region - some facts

Europe, between 1970 and 2019

More than 1 600 reported disasters and nearly 160 000 reported deaths

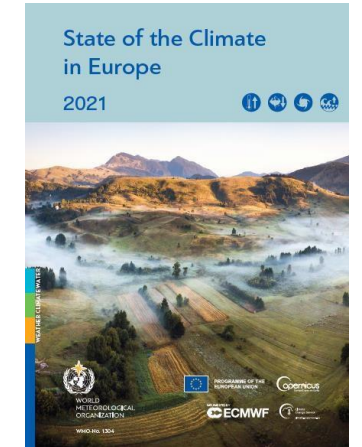
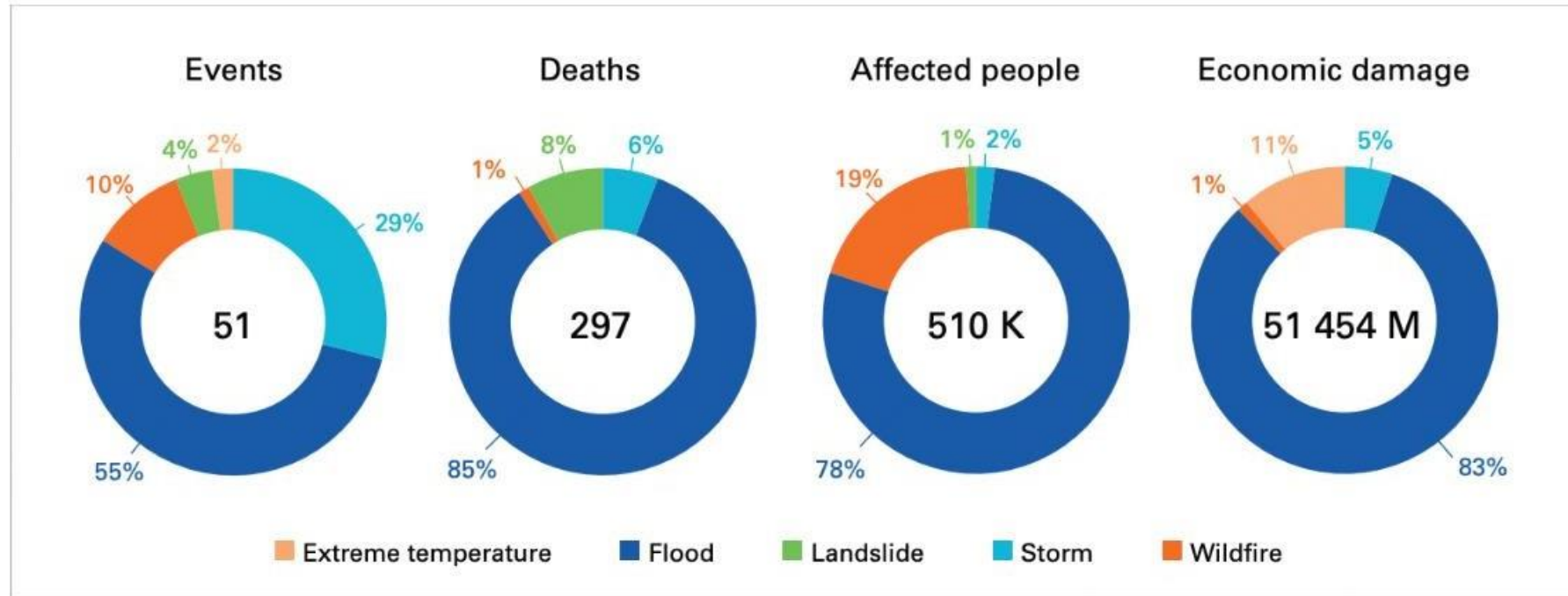
Floods (38%) and storms (32%) the most-reported cause of disasters

Extreme temperatures responsible for the highest proportion of disaster-related deaths (93%)



Extreme weather events in the European Region - some facts

Europe, 2021



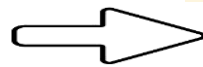
Weather, climate and water-related natural disasters in Europe during 2021. Source of data: EM/DAT, accessed on 09 August 2022. (Note: Impacts for some disaster occurrences may be missing due to data unavailability). Source: State of the Climate in Europe 2021.

Health impacts of climate change



DIRECT IMPACTS

- Storm
- Drought
- Flood
- Heatwave
- Temperature Change
- Wildfires



HEALTH IMPACTS

 Mental Illness	 Undernutrition	 Injuries	 Respiratory Disease	 Allergies
 Cardiovascular Disease	 Infectious Diseases	 Poisoning	 Water-Borne Diseases	 Heat Stroke



INDIRECT IMPACTS

- Water Quality
- Air Quality
- Land Use Change
- Ecological change

Extreme events and health

Heat strokes, heat cramps, heat exhaustion and hyperthermia

Cardiovascular, respiratory and kidney diseases, dehydration and electrolytic disorders

Deaths related to cardiovascular conditions

Death or injury as a result of extreme climate event

Indirect health impacts from damaged infrastructure, hospitals...

Health risks associated with post-disaster clean-up activities



MENTAL HEALTH AND CLIMATE CHANGE: POLICY BRIEF

In the 5 decades between 1970 and 2020, climate-related hazards have increased, with 50% of all events occurring since 2003 and nearly 5 billion people in total affected (1)

Key points

- Climate change is increasingly having stronger and longer-lasting impacts on people, which can directly and indirectly affect their mental health and psychosocial well-being.
- Several environmental, social and economic determinants of mental health are negatively affected by climate change.
- Certain groups are disproportionately at risk from climate change-related hazards, including people with pre-existing mental health conditions.
- The World Health Organization (WHO) recommends five key approaches to address these impacts:
 1. Integrate climate change considerations into policies and programmes for mental health, including MHPSS, to better prepare for and respond to the climate crisis
 2. Integrate MHPSS within policies and programmes dealing with climate change and health
 3. Build upon global commitments
 4. Implement multisectoral and community-based approaches to reduce vulnerabilities and address the mental health and psychosocial impacts of climate change
 5. Address the large gaps that exist in funding both for mental health and for responding to the health impacts of climate change

We need to be concerned about mental health in the context of climate change

Climate change is a growing global crisis. Its scale is already massive, and with inaction it continues to grow. It results in both acute hazards, such as hurricanes, floods and wildfires, and slower-onset threats, such as ecosystem changes, food and water insecurity and loss of place and culture. Climate change is one of a number of global environmental threats. The effects of unsustainable human activities, such as deforestation, ecosystem degradation and depletion and loss of biodiversity, and economies that are reliant on fossil fuels are leading to water and food insecurity, air pollution and contamination of land, rivers and oceans. All of these are having a measurable adverse impact on human health, mental health, and well-being and further exacerbating the climate emergency.

