



Protecting health in a warming world

Thematic brief from the C7 Global Health Working Group

Climate change is now defined as one of the major risks to people's health globally. As extreme weather events, such as heatwaves, droughts, floods, and wildfires, intensify and multiply, lives are increasingly at risk. Heat alone has become a silent killer, responsible for more than 540,000 deaths each year between 2012 and 2021, a 63% increase since the 1990s. At the same time, climate change directly affects access to safe water and nutritious food, contributing to the burden of malnutrition.

Warmer temperatures and alternating cycles of drought and heavy rainfall are creating ideal conditions for the spread of vector-borne diseases such as dengue and chikungunya, as well as water-related diseases resulting from poor sanitation. Climate change is also affecting disease transmission patterns and the seasonal cycle, making outbreaks harder to predict. At the same time, melting permafrost and glaciers pose a risk of releasing viable, long-dormant pathogens, making pandemic preparedness, prevention, and response infrastructure an absolute necessity for low- and middle-income countries.

Climate shocks are compromising access to healthcare, particularly during crises and in vulnerable areas, which affects people who are already struggling to get the care they need. Health infrastructures and services, already overstretched, are especially vulnerable to disruptions caused by climate change. By the end of the century, it is projected that 1 in 12 hospitals worldwide could face a high risk of partial or total shutdown due to extreme weather events, 71% of these hospitals located in low- and middle-income countries. Similar risks apply to production and manufacturing sites for medical products, and may affect the delivery of critical health countermeasures to populations in need. Countries with rapidly ageing populations face compounding risks, as older adults are disproportionately vulnerable to heat stress, air pollution, and climate-related infectious diseases.

These challenges posed by climate change are significant and require coordinated, collective action to mitigate their health impacts and strengthen the resilience of health systems against current and future risks. Since climate change does not affect all populations equally, climate and health policies must be designed and implemented with equity at their core. Building on international commitments through UN climate processes, the COP28 Declaration on Climate and Health and the COP30 Belém Health Action Plan, the World Health Assembly and WHO's Global Action Plan on Climate Change and Health, G7 countries must reaffirm their leadership in addressing the interconnected crises of climate change and health.

1/ Better connecting climate and health policies

1.1 Addressing the problem at its root through stronger climate action

Countries should urgently strengthen efforts to reduce greenhouse gas emissions as a central strategy to protect and improve public health. Exposure to air pollution has immediate and long-term impacts, contributing to respiratory and cardiovascular diseases, while more than 2.52 million deaths in 2022 were attributed to air pollution derived from the combustion of fossil fuels.

By placing health at the centre of emission reduction strategies, governments can address the drivers of climate change while reducing pressure on health systems and improving population well-being. Transitioning away from

fossil fuels would also strengthen health-system resilience by reducing dependence on non-renewable energy sources. COP31 offers G7 leaders an opportunity to build on previous progress and commit to integrating health into their climate policies and commitments. Health should no longer be treated as peripheral to climate negotiations, but recognised as a core indicator of climate success.

Governments are encouraged to use health-impact assessments to quantify the health co-benefits of climate policies. Integrating Environmental and Health Impact Assessments can help identify risks and support equitable health outcomes at both national and subnational levels, including in urban and regional planning.

Accounting for 4.4% of global greenhouse gas emissions, the healthcare sector and supply chains should also be a focus of decarbonisation priorities through a just and equitable transition. Framing decarbonisation as a cost-saving measure for health systems, rather than solely an emissions obligation, may also help generate broader domestic support for ambitious climate policies.

Sustainable action requires moving beyond voluntary declarations toward enforceable frameworks that are incorporated into national climate laws and accompanied by mandatory reporting and compliance monitoring mechanisms.

1.2 Enabling climate-informed health policies

Building resilience to climate-related health risks relies on robust and reliable data to inform public policy. It necessitates improving the integration of environmental, meteorological, and health data systems to better anticipate the risks and prepare the response. The implementation of the One Health approach at the local level is a useful tool; by integrating human, animal, and environmental health, it enhances our ability to detect and respond to emerging threats.

