

INTEGRATING MENTAL HEALTH INTO CLIMATE CHANGE ADAPTATION POLICIES

**UNITED
FOR
GLOBAL
MENTAL
HEALTH**

EXECUTIVE SUMMARY

Climate change is negatively affecting the mental health of people across the world. Climate action, however, creates co-beneficial opportunities for mental health. Climate adaptation has a crucial role to play in ensuring better preparedness, prevention, and response to climate change and its impacts on mental health.

This review of the national climate adaptation policies of 193 countries identified that:

42%

of countries mention mental health in their climate adaptation policies

36%

of countries mention climate change-related mental health impacts in their adaptation policies

17%

of countries include adaptation actions to address mental health in their adaptation policies

Overall, mental health was not included in the majority of national adaptation policies (58%) and, when included, it was often mentioned superficially and/or with no corresponding adaptation action.

The report recommends policymakers working on national adaptation policies:

- Recognise the diverse negative impacts of climate change on mental health, including the increased risks certain groups with specific vulnerabilities may face
- Monitor the mental health impacts of climate change and any mental health risks and co-benefits of adaptation at the national level to ensure appropriate and effective adaptation responses
- Ensure specific adaptation actions are planned and implemented to protect and promote good mental health, as well as to prevent and manage mental health problems
- Identify the many co-benefits to mental health that appropriate adaptation measures and actions can have
- Ensure appropriate financing is available for the integration of mental health into adaptation efforts
- Recognise that many places may be unable to fully adapt to climate change, resulting in significant losses and damages among people and communities. Therefore, appropriate mental health and psychosocial support needs to be resourced and provided to affected populations immediately
- Build collaborative, cross-sector partnerships – including with communities – that combine diverse forms of expertise to inform the design, delivery, and evaluation of efforts to integrate mental health into adaptation.



Credit: Anthony Ochieng
Climate Visuals Countdown

INTRODUCTION

Climate change affects all aspects of people's health and wellbeing, including their mental health. The [latest report by the Intergovernmental Panel on Climate Change \(IPCC\)](#) indicates, with high confidence, that climate change has already been [negatively impacting mental health globally](#), and these impacts are expected to worsen as climate change deepens. Climate change is negatively impacting mental health by:

- Increasing the [risk of new mental health problems](#), such as post-traumatic stress disorder and depression, following extreme weather events
- Worsening the social, psychological, biological, and environmental determinants of mental health, such as [economic inequality](#) or [gender-based violence](#)
- Contributing to a range of [psychological reactions, such as worry and anxiety](#), often to the detriment of people's mental health and wellbeing.

Climate hazards can make people living with pre-existing mental health problems more vulnerable. For example, those with certain mental health conditions are more [likely to die](#) during heatwaves than the general population.

The connections between physical and mental health mean the [negative physical health consequences](#) of climate change, such as the increase in certain infectious diseases, can also have mental health implications.

Conversely and importantly, action to mitigate and adapt to climate change can have [significant positive co-benefits](#) for mental health.

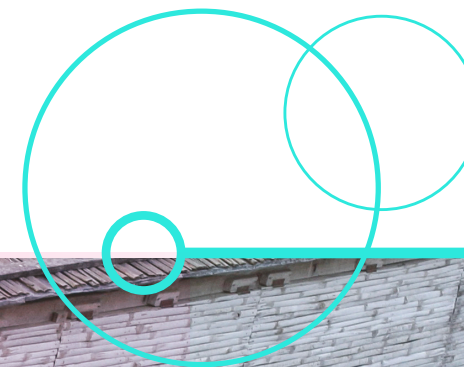
DEFINITION OF TERMS

Climate change: A change of climate which is attributed directly or indirectly to human activity that alters the composition of the global atmosphere and which is in addition to natural climate variability observed over comparable time periods ([UNFCCC](#))

Climate adaptation: The human process of adjusting to the actual or expected climate and its impacts in order to reduce harm or to benefit from opportunities ([IPCC, 2023](#))

Mental health: Mental health is a state of mental wellbeing that enables people to cope with the stresses of life, realise their abilities, learn well and work well, and contribute to their community ([WHO](#))

Mental disorders: A mental disorder is characterised by a clinically significant disturbance in an individual's cognition, emotional regulation, or behaviour. It is usually associated with distress or impairment in important areas of functioning. There are many different types of mental disorders. Mental disorders may also be referred to as mental health conditions ([WHO](#)).



