

Trends in the Health Impacts of Climate Change, and Resilient, Adaptation Strategies

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**World Health
Organization**

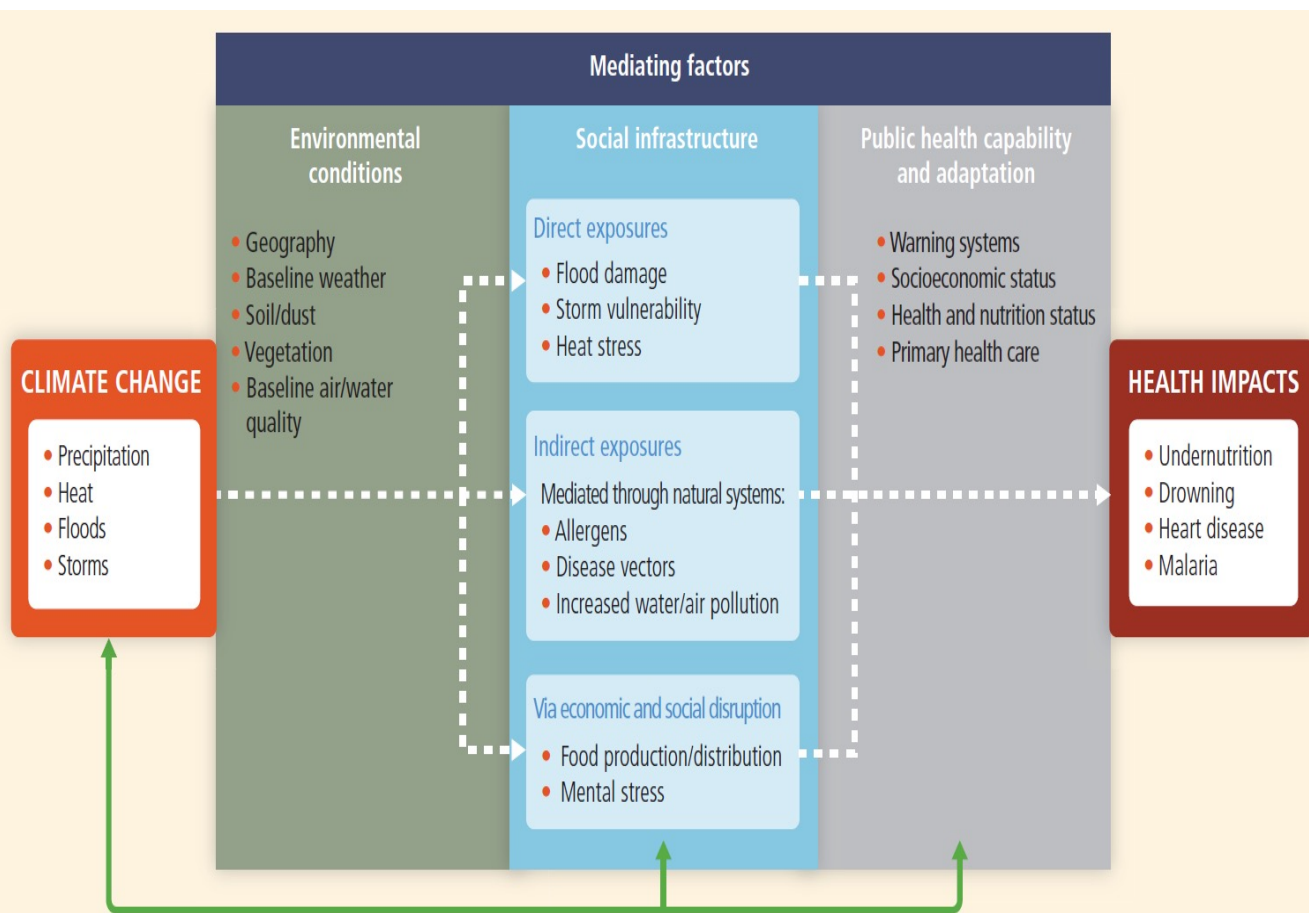
Climate change

*"The defining issue
for public health
during this century"*

Health risks from climate change



Health risks from climate change



Each year:

-Extreme weather events kill tens of thousands

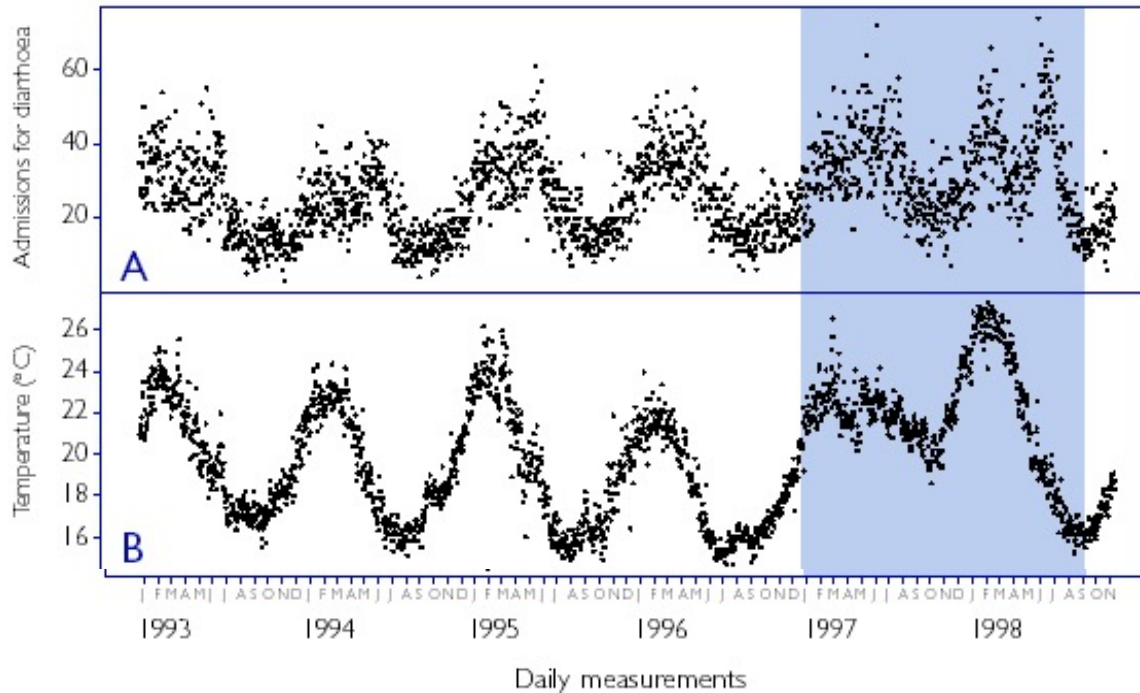
-Malaria kills over 600,000

-Diarrhoea kills almost 600,000 children

-Undernutrition kills 3.1 million

All are highly sensitive to climate conditions

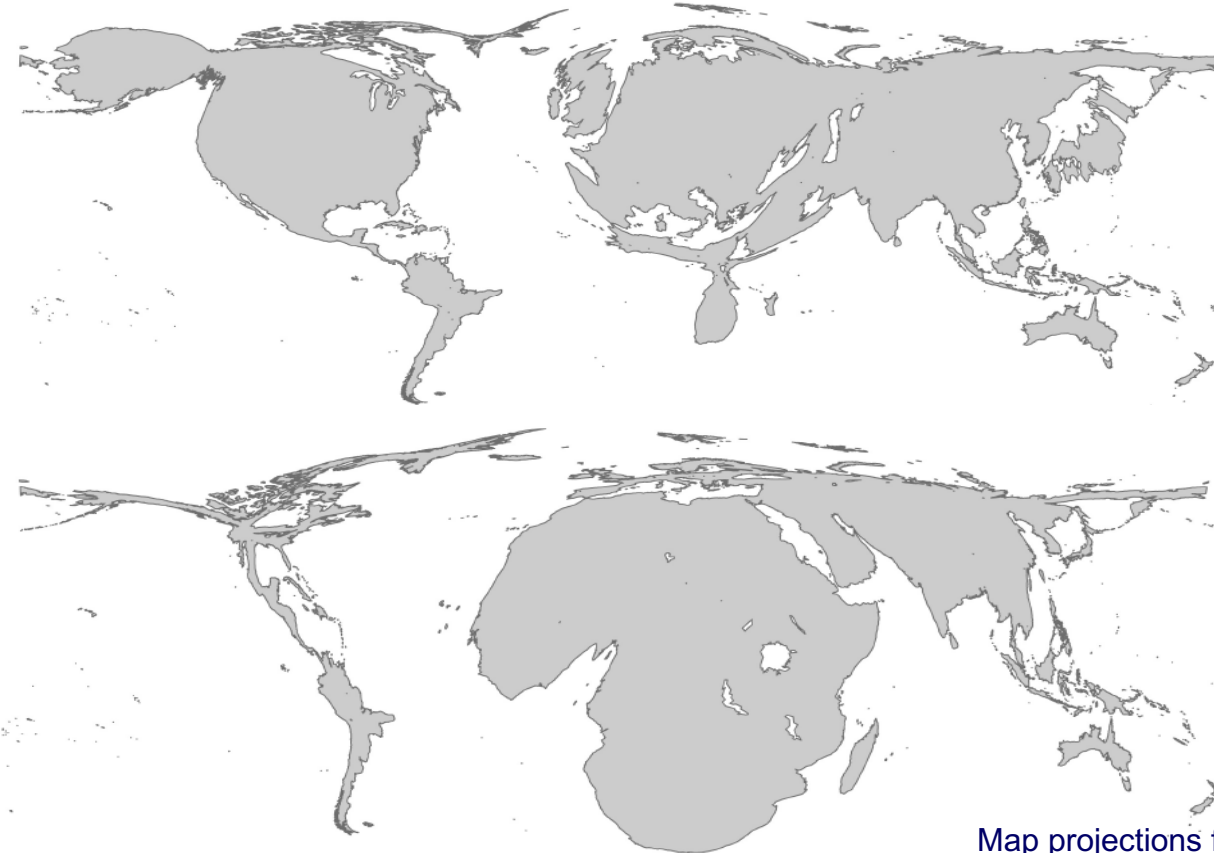
How sensitive is health to climate? Diarrhoea



Incidence of diarrhoeal disease is related to variations in temperature and precipitation, over both space and time. In Lima, Peru, diarrhoea increased 8% for every 1°C temperature increase.