Not only is nature essential for human existence, but many of its functions and contributions are irreplaceable. Studying the impact of these changes on individuals and communities, researchers and public health officials have largely focused on physical health. However, climate change also exacerbates many social and environmental risk factors for mental health and psychosocial problems, and can lead to emotional distress, the development of new mental health conditions and a worsening situation for people already living with these conditions. Therefore, in preparing for and responding to this growing emergency, there is an increasing need for the provision of mental health and psychosocial support (MHPSS).

Mental health concerns in the context of climate change

Mental health conditions already represent a significant burden worldwide

Climate change can exacerbate many social and environmental risk factors for mental health and psychosocial problems

Certain groups can be disproportionately at risk, depending on existing vulnerabilities and inequalities:

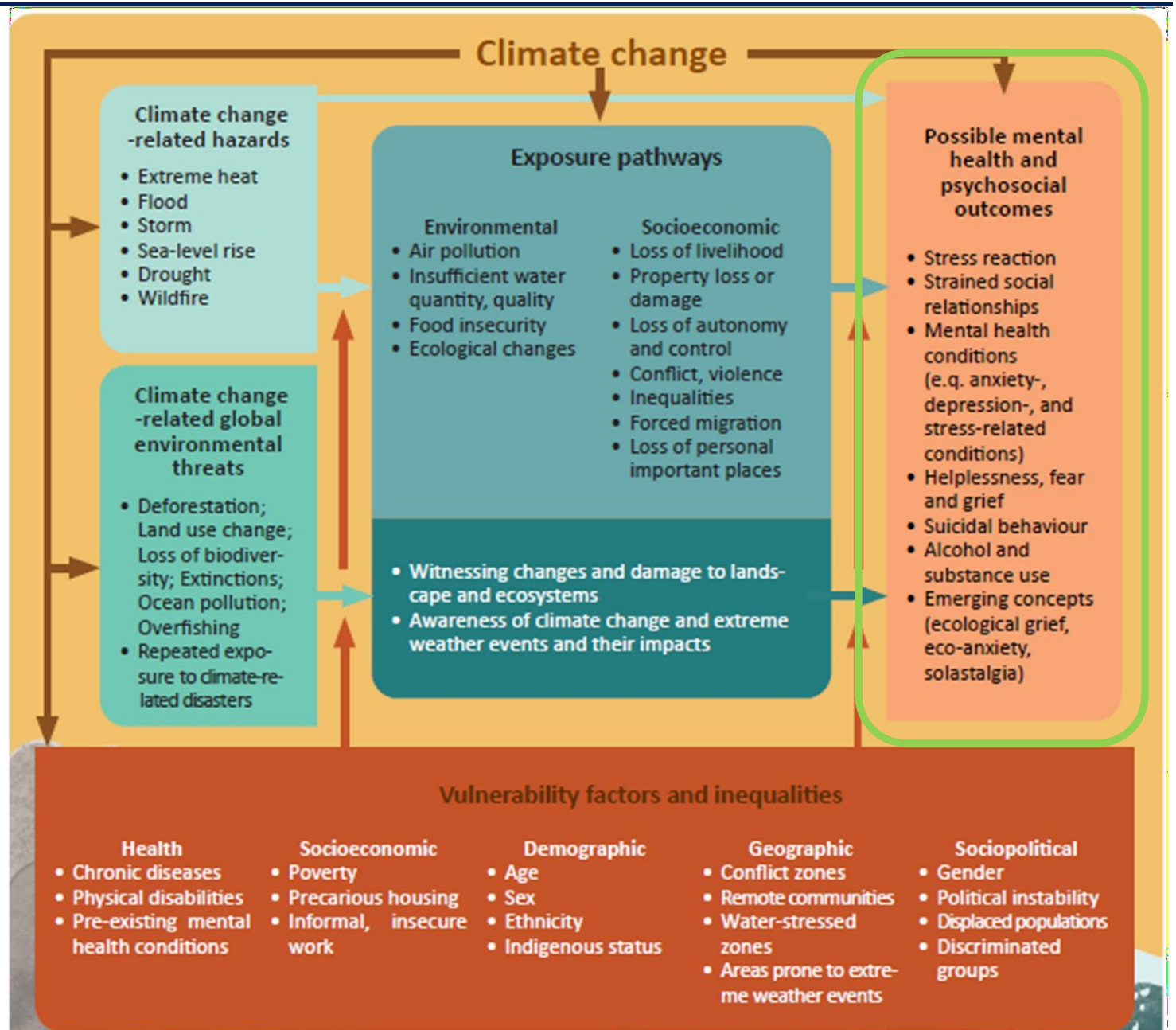
- Communities in low-and middle-income countries
- Indigenous people
- Children and adolescents

Source: [Mental health and Climate Change: Policy Brief \(who.int\)](https://www.who.int/publications/m/item/mental-health-and-climate-change-policy-brief)

Interlinkages between climate change and mental health

There are gaps in understanding the impact of climate change on mental health and psychosocial well-being, but **current knowledge is sufficient to act**

Source: [Mental health and Climate Change: Policy Brief \(who.int\)](https://www.who.int)



WHO Policy Brief on Mental health and Climate Change

WHO recommends five key approaches



1. Integrate climate change considerations into policies and programmes for mental health, including MHPSS
2. Integrate MHPSS within policies and programmes dealing with climate change and health
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Climate anxiety and distress

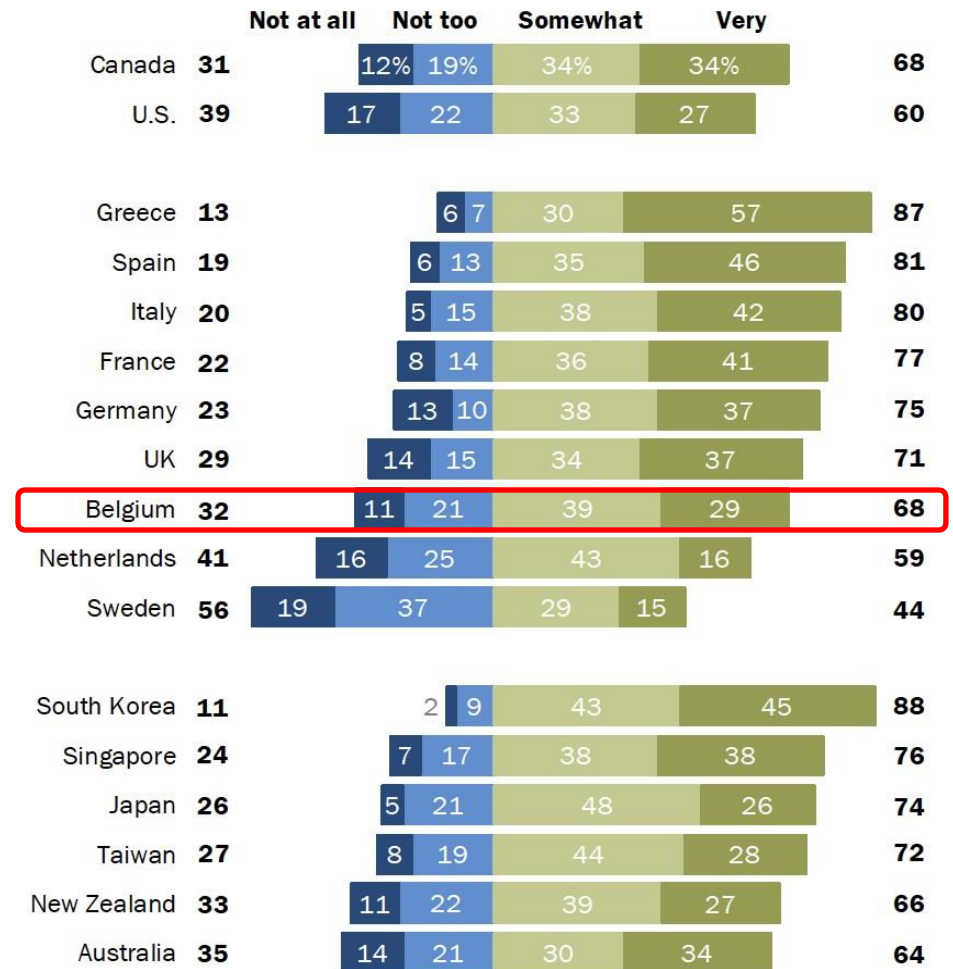
45% of 10 000 young people, aged 16-25 years, surveyed in 10 countries around the world report that: **climate change has a negative impact on their daily functioning** (eating, concentrating, work, school, sleeping, spending time in nature, playing, relationships)