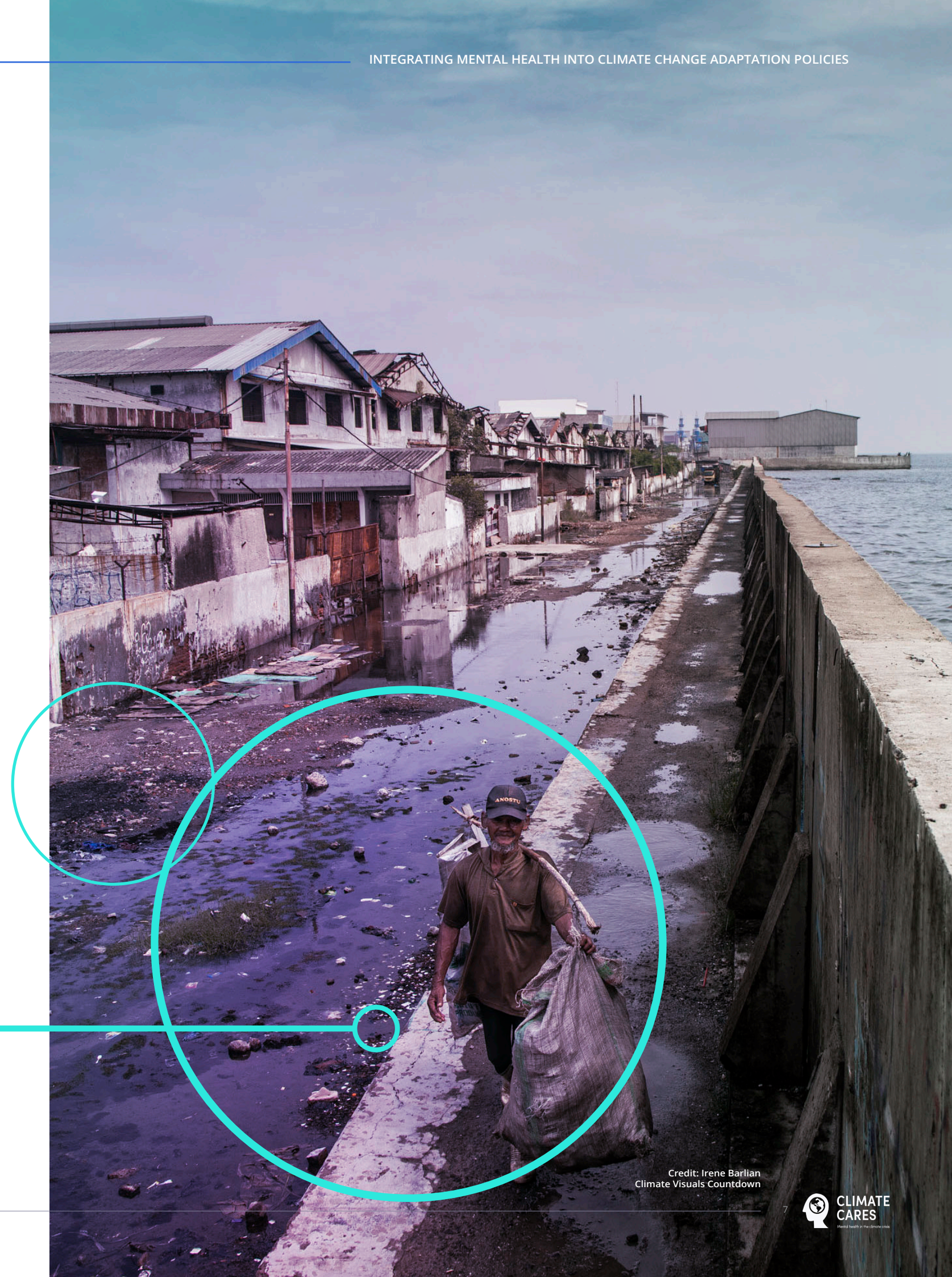
The negative mental health impacts of climate change, and the opportunities for co-beneficial climate and mental health action, highlight the important role of adaptation in ensuring better preparedness, prevention, and response to climate change and its impacts on mental health. The [2022 Intergovernmental Panel on Climate Change Sixth Assessment Report \(IPCC AR6\)](#) emphasises that improving access to mental health care is an effective form of climate adaptation (see C.3.7). And yet, mental health often receives insufficient attention in the context of climate adaptation discussions.