(Checkley et al, Lancet, 2000)

Global health inequities and climate change



Cumulative emissions
of greenhouse gases,
to 2002

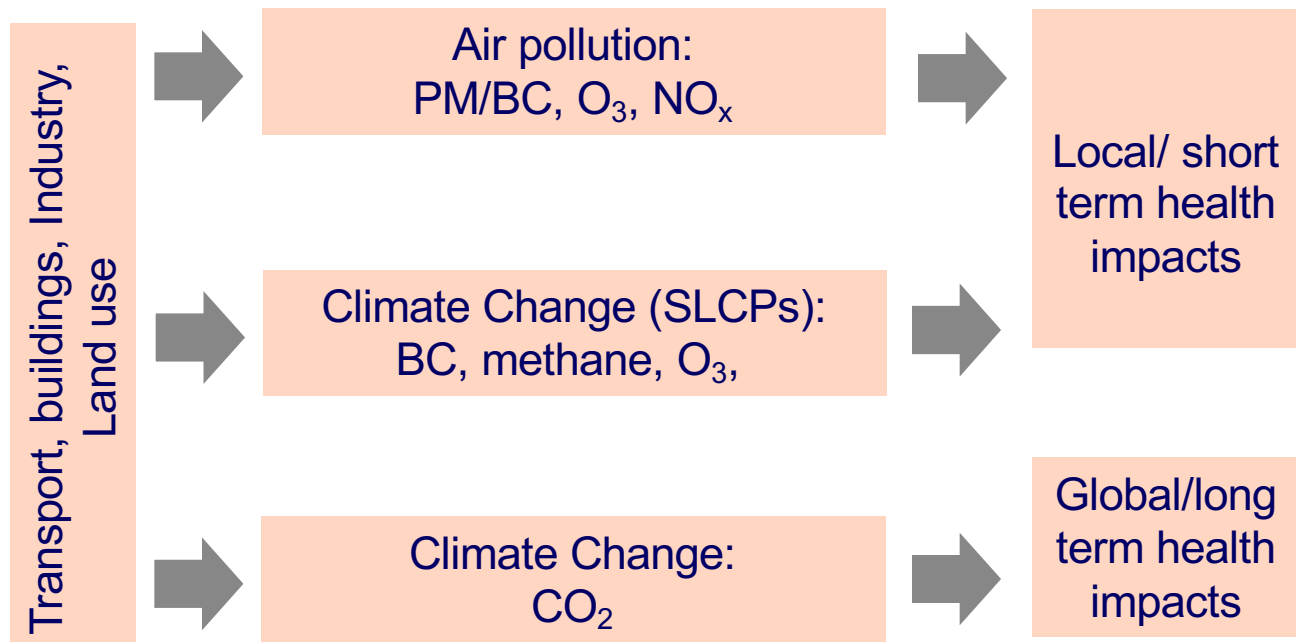
WHO estimates of *per
capita* mortality from
climate change, 2000