[Source: Hickman et al. Climate anxiety in children and young people and their beliefs about government responses to climate change: a global survey – ScienceDirect](#)

[Source: Climate Change Concerns Make Many Around the World Willing to Alter How They Live and Work | Pew Research Center](#)

Many are concerned climate change will personally harm them during their lifetimes

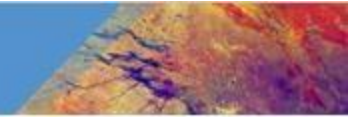
% who are ___ concerned that global climate change will harm them personally at some point in their lifetime



Note: Those who did not answer not shown.

Source: Spring 2021 Global Attitudes Survey, Q31.

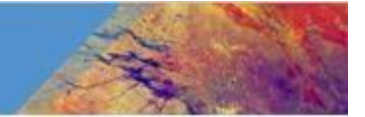
"In Response to Climate Change, Citizens in Advanced Economies Are Willing To Alter How They Live and Work"



Observed impacts – health and wellbeing

Climate change is adversely affecting the physical health of people globally (very high confidence) and mental health of people in assessed regions

- Extreme **heat** events human **mortality** and **morbidity******
- Climate-related **food-borne** and **water-borne diseases******
- **Vector-borne diseases** from range **expansion** and/or **increased reproduction** of disease vectors***
- **Animal** and **human** diseases, including **zoonotic** diseases, **emerging** in new areas***
- **Water and food-borne** diseases from **climate-sensitive aquatic pathogens**, including **Vibrio spp.** ***, and from toxic substances from harmful freshwater **cyanobacteria****
- **Diarrheal** diseases, including **cholera****** and other **gastrointestinal** infections**
- Some **mental health** challenges***
- Climate-sensitive **cardiovascular** and **respiratory** distress**
- Health **services disrupted** by extreme events, such as **floods*****



Projected impacts – health and wellbeing

Climate change and related extreme events will significantly increase ill health and premature deaths from the near- to long-term ***

- Population exposure to **heatwaves**: increase with additional warming, strong geographical differences in heat-related mortality ****
- **Food-borne, water-borne, and vector-borne** diseases: increase under all levels of warming without additional adaptation ***
- **Dengue risk**: increase with longer seasons and a wider geographic distribution, billions of people at risk by the end of the century ***
- **Mental health** (including anxiety and stress): increase in assessed regions ****

Climate change

Vulnerability

Vulnerability factors

- Demographic factors
- Geographic factors
- Biological factors & health status
- Sociopolitical conditions
- Socioeconomic factors

Exposure pathways

- Extreme weather events
- Heat stress
- Air quality
- Water quality and quantity
- Food security and safety
- Vector distribution & ecology

Health system capacity & resilience

- Leadership & governance
- Health workforce
- Health information systems
- Essential medical products & technologies
- Service delivery
- Financing

Climate-sensitive health risks

Health outcomes



Health systems & facilities outcomes



Effective options are available to protect health from climate risks

Integrating health in climate action and scaling up climate action for health

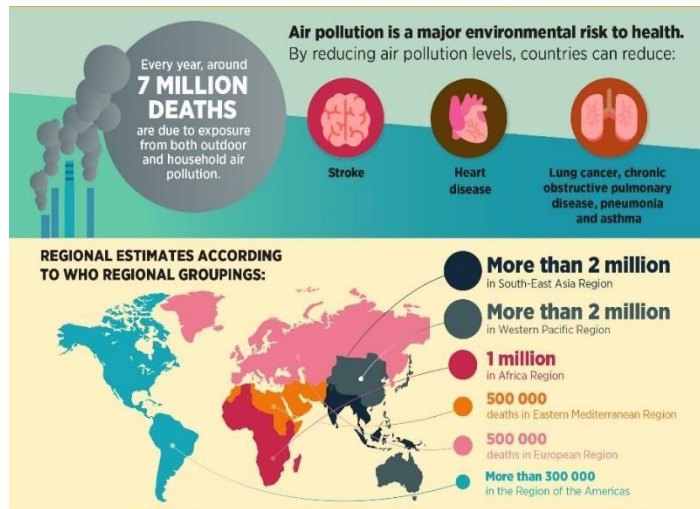


European Region

An infographic with a yellow and orange color scheme. At the top, it says "#ClimateChange" and "WHETHER YOU LIVE IN A...". Below this are three icons: a rural village, a small island or coastal town, and a big city. A central banner reads "CLIMATE CHANGE THREATENS YOUR HEALTH". Below the banner, there are three sections: "Drought, floods and heat waves will increase." with a sun icon; "Vector-borne diseases, like malaria and dengue virus will increase with more humidity and heat." with a mosquito icon; and "Basic necessities will be disrupted..." with three sub-sections: "FOOD" (Hunger and famine will increase as food production is destabilised by drought.), "AIR" (Pollution and pollen seasons will increase leading to more allergies and asthma.), and "WATER" (Warmer waters and flooding will increase exposures to diseases in drinking and recreational waters.). At the bottom, a white box states: "Between 2030 and 2050 climate change is expected to cause 250 000 ADDITIONAL DEATHS PER YEAR due to malaria, malnutrition, diarrhoea and heat stress." The World Health Organization logo is in the bottom right corner.