According to a [2025 World Health Organisation review of health in national adaptation plans](#) (incorporating 59 national adaptation plans (NAPs) and 27 health national adaptation plans (HNAPs)), mental health and psychosocial considerations are included in less than half of NAPs (44%) and are incompletely documented across HNAPs (81%). Importantly, only 5% of NAPs and 22% of HNAPs included specific actions to address mental health and psychosocial needs, making mental health one of the health outcomes with the least actionable recommendations in the context of adaptation policies.. Another [recent review](#) on children's health in NAPs found that of the 160 countries it examined, none included considerations on children's mental health. An [analysis of HNAPs in South America](#) also highlighted the minimal recognition of mental health. The lack of recognition of mental health in adaptation policies may also be driven [by the dearth of robust research](#) on the mental health impacts of adaptation action.

This policy brief aims to better understand the extent to which mental health has been integrated into national adaptation policies by:

- Providing quantitative estimates of how many national adaptation policies include mental health
- Exploring, where relevant, how mental health is included
- Highlighting examples where mental health is already being comprehensively considered in case studies throughout the report.

The brief then suggests opportunities for improving integration – providing evidence-based recommendations and concrete content suggestions on how policymakers can integrate mental health in national adaptation policies. As such, it is expected to be used as an advocacy tool to help policymakers make sure mental health is an essential pillar of climate adaptation.



Credit: Irene Barlian
Climate Visuals Countdown

BRIEF METHODOLOGY

For more detail on the methodology used, please consult the [Annex](#).

The two guiding research questions for this analysis were:

- How is mental health included as a climate-sensitive health risk in national adaptation policies?
- How are the impacts of climate change on mental health addressed in national adaptation policies?

Previous reviews of National Adaptation Plans helped guide our methodological approach, namely:

- [Child health prioritisation in national adaptation policies on climate change: A policy document analysis across 160 countries](#)
- [Towards gender-responsive national adaptation plan processes: Progress and recommendations for the way forward](#)
- [Opportunities for strengthening resilience by integrating climate and disaster risk finance and insurance in national adaptation plan processes](#)
- [WHO 2025 review of health in national adaptation plans](#)
- Sexual and reproductive health and rights in national adaptation plan processes ([Y Labs](#) ; [Women Deliver](#) and [NAP Global](#)).

A database of national adaptation climate change policies, strategies and plans was created, based on a comprehensive search approach, presented in the [Annex](#).

The main search for the documents was conducted in English. In the absence of the relevant documents in English, a search was conducted in French, Spanish, and Arabic using a translated version of the keywords. Search keywords are available in the [Annex](#).

A total of 396 documents were retrieved for 193 countries (countries identified according to the [World Bank classification of countries and economies](#)). These documents were compared with the database produced by the [Zangerl et al. \(2024\)](#) study, the UNFCCC's [NAP central database](#), and the database produced by the WHO-hosted [Alliance for Transformative Action on Climate and Health \(ATACH\)](#).