Map projections from Patz et al 2007; WHO 2008

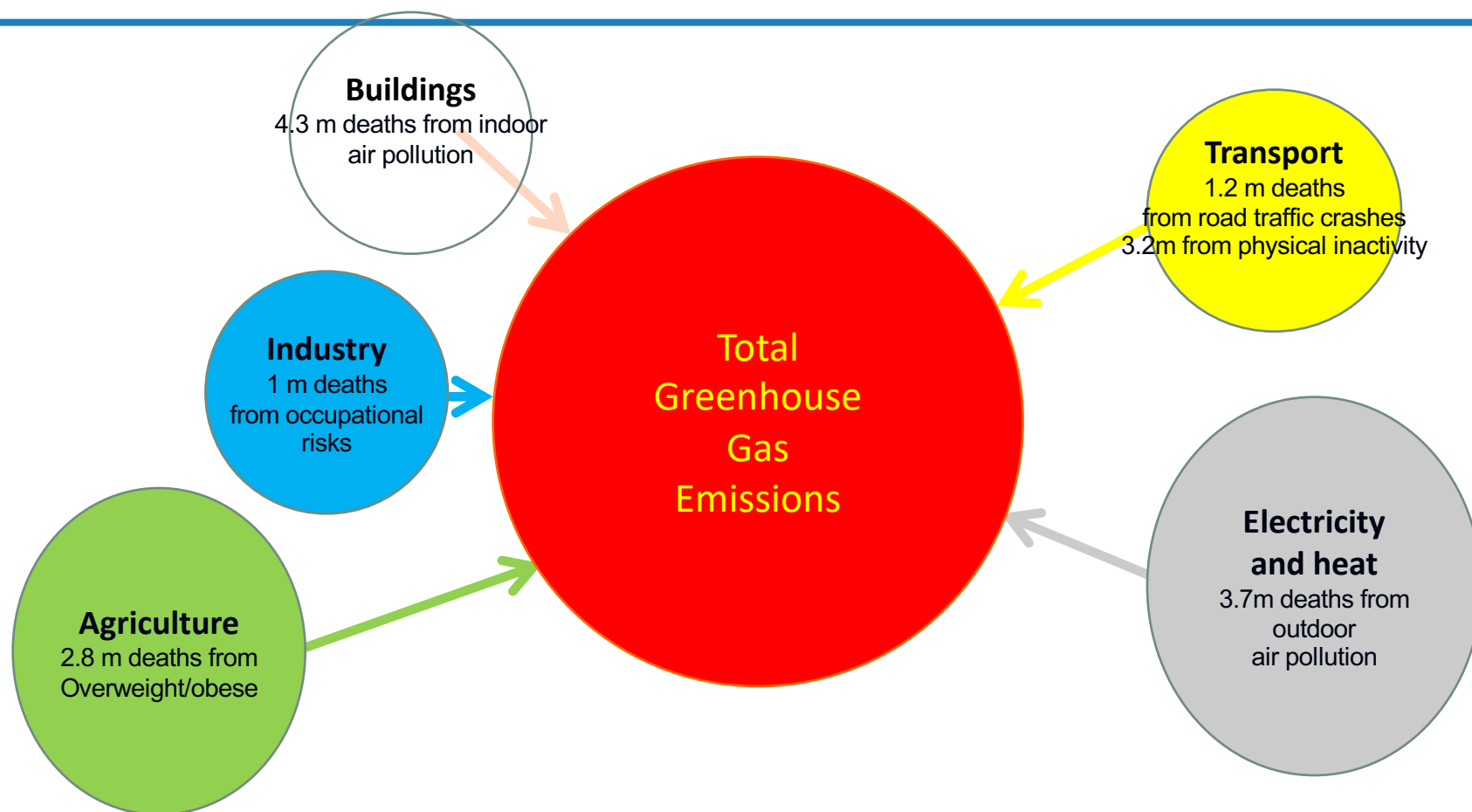
WHO Comparative Risk Assessment estimated that by 2000, climate change that had occurred since the 1970s was causing over 150,000 additional deaths per year (WHO, 2002, McMichael et al 2004)



Identifying Shared Pollutants for Climate Change and Air pollution



Health impacts of the causes of climate change



Circle size proportional to GHG emissions in 2010 (tonnes CO₂ equivalent).
Changes proportional to projections of changes by 2050. *Emissions data from IPCC, 2014.*

Political Processes and Public Health Response

Climate change mandates for health



Principle 1 of the 1992 UNFCCC –
Avoiding adverse effects of
climate change

“Adverse effects of climate change”

- changes in the physical environment or biota resulting from climate change which have significant deleterious effects on the composition, resilience or productivity of **natural and managed ecosystems** or on the operation of **socio-economic systems** or on **human health** and welfare.

The Paris agreement as a public health treaty



Renewing our commitment to “the most important health agreement of the 21st century”

Updated national climate plans are needed to reach the 1.5° goal. Enhanced Nationally Determined Contributions (NDCs) to the Paris Agreement are needed to reach our collective climate commitment, and a growing number of countries have announced net zero GHG emission targets for 2050.

Health action is an integral part of national climate plans

70% of current NDCs already include public health considerations, such as health adaptation measures or added health benefits from climate action. New plans are likely to increase the focus on health benefits by placing climate targets in the context of Covid-19 recovery.

The level of ambition will determine the fate of planet and people and how many lives we can save from improved air quality, more sustainable and healthy diets, liveable cities, and an environment free of pollution



COP26 Health Programme

Climate-resilient health systems



Promoting healthy NDCs

Health Leadership in Emissions Reduction



Delivering a 'Net Zero' National Health Service



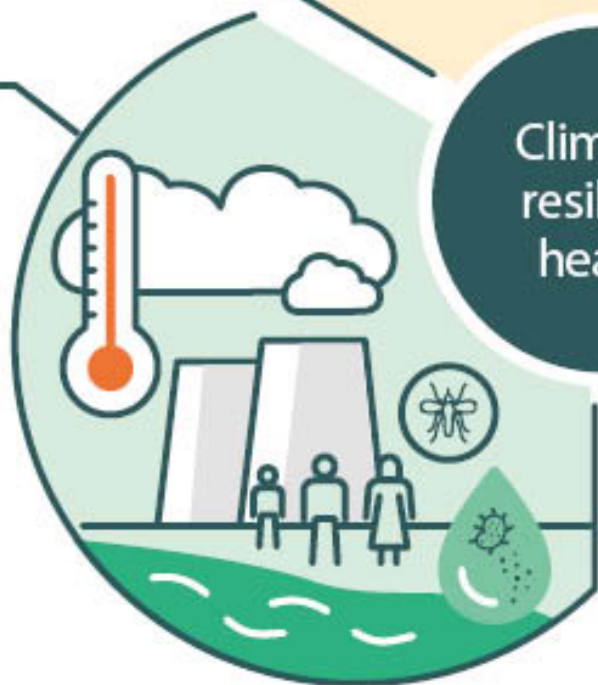
Mobilizing health voices for climate action