Actions on health and climate change

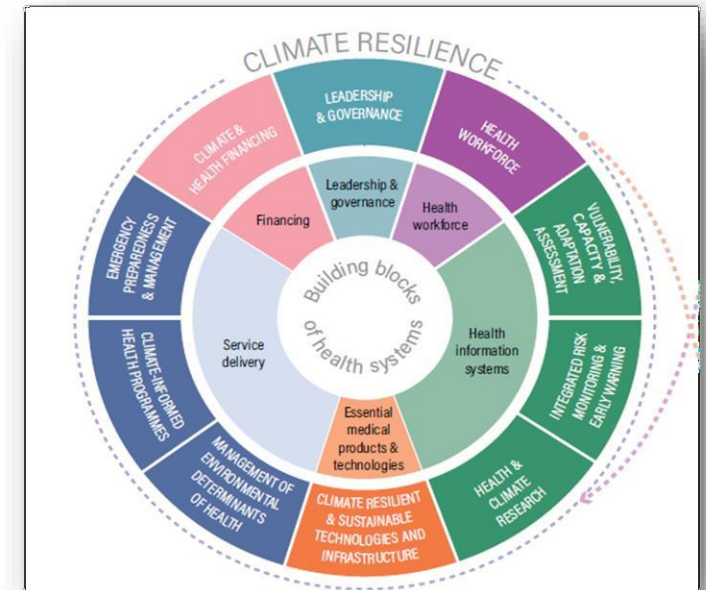
Help reduce carbon emissions for protecting health (air quality)



Protect health from climate risks



Make health systems more sustainable (lead by example)

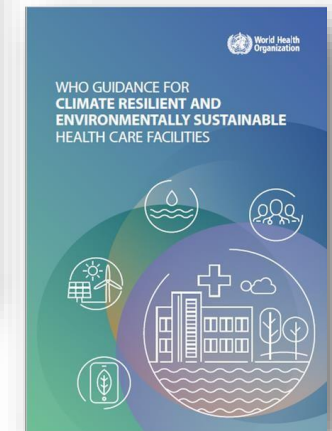
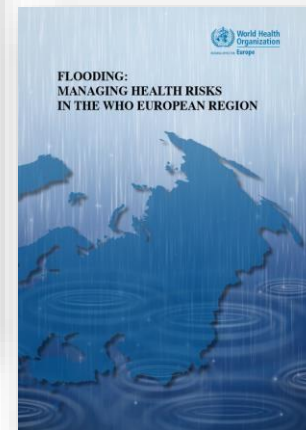
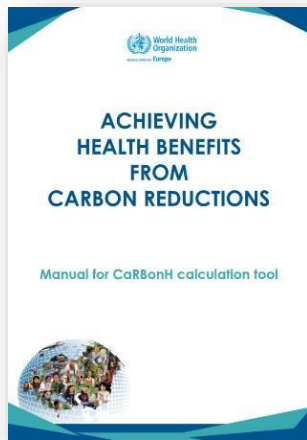


WHO actions on health and climate change

Help reduce carbon emissions for protecting health (air quality)

Protect health from full range of climate risks

Make health systems more sustainable (lead by example)



Help reduce carbon emissions for protecting health (air quality)

Synergies in tackling CC and air pollution

Common drivers of climate change and air pollution

Multiple actions possible: reduced emissions, urban planning, behavioural change (e.g. transport, diet)...

Most efforts to improve air quality can enhance climate change mitigation, and climate change mitigation efforts can, in turn, improve air quality

Up to date evidence of the health effects of air pollution is instrumental to support action



WHO actions on health and climate change

Help reduce carbon emissions for protecting health (air quality)



Pollutant	Averaging time	Interim targets IT1 - IT2 - IT3 - IT4	AQG level
PM _{2.5} , µg/m ³	Annual	35; 25; 15; 10	5
PM _{2.5} , µg/m ³	24-hour	75; 50; 37.5; 25	15
PM ₁₀ , µg/m ³	Annual	70; 50; 30; 20	15
PM ₁₀ , µg/m ³	24-hour	150; 100; 75; 50	45
O ₃ , µg/m ³	Peak season	100; 70	60
O ₃ , µg/m ³	8-hour	160; 120	100
NO ₂ , µg/m ³	Annual	40;30; 20	10
NO ₂ , µg/m ³	24-hour	120; 50	25
SO ₂ , µg/m ³	24-hour	125; 50	40
CO, mg/m ³	24-hour	7	4

Good practice statements

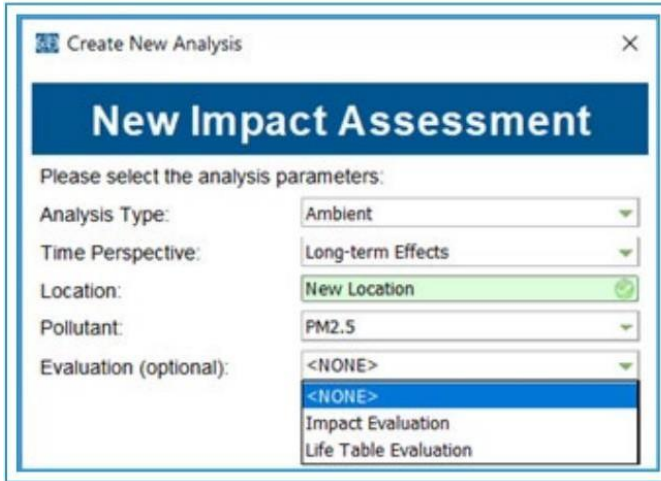
- certain types of particulate matter
- evidence insufficient to derive AQG levels
- health relevance
- black/elemental carbon
- ultrafine particles
- sand and desert dust

European Region [Source: New WHO Global Air Quality Guidelines aim to save millions of lives from air pollution](#)

[WHO global air quality guidelines: particulate matter \(PM2.5 and PM10\), ozone, nitrogen dioxide, sulfur dioxide and carbon monoxide](#)

WHO actions on health and climate change

Help reduce carbon emissions for protecting health (air quality)



Create New Analysis

New Impact Assessment

Please select the analysis parameters:

Analysis Type: Ambient

Time Perspective: Long-term Effects

Location: New Location

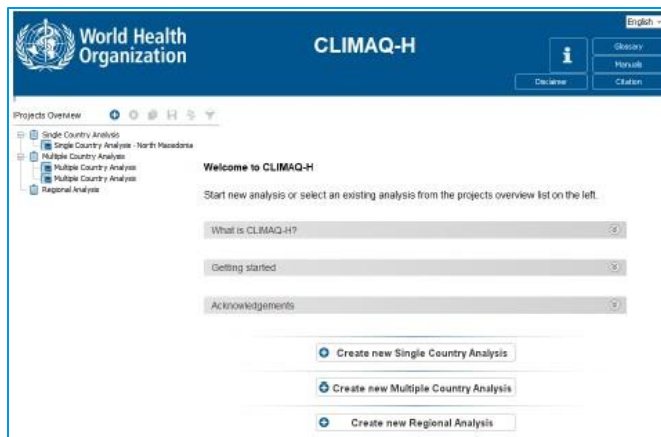
Pollutant: PM2.5

Evaluation (optional): <NONE>

- <NONE>
- Impact Evaluation
- Life Table Evaluation

AirQ+: a tool for health risk assessments of air pollution can be used, with some limitations, for cities, countries or regions to estimate:

- How much of a particular health effect is attributable to selected air pollutants?
- Compared to the current scenario, what would be the change in health effects if air pollution levels changed in the future?