Individual countries often had multiple adaptation policies (sometimes including both NAPs and HNAPs), so a decision tree was created to objectively and consistently identify which document to analyse for each country. This was complemented by discussions within the team to reach a consensus on the documents for inclusion. The decision tree is provided in the [Annex](#).

A coding framework (also available in the Annex) was developed inductively and iteratively with input from the whole research team to guide the analysis of the policies. Quantitative analysis of the frequency of each of the codes and subcodes enabled a description of the content across all the policies.

MAIN FINDINGS

Health national adaptation plans (HNAPs), national adaptation plans (NAPs) and other relevant national adaptation documents were identified for 193 countries (a total of 175 NAPs and 18 HNAPs).

Mental health was mentioned at least once in the national adaptation policy documents of 42% of countries (38% NAPs, 83% HNAPs).

The impacts of a changing climate on specific mental health and wellbeing outcomes were highlighted by 36% of countries (32% NAPs and 78% HNAPs).

Adaptation interventions to address the mental health and psychosocial impacts of climate change (including mental health and psychosocial support (MHPSS)) were mentioned by 17% of countries (14% NAPs, 50% HNAPs).

A heat map outlining the degree of inclusion of mental health across countries is presented below showing how most countries had no to little inclusion of mental health in their national adaptation policy (please consult the [Annex](#) for a description of what the colour categories correspond to and for an outline of each country score



Credit: Debsuddha Banerjee
Climate Visuals Countdown



DETAILED FINDINGS

MENTAL HEALTH AND WELLBEING IMPACTS

INCLUDED IN 36% OF COUNTRIES (32% OF NAPs, 78% OF HNAPs)

Various mental health and wellbeing impacts of climate change were mentioned. These included:

- Mental health issues that may be common to multiple mental health disorders (i.e., **transdiagnostic mental health presentations**), such as suicidal ideation, suicide, or sleep disruptions, were mentioned by 19% of countries (15% of NAPs and 50% of HNAPs).
- **Specific mental health disorders** were mentioned by 17% of countries (12% of NAPs and 67% of HNAPs). The mental health disorders commonly mentioned included post-traumatic stress disorder and anxiety disorders.
- **Psychological and emotional responses to climate change** were mentioned by 7% of countries (5% of NAPs and 28% of HNAPs). This included individuals' and communities' experiences of fear and mental distress caused by displacement and/or physical injuries as a result of extreme weather events.
- **Physical health outcomes associated with mental health problems** were mentioned by 3% of countries (1% of NAPs and 22% of HNAPs). For example, the increased risk for people with mental health disorders of experiencing poor physical health outcomes during extreme heat.
- **Neurological disorders** were mentioned by 1% of countries (1% of NAPs and 6% of HNAPs). Policies mentioned how climate related hazards, including temperature-related events such as heatwaves, could contribute to cognitive impairment and neurological conditions, among other physical and mental health impacts.
- Additionally, 13% of countries (13% NAPs, 17% HNAPs) mentioned **mental health impacts in passing only**, with no detail of which specific aspect of mental health may be affected by climate change.



CASE STUDY: ETHIOPIA'S HNAP



Ethiopia's HNAP considers mental health a critical public health concern, highlighting how climate change can exacerbate poor mental health. Exposure to the country's more frequent, more severe, and longer-lasting extreme weather events and high temperatures can have direct negative effects on mental health. The HNAP also mentions the detrimental impact of other environmental issues, such as pollution, on mental health. Mental health is identified as a climate-sensitive health risk, shaped by factors such as age, gender, ethnicity, occupation, and location.

The HNAP also highlights that high temperatures can have direct physiological effects on the brain, influencing emotional control and therefore potentially contributing to increased suicide rates. High temperatures in Ethiopia can also harm agriculture and lead to economic loss among farmers, contributing to worsened mental health and higher rates of suicide. The HNAP identifies Ethiopia's pastoralist communities as among the most vulnerable to the impacts of climate change on mental health, due to drought-induced water scarcity and economic losses.