Key Focus Areas

To advance climate-resilient health, WHO works in three key focus areas:

1

Addressing the wide range of health impacts of climate change



2

Strengthening the climate resilience and environmental sustainability of health systems and facilities



3

Promoting the health co-benefits of climate change mitigation in other sectors



Climate-resilient health

Building Climate-Resilient Health

Five Key Questions:

1. What are the **impacts** of climate change on health and the potential health co-benefits of climate change mitigation?
2. How do we develop **comprehensive plans and strategies** to address climate-sensitive health risks and build climate-resilient health systems and facilities?
3. How do we **access climate financing** for climate change and health, including the Green Climate Fund (GCF) Readiness programme?
4. What **interventions** can be implemented to address climate-sensitive health risks and strengthen the resilience and environmental sustainability of health systems and facilities?
5. How do we **monitor progress** made at national level on climate change and health?



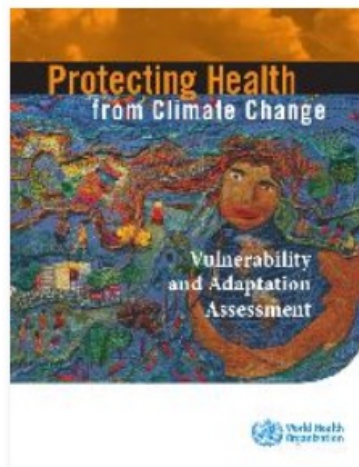
Assessing Health Risks and Co-benefits

What are the impacts of climate change on health and the potential health co-benefits of climate change mitigation?

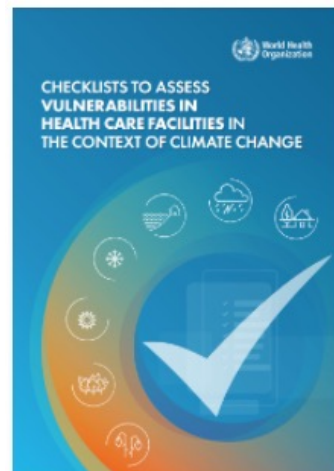
- Assessing health vulnerability to climate change at population and facility level
- Understanding the potential health co-benefits of climate action

WHY? To provide the required evidence to protect and promote health in a changing climate.

1. Assessing CC and health vulnerabilities at population level



2. Assessing CC vulnerabilities in healthcare facilities



3. Assessments of health co-benefits of climate change mitigation





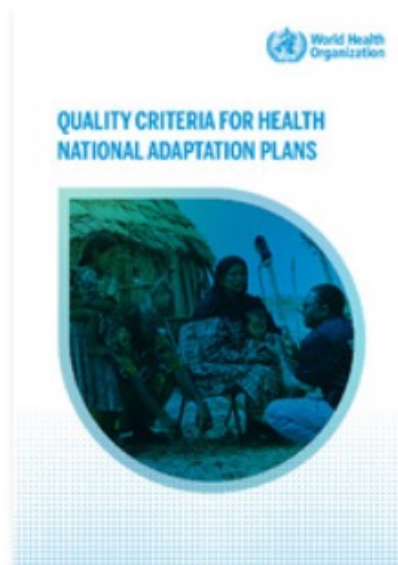
Climate Change and Health Planning

How do we develop comprehensive plans and strategies to address climate-sensitive health risks and build climate-resilient health systems and facilities?

- WHO assists countries with climate change and health planning to:
 - Address climate-related health risks;
 - Strengthen the climate resilience and environmental sustainability of health systems and facilities; and
 - Promote health co-benefits of mitigation



Nationally Determined Contributions (NDCs)



Health National Adaptation Plans (HNAPs)