World Health Organization

CLIMAQ-H

Projects Overview

- Single Country Analysis
- Multiple Country Analysis
- Regional Analysis

Welcome to CLIMAQ-H

Start new analysis or select an existing analysis from the projects overview list on the left.

What is CLIMAQ-H?

Getting started

Acknowledgements

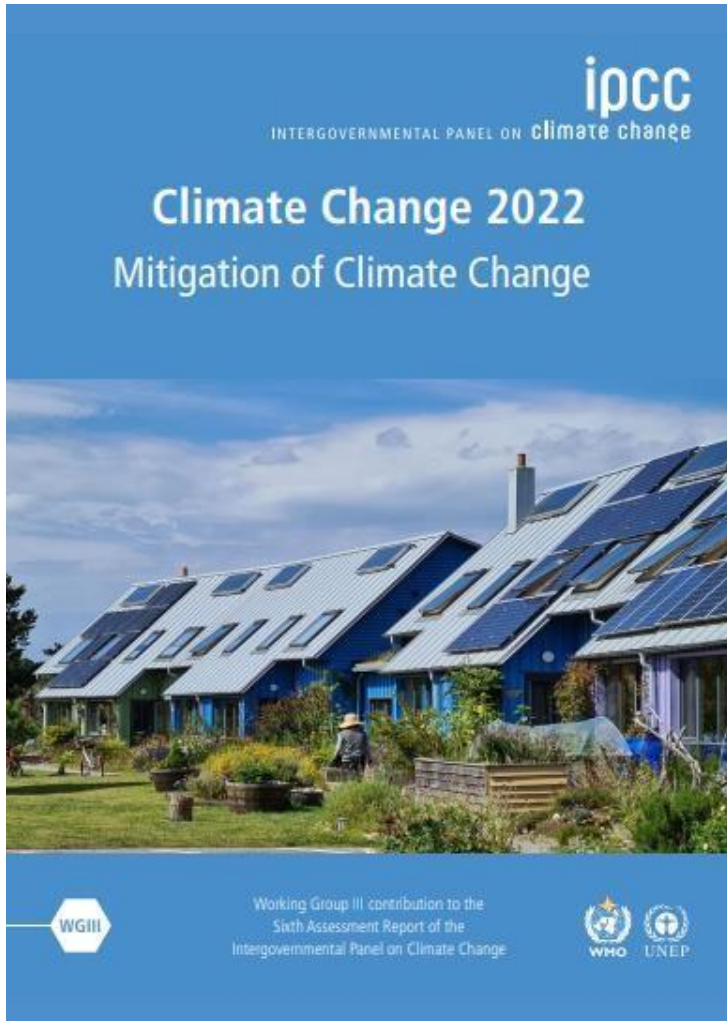
Create new Single Country Analysis

Create new Multiple Country Analysis

Create new Regional Analysis

CLIMAQ-H (formerly CaRBonH): a tool to quantify health and economic effects of climate change mitigation through air quality improvements. Key questions addressed:

- Which air pollution and health benefits have been achieved through reductions in domestic carbon emissions for the proposed climate policies under the NDCs submitted by Member States to the UNFCCC?
- What would the magnitude of the economic benefits due to the future changes in health effects expected under the NDCs be?



The economic benefits on human health from air quality improvement arising from mitigation action can be of the same order of magnitude as mitigation costs, and potentially even larger.

IPCC Working Group III

WHO actions on health and climate change

Protect health from climate risks



Core elements of Heat Health Action Plans (HHAPs)

- Agreement on a lead body: governance of public health responses to heat;
- Accurate and timely alert systems: heat–health warning systems;
- Heat-related health information plans: communicating heat risk;
- Strategies to reduce heat exposure: types of intervention and evidence of effectiveness;
- Care for vulnerable population groups: updated evidence on risk factors and vulnerability;
- Preparedness: planning for heat–health risks in health and social care settings;
- Long-term urban planning: reducing heat risks
- Real-time surveillance



European Region

WHO actions on health and climate change

Make health systems more sustainable(lead by example)

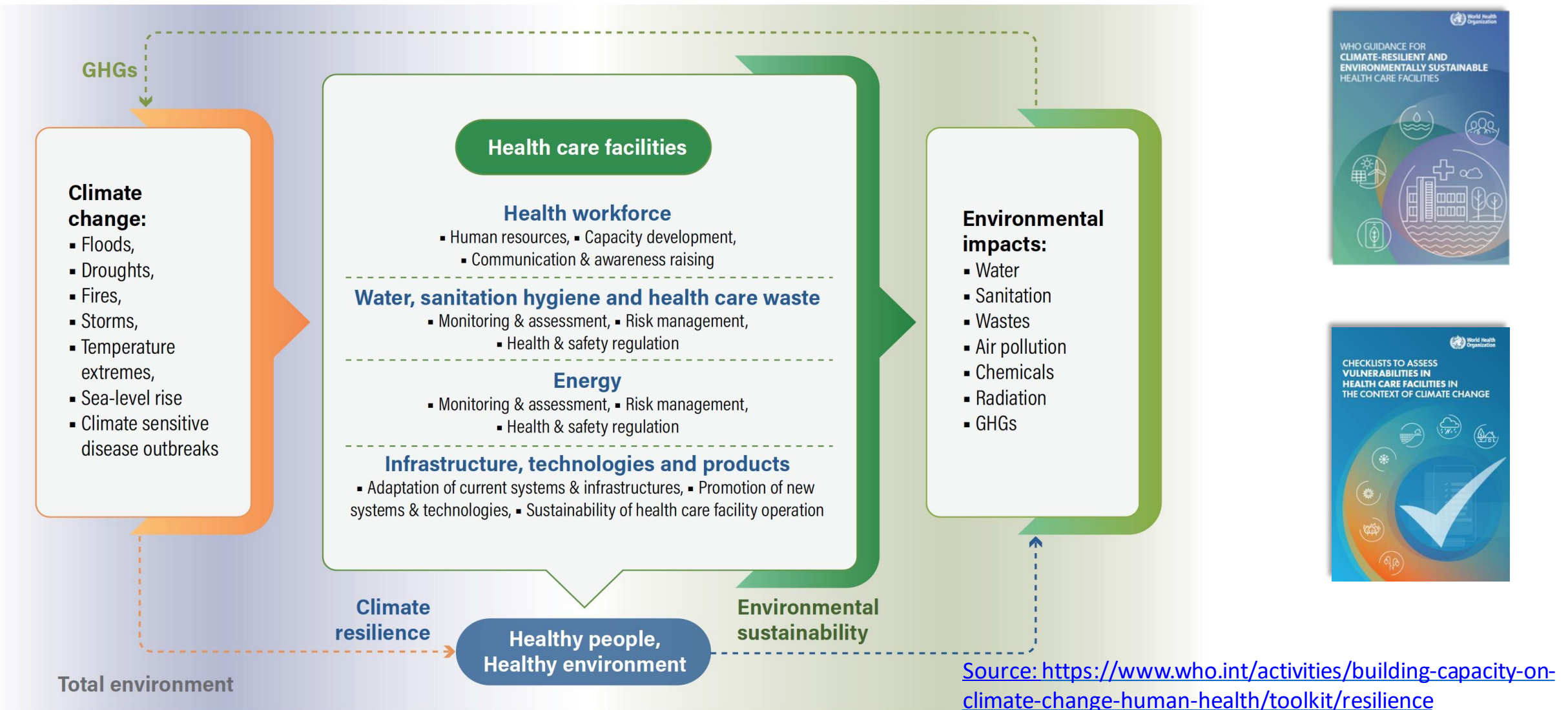


VISION

... health systems, which can improve, maintain or restore health, while minimizing negative impacts on the environment and leveraging opportunities to restore and improve the environment to the benefit of the health and well-being of current and future generations ...