The proposed response involves the whole health system, involving all building blocks including its workforce, governance, financing, information systems, service delivery, and access to essential medicines. Ethiopia also plans to mainstream climate considerations into health and related sectors through advocacy workshops, including on mental health. Adaptation efforts are encouraged to reflect local social and cultural contexts to improve effectiveness.

CLIMATE RELATED HAZARDS IN THE CONTEXT OF MENTAL HEALTH IMPACTS

INCLUDED IN 36% OF COUNTRIES, (32% NAPs, 78% HNAPs)

Various specific climate related hazards were described as negatively impacting mental health.

- **Extreme weather events** such as floods and droughts were mentioned by 26% of countries (21% of NAPs and 78% of HNAPs). The policies highlighted how exposure to extreme weather events exacerbated environmental and socioeconomic vulnerabilities, resulting in disaster-induced short, medium, and long term physical, mental, and social health effects.
- **Temperature-related events**, including heatwaves, were mentioned by 10% of countries (6% of NAPs and 44% of HNAPs). High temperatures were said to contribute to negative mental health impacts, including suicide, especially among vulnerable groups.
- **Pollution** was mentioned by 4% of countries (1% of NAPs and 28% of HNAPs). Pollution, especially water and air pollution, was described as contributing to the development of mental health problems.
- **Biodiversity loss** was mentioned by 2% of countries (1% of NAPs and 6% of HNAPs). This was usually cited in relation to the loss of traditional land, resulting in harms to the physical, mental, and social wellbeing of Indigenous peoples.





Credit: Jack Taylor
Climate Visuals Countdown

PATHWAYS AND MECHANISMS THROUGH WHICH CLIMATE CHANGE IMPACTS MENTAL HEALTH INCLUDED IN 13% OF COUNTRIES (9% NAPs, 44% HNAPs)

A number of pathways through which climate change impacted mental health were mentioned.

- **Environmental pathways** were mentioned by 11% of countries (7% of NAPs and 44% of HNAPs). Examples included loss of land, infrastructures, and homes as well as food and water scarcity resulting from climate change.
- **Socioeconomic pathways** were mentioned by 7% of countries (5% of NAPs and 33% of HNAPs). Pathways included loss of loved ones, displacement and migration, increased poverty and other socioeconomic changes due to climate change that negatively impact mental health.
- **Psychological pathways** were mentioned by 3% of countries (2% of NAPs and 17% of HNAPs). They included mentions of psychological trauma, anxiety and emotional stress due to climate change that contribute to mental health problems.
- **Biological pathways** were mentioned by 2% of countries (1% of NAPs, and 11% of HNAPs). They were mainly mentioned in the context of direct injury from exposure to extreme weather events or via direct physiological effects on the brain, for example due to extreme heat (that in turn could influence emotional control).

CASE STUDY: BANGLADESH'S NAP



The NAP from Bangladesh recognises that extreme temperatures and increased salinity as a result of climate change can impact people's physical and mental health. This is particularly true of vulnerable groups, such as older adults, children, and people with pre-existing mental health conditions.

In response, the government of Bangladesh aims to:

- Improve surveillance, early warning systems, and monitoring of the adverse impacts of extreme climate events on mental health, paying particular attention to how people are affected according to gender and disability
- Extend access to mental healthcare by expanding telehealth services
- Work towards pollution-free cities and expand green and blue spaces to help boost mental health
- Study the impact of climate change on several health issues, including mental health and trauma, and identify possible relevant adaptation interventions
- Promote climate-smart cities, climate-resilient healthcare and WASH facilities, and community-based afforestation and reforestation as co-beneficial interventions for resilience, livability, and improved mental wellbeing.