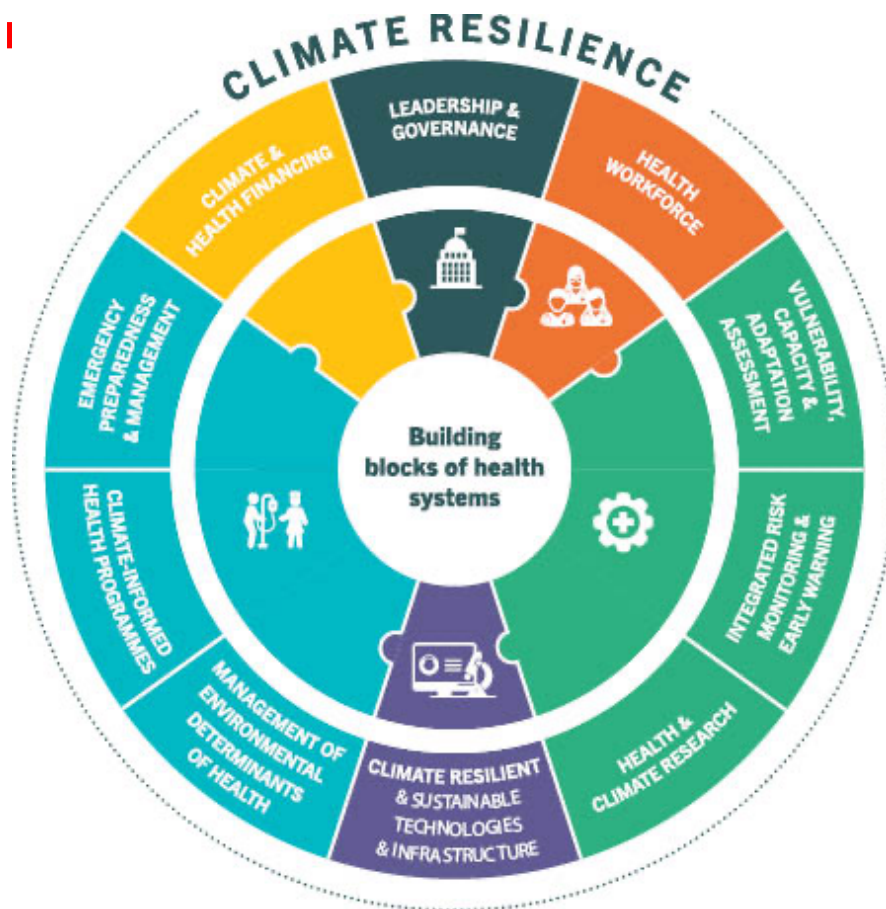


Climate Change and Health Planning

How do we develop comprehensive plans and strategies to address climate-sensitive health risks and build climate-resilient health systems and facilities?

WHO Operational Framework for Building Climate-Resilient Health Systems

- provides a structure to guide countries in developing plans or designing interventions for strengthening the resilience and environmental sustainability of health systems, and
- It is a critical tool in the preparation of HNAPs





Financing Climate Change and Health

How do we access climate financing for climate change and health, including the Green Climate Fund (GCF) Readiness programme?

WHO supports countries to develop single- and multi-country project proposals to access climate financing for health:

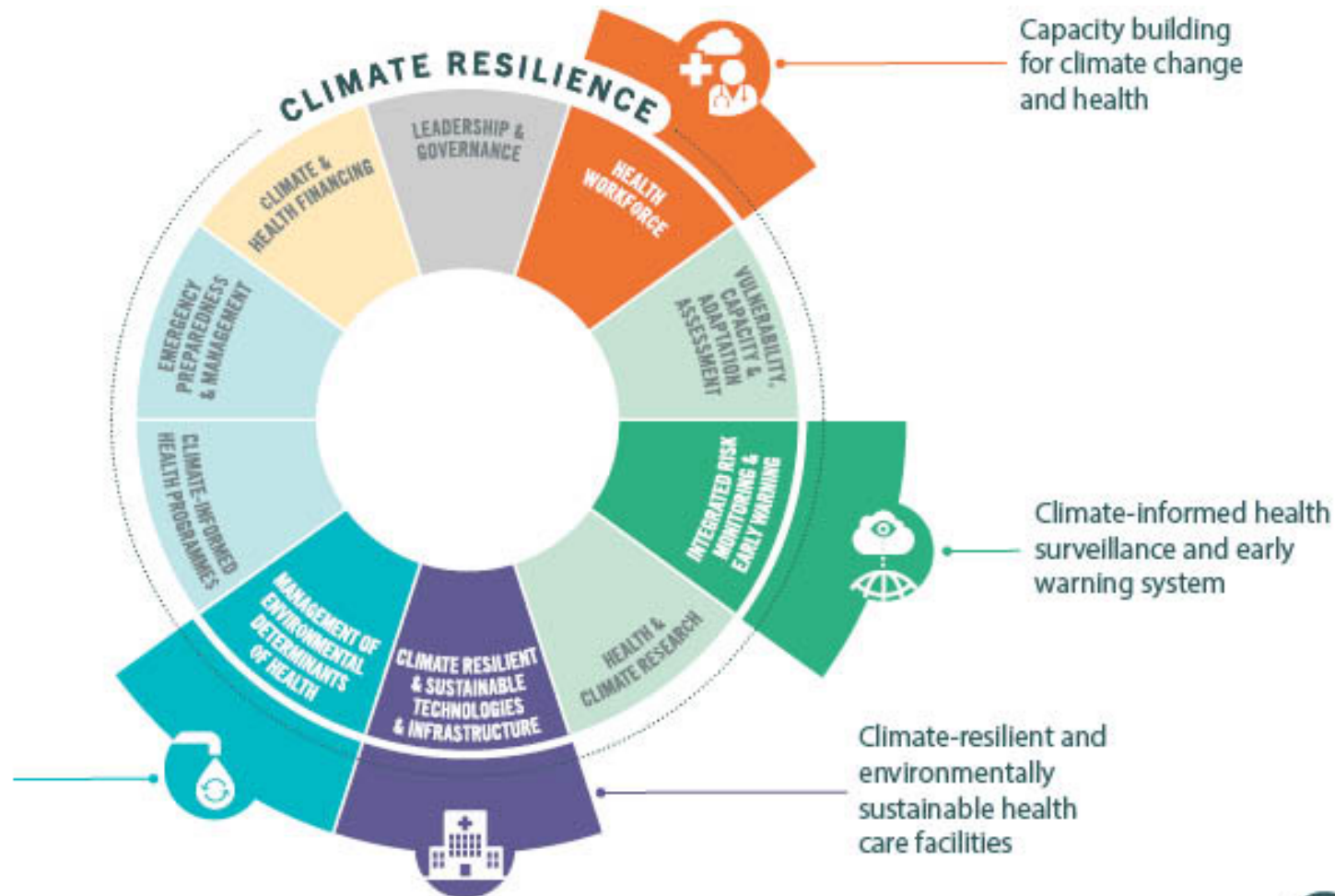


- Key climate change funding streams include the Adaptation Fund (AF), the Global Environment Facility (GEF), and the Green Climate Fund (GCF);
- As a GCF Readiness Delivery Partner WHO can support countries to access to GCF Readiness funds for health.

Implementing Climate Change and Health Interventions



What **interventions** can be implemented to address climate-sensitive health risks and strengthen the resilience and environmental sustainability of health systems and facilities?

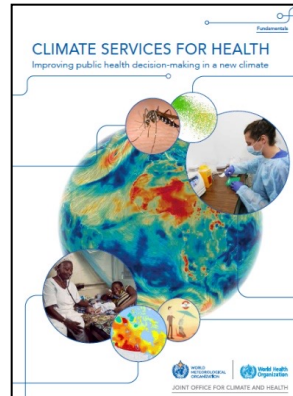
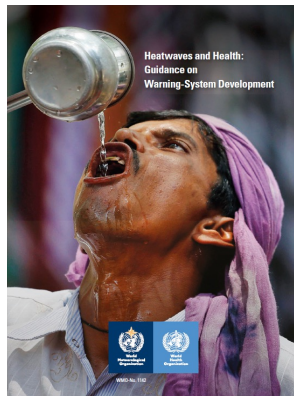
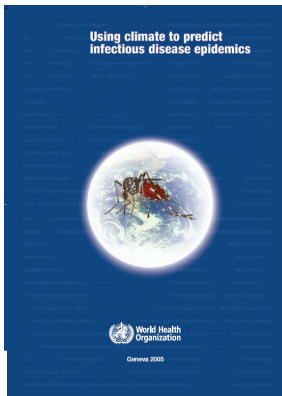


Implementing Climate Change and Health Interventions

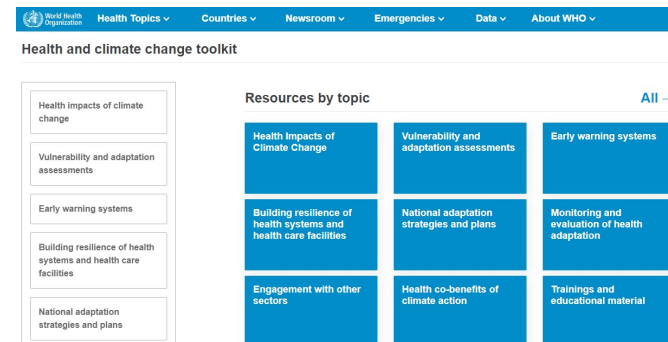


What interventions can be implemented to address climate-sensitive health risks and strengthen the resilience and environmental sustainability of health systems and facilities?

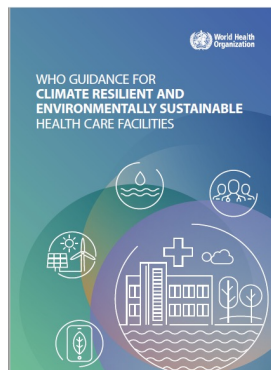
Climate resilient water and sanitation safety plans



Climate-informed health surveillance and early warning system



Capacity building for climate change and health



Climate-resilient and environmentally sustainable healthcare facilities



Monitoring Climate Change and Health Progress

How do we monitor progress made at national level on climate change and health?

WHO utilizes two key initiatives to assist in monitoring progress made on climate change and health at a national and global level

WHO UNFCCC Health and Climate Change Country Profiles



developed in collaboration with national health authorities and health stakeholders.