- ❑ For climate action, the health sector:
 - needs to reduce greenhouse gas emissions from its operations, contributing to mitigation efforts
 - has to adapt and become resilient to climate change
- ❑ Climate action is an opportunity to explore synergies to improve health services and infrastructure towards a low-carbon and resilient health sector.

Framework for climate resilient and environmentally sustainable health care facilities





Protecting health workers

3.10. Environmental hygiene, sustainability and resilience

KEY DELIVERABLES:

- > Adequate water, sanitation and hygiene (WASH) provision in health facilities.
.....
- > Facilities available for staff welfare (e.g. personal hygiene, clothing, rest and dining).
.....
- > Safe handling and management of health-care waste.
.....
- > Safety protocols available for use of hazardous chemicals.
.....
- > Standard operating procedures for action in extreme weather events (e.g. heat or cold wave, hurricanes, flood) include protection of health and safety of health workers and first responders.
.....

Interventions to protect health and safety of health workers in the context of building resilience to climate related disasters and emergencies

[Source: Caring for those who care: Guide for the development and implementation of occupational health and safety programmes for health workers](#)



UN CLIMATE
CHANGE
CONFERENCE
UK 2021

COP26 Health Init

Two of the Programme's key
expected to announce their c
years and will allow countries

Commitment 1: Climate res

- Commit to conduct climate
adaptation assessments
facility level by a stated tar
- Commit to develop a heal
health V&A, which forms p
published by a stated targ
- Commit to use the V&A ar
change funding for heal
Global Environmental Faci
GCF Readiness programm



World Health
Organization

An alliance to make HEALTH SYSTEMS

**CLIMATE RESILIENT
+ LOW-CARBON**

**60+
COUNTRIES**



**Alliance for Transformative Action
on Climate and Health**

Health Systems

Health Systems, with countries
implemented in the coming
n systems and facilities.

n health systems

a target date by which to
s (ideally by 2050).

baseline assessment of
system (including supply

plan or roadmap by a set
health system (including supply
ure to air pollution and the
exposure to air pollution

ATACH – global initiative

Works to realize the ambition set at COP26 to build climate resilient and sustainable health systems, using the collective power of WHO Member States and other stakeholders to drive this agenda forward at pace and scale; and promote the integration of climate change and health nexus into respective national, regional, and global plans



European Region



Home / Initiatives / Alliance for Transformative Action on Climate and Health



Four thematic working groups to address:

- Financing the Health Commitments on Climate Resilient and Sustainable Low Carbon Health Systems
- Climate Resilient Health Systems
- Low Carbon Sustainable Health Systems
- Supply chains

ZERO REGRETS

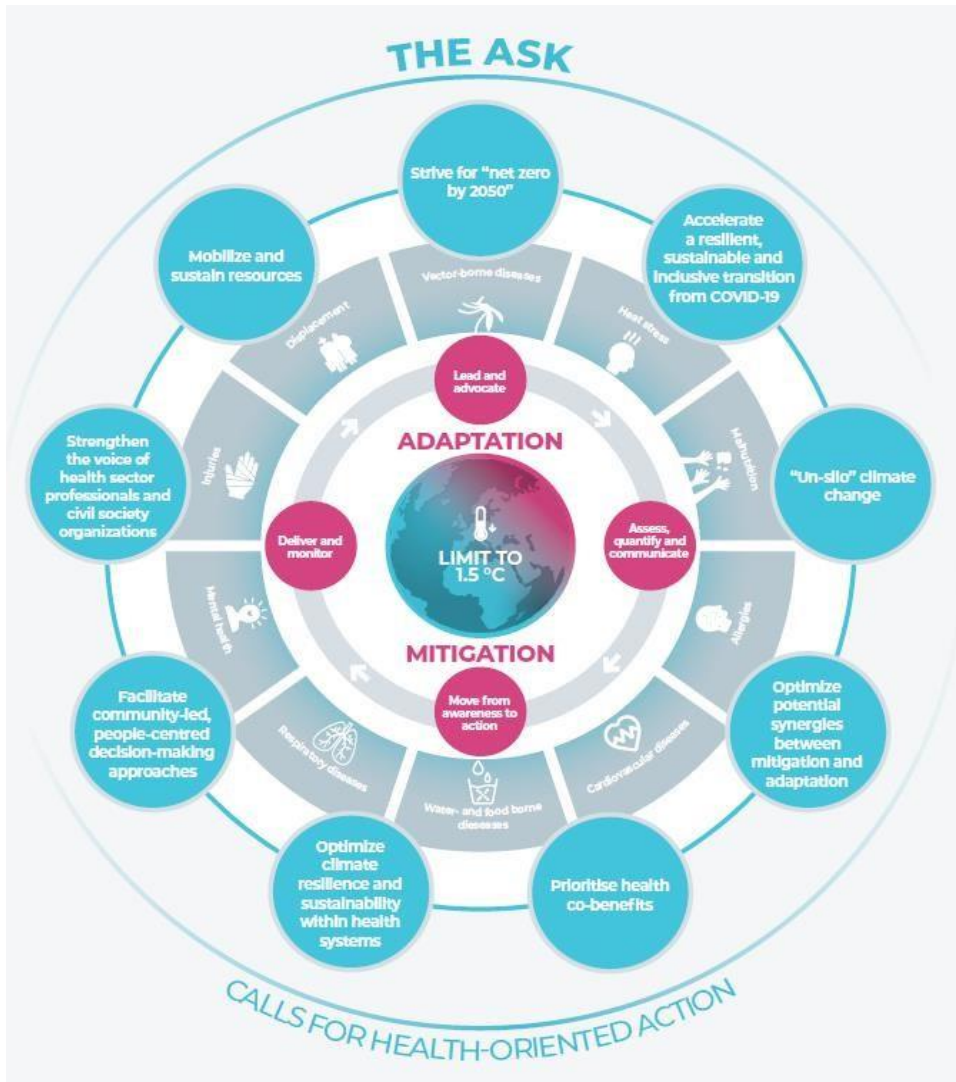
SCALING UP ACTION ON CLIMATE CHANGE MITIGATION AND ADAPTATION FOR HEALTH IN THE WHO EUROPEAN REGION