Integrated early warning systems should also be strengthened by combining meteorological data, environmental indicators, and diagnostic-confirmed disease surveillance, which enables faster and more accurate prediction and response to outbreaks of climate-sensitive diseases such as dengue, cholera, and malaria. Connecting the impacts of climate change in each sector with public health and health security plays a key role in shaping future environmental and public health policies.

In a context where scientific evidence is often questioned, it is essential to reaffirm evidence-based decision-making as the foundation of effective, credible, and life-saving public health and climate policies.

2/ Safeguarding access to health services by adapting health systems

2.1 Putting health adaptation at the core of countries' climate policies

The growing health impacts of climate change call for renewed efforts and political leadership to prepare health systems to respond to current and future crises. This requires long-term global health policies aimed at strengthening public and community health systems that are resilient, inclusive, and rooted in local communities, able to guarantee equitable and universal access to quality health services, including those related to sexual and reproductive health and rights, and grounded in a transformative gender approach.

Health systems must be adapted to ensure continuity of services, including supply chains and essential diagnostic services, even in the context of climate crises, epidemics, natural disasters, or conflicts. This includes investments in resilient infrastructure, on-site renewable energy, and climate-resilient diagnostics and treatments as core components of climate-health adaptation and early warning systems.

The training of health professionals is also a key component of health adaptation. It must incorporate climate-health literacy, covering recognition and management of heat-related illness, climate-sensitive disease patterns, and disaster preparedness, ensuring the health workforce is equipped to respond to emerging climate threats. Additionally, effective adaptation must also include scaling up mental health services to address the growing burden of anxiety, trauma, and long-term psychological stress linked to climate-related crises.

It is also essential to ensure the active participation of civil society, communities, women and girls, recognizing their role as agents of change at the local, national, and international levels in all phases of decision-making, implementation, and monitoring of climate and health policies.

Finally, governments are encouraged to rely on resources such as the tracker developed by the Alliance for Action on Climate Change and Health (ATACH) to monitor their progress in adapting their health systems to climate change.

2.2 Increasing funding for sustainable and resilient health systems

The need to increase national and global financial resources for health systems is urgent, especially as foreign aid in the health sector is declining. Ensuring the continuity of primary health care services and the availability of diagnostics are essential for effectively responding to climate-related risks and rely on sustainable and predictable funding.

In addition to general health financing, there is a pressing need to increase dedicated funding for climate adaptation in the health sector. By 2035, it is estimated that health adaptation measures alone will require more than \$22 billion annually, which accounts for approximately 7% of the total adaptation financing needs. Currently, there is a significant funding gap that must be addressed urgently. Countries must engage in a process of climate budgeting, to identify exactly how their national health budgets support climate resilience to ensure long-term domestic funding. Investments in climate-health preparedness are an urgent necessity; without them, the annual costs of inaction from direct health impacts are projected to reach between \$2 billion and \$4 billion by 2030.

Securing funding remains a major hurdle, as health currently receives less than 1% of multilateral climate finance. Integrating health financing with low-carbon strategies and carbon pricing revenues can ensure that climate mitigation also funds public health outcomes. Reallocating funding from fossil fuel subsidies toward climate-resilient infrastructure and healthcare systems thus presents a transformative opportunity. Several new mechanisms are also being deployed and could be used to step up climate and health funding, such as the Guiding Principles for Financing¹, Hybrid Capital & Bonds² and the Climate and Health Co-Investment Facility³.

¹ Endorsed by nearly 50 institutions (including the World Bank), these principles promote grants over loans to avoid increasing the debt burden on vulnerable nations.

² Proposals like Sustainable Future Bonds aim to re-channel a fraction of global foreign reserves into Multilateral Development Banks, potentially unlocking billions for health infrastructure.

³ This initiative, launched at COP28, incubates projects to make health adaptation "bankable" for private investors.