WHO Health and Climate Change Global Survey

Measures and monitors health sector response to climate change



Health is one of 3 COP26 Science Action areas, with specific Initiatives

Building climate-resilient health systems



NHS

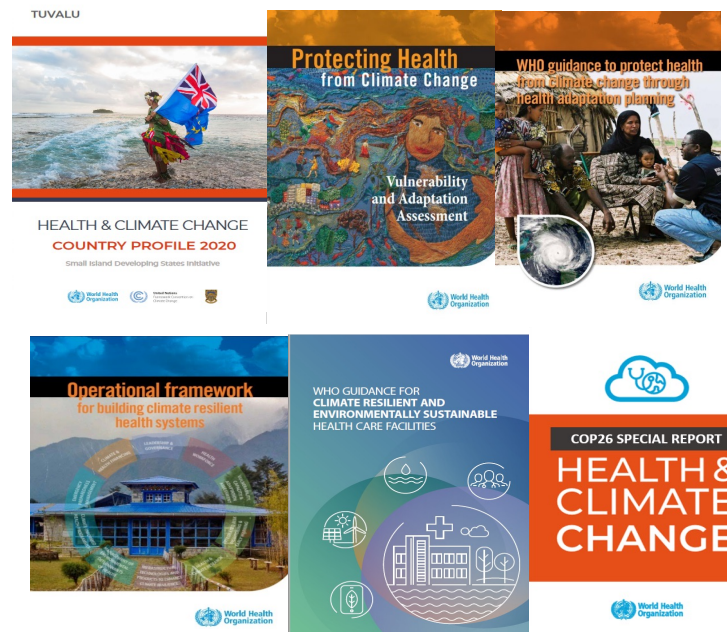
Delivering a 'Net Zero' National Health Service



Low carbon, sustainable health systems

Countries commit to:

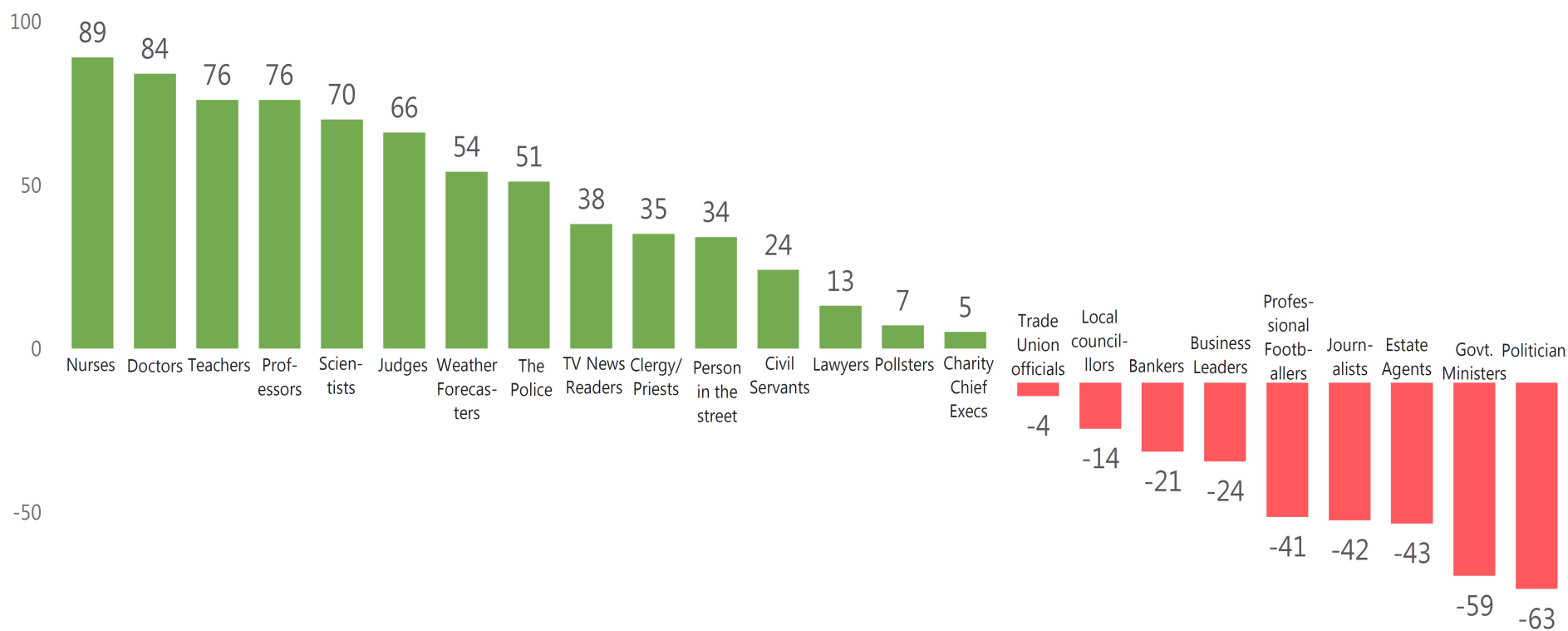
- Conduct climate change and health vulnerability and adaptation assessments (V&As) at population and/or HCF level;
- Develop a Health National Adaptation Plan (HNAP) informed by the V&A;
- Use the V&A and HNAP to facilitate health access to climate change funding;
- High ambition/high emitters: Commitment to set a target date by which to achieve health system net zero emissions (ideally by 2050).
- All countries: Commitment to deliver a baseline assessment of GHG emissions of the health system (including supply chains)
- All countries: Commitment to develop an action plan or roadmap by a set date to develop a sustainable low carbon health system.



World Health Organization

THE most important part of the facility: People

Net trust = % trust to tell the truth - % do not trust to tell the truth



Thank you