Key messages from the
Working Group on Health
in Climate Change

Regional initiative of the HIC Working Group in the European Region

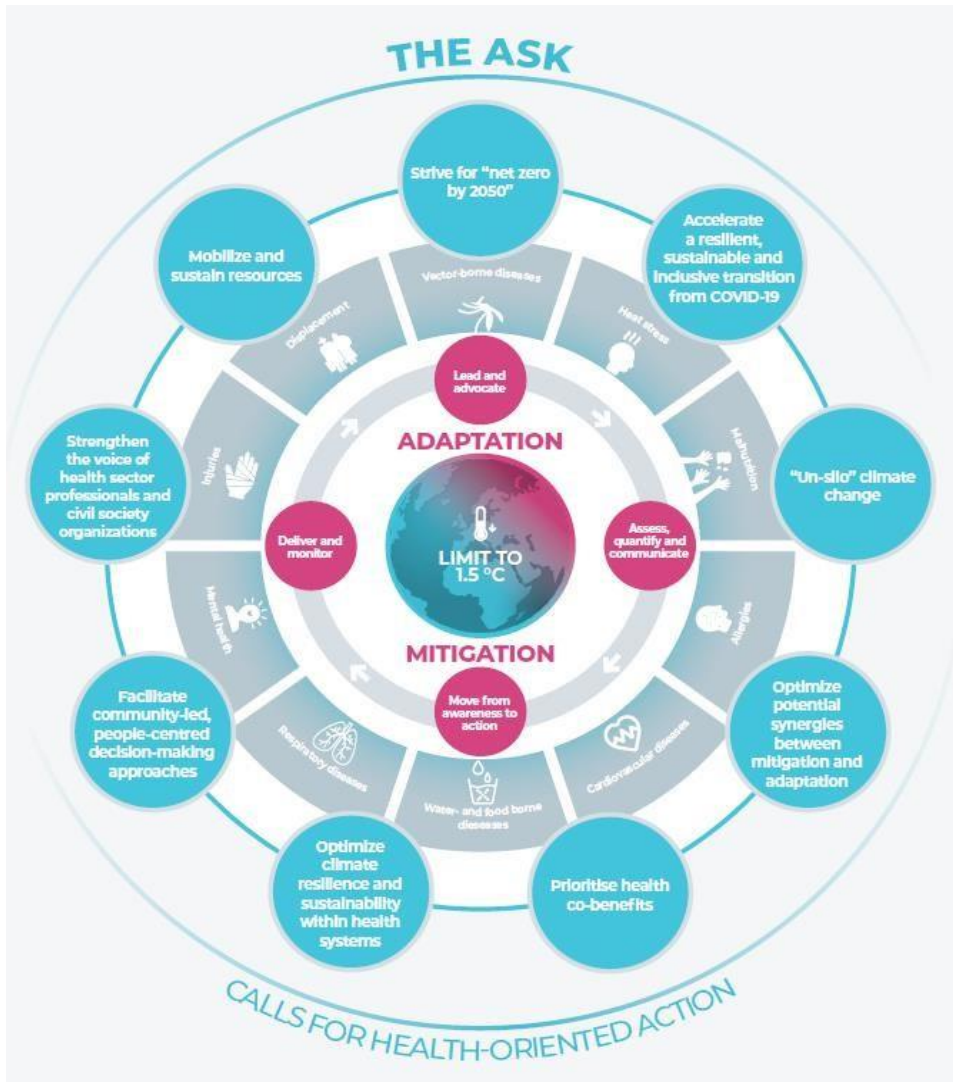
Aimed at policy-makers, particularly from the health sector, and civil society with the intent to:

- **Raise awareness** about the links between health and climate change
- **Identify policy options** that can maximize the benefits for health and the environment
- **Equip stakeholders** with evidence and messages to support engagement in national preparatory consultations for and negotiations at COP
- **Indicate areas for action** and collaboration across sectorial boundaries and social actors.



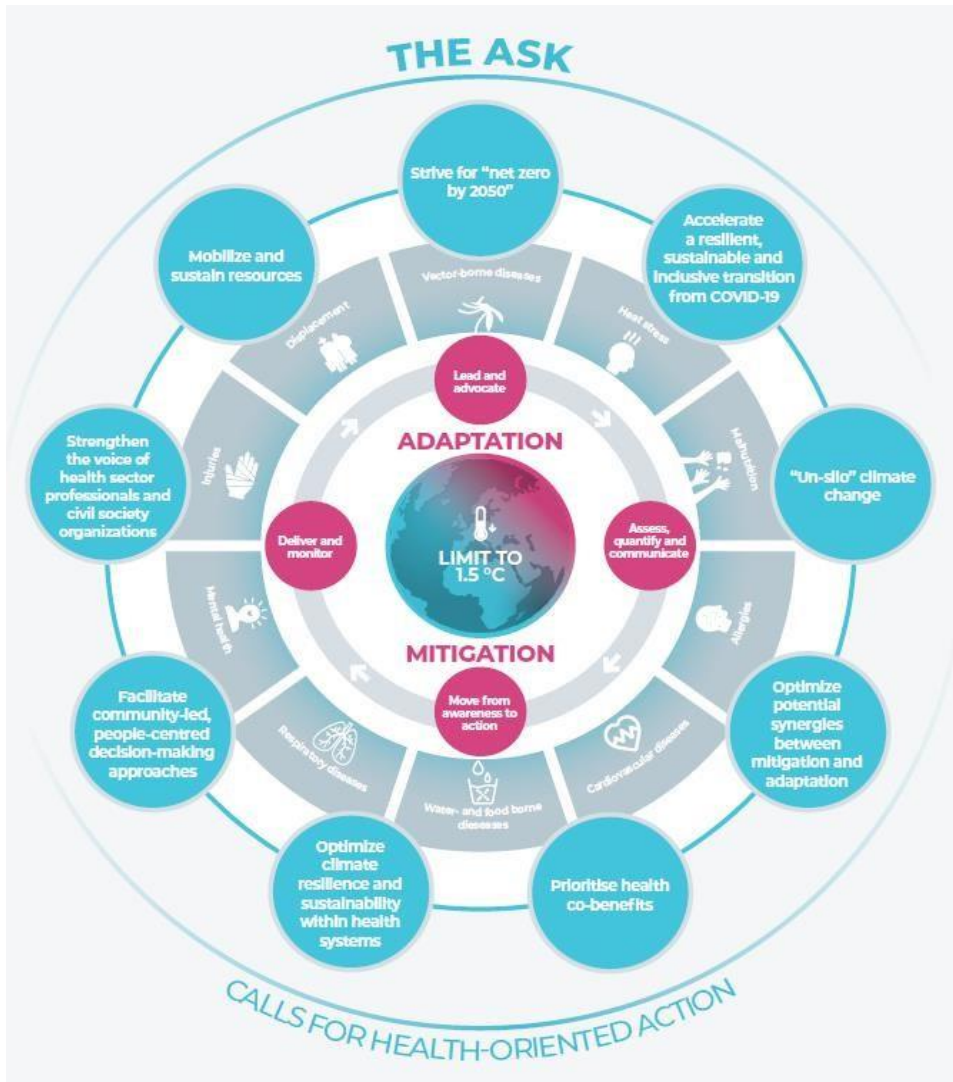
The Asks

- **Strive for “net zero by 2050”** to support a sustainable future that is better for our health and the planet. A move to net zero economies will bring significant health co-benefits from improved air quality, from a more physically active population and from healthier diets, among others.
- **Accelerate resilient, sustainable and inclusive transition from COVID-19** and prioritise actions that optimise the multiple benefits for the environment, health and societal wellbeing.
- **“Un-silo” climate change** by following the guiding principle of "climate change in all policies" analogous to "health in all policies".



The Asks

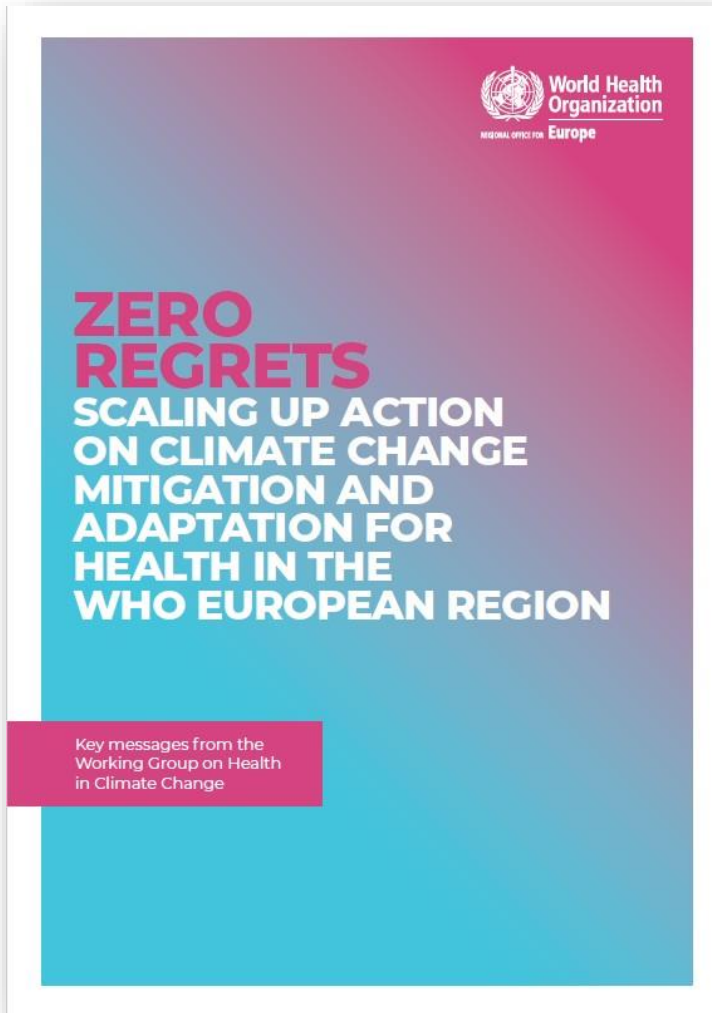
- **Optimize potential synergies between mitigation and adaptation**, raising and sustaining ambitions for mitigation and simultaneously scaling up adaptation at national and subnational levels.
- **Prioritise health co-benefits and explore synergies of tackling climate change and air pollution**, and minimize or avoid adverse health outcomes through policy coherence and implementation optimisation in health and health determining sectors.
- **Optimize climate resilience and sustainability within health systems** by scaling up action at the local and national level, and climate-proofing health protection, promotion and improvement programmes. Lead by example and proactively promote and strive for green, low-carbon health service delivery, preferably by 2050.



The Asks

- **Facilitate community-led, people-centred decision-making** approaches for all interventions for assessing and maximizing potential co-benefits, as well as minimizing unintended harms of mitigation actions.
- **Strengthen the voice of health sector professionals and civil society organizations** for action on climate change and undertake capacity strengthening for health and climate change.
- **Mobilize and sustain resources (knowledge, technology and finance)** for climate mitigation and adaptation action in the health and health determining sectors. Repurpose financial gains from reduction in, or the elimination of, fossil fuel subsidies to support health.

Calls for Action



Asses and communicate risks

Lead and advocate

Move from awareness to action

Align and adjust

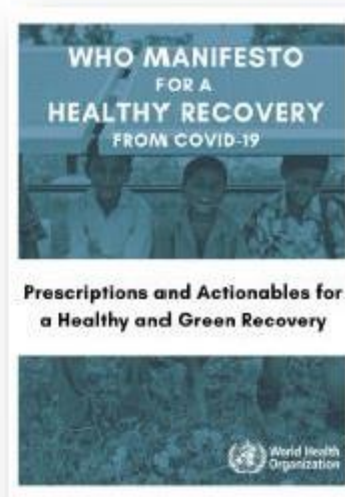
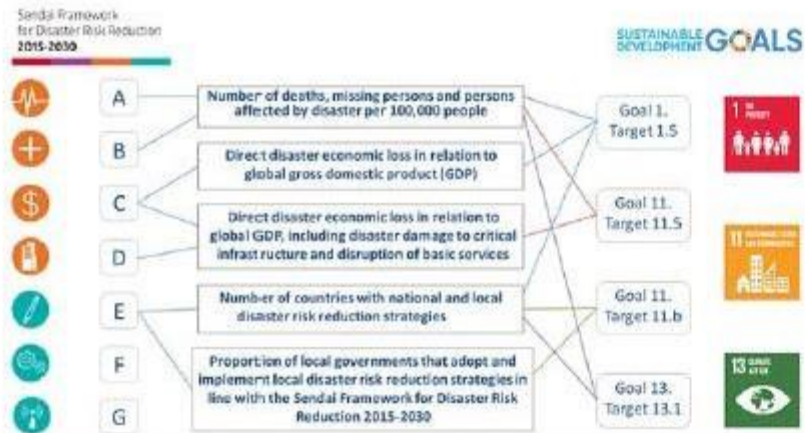
Deliver and monitor

Align and adjust



Strategic delivery alliances

Fostering good governance



Climate action in Environment and Health agenda in the WHO European Region

Environment and Health Process: a series of Ministerial Conferences on Environment and Health, endorsed by Regional Committee Resolutions



*“The cumulative scientific evidence is unequivocal:
Climate change is a threat to human well-being and planetary health.
Any further delay in concerted anticipatory global action on adaptation and
mitigation will miss a brief and rapidly closing window of opportunity to secure a
liveable and sustainable future for all (very high confidence)”*

IPCC WGII Summary for policy makers

Thank you

Acknowledgments: Oliver Schmoll, Vladimir Kendrovski, Diarmid Campbell-Lendrum

More information:

<https://www.who.int/europe/health-topics/climate-change>

<https://www.who.int/health-topics/climate-change>

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