PEOPLE AND COMMUNITIES MOST AT RISK OF EXPERIENCING THE MENTAL HEALTH IMPACTS OF CLIMATE CHANGE

INCLUDED IN 14% OF COUNTRIES (11% NAPs, 39% HNAPs)

Vulnerability factors for the mental health impacts of climate change mentioned in adaptation plans were:

- **Pre-existing health conditions**, including both physical and/or mental health conditions, were mentioned by 7% of countries (5% of NAPs and 28% of HNAPs).
- **Age** was mentioned by 7% of countries (6% of NAPs and 22% of HNAPs), with children and older people identified as being at higher risk of experiencing poor mental health in the context of climate change.
- **Occupation** was mentioned by 5% of countries (3% of NAPs and 22% of HNAPs). This included outdoor workers exposed to high temperatures, first responders, agricultural workers, pastoralists, and other occupations, who are also more exposed to negative economic shocks when high temperatures and other climate-related hazards arise, thus resulting in worsened mental health outcomes.
- **Living area/geography** was mentioned by 4% of countries (2% of NAPs and 28% of HNAPs). This included people living in tropical and subtropical areas at greater risk of high temperatures and heatwaves (often coupled with less adaptive resources like little access to shade or air-conditioned shelter). People living in rural and remote areas were also

considered more vulnerable to the impacts of climate change on mental health.

- **Gender** was mentioned by 4% of countries (2% of NAPs and 22% of HNAPs), with some policies highlighting that there are differences between men and women in dealing with the aftermath of disasters, including with post-disaster trauma.
- **Ethnicity and Indigenous status** was mentioned by 3% of countries (2% of NAPs and 11% of HNAPs). For example, First Nations, Inuit, and Métis people were mentioned in the Canadian national adaptation policy as being disproportionately impacted by climate change, with resulting negative effects on their mental health.
- **Socioeconomic status** was mentioned by 2% of countries (1% of NAPs and 17% of HNAPs). Those living in low socioeconomic areas were identified as being at higher risk of negative mental health impacts as a result of climate change.
- **Specific institutional settings** were mentioned by 2% of countries (1% of NAPs and 6% of HNAPs). These included schools, which were considered more vulnerable to climate change and its health impacts and to require specific interventions following climatic events, such as psychosocial support for students and staff.

CASE STUDY: JORDAN'S HNAP



Jordan's NAP identifies specific population groups who may be at higher risk of experiencing the negative mental health impacts of climate change. The HNAP also cites numerous studies that highlight how psychiatric conditions, cognitive impairment, and neurological disease increase the risk of mortality during heatwaves. People living with certain severe mental health problems can struggle with remaining hydrated, asking for help, and having access to air conditioning. The HNAP suggests that there may also be potential thermoregulation side-effects of certain types of psychotropic medication.

Workers exposed to extreme heat may experience mental stress, anxiety, and reduced cognitive performance. People with insecure housing are also considered vulnerable to climate change and its impact on mental health, due in part to higher rates of psychiatric conditions and substance use. Social isolation is identified as a major risk factor for mortality during heatwaves, often linked with poor mental health. People with mental and physical disabilities living alone also face barriers in seeking care during climate-related events.

Lastly, the HNAP notes the media has limited awareness about the risks to mental health from climate change, identifying a need to strengthen public communication and education.

CASE STUDY: CANADA'S NAP



Canada's NAP highlighted several of the country's pilot projects to address the negative impacts of climate change on health, including mental health. For example, Quebec's Centre Intégré de Santé et de Services Sociaux de Chaudière-Appalaches provides targeted responses to the mental health impacts of extreme weather. Canada's interventions include a focus on groups more vulnerable to the impacts of climate changes on health, including mental health. These include older adults, those living with pre-existing physical and mental health conditions, and Indigenous peoples such as the First Nations, Inuit, and Métis.

In response, climate adaptation projects support these groups with culturally appropriate and community-based interventions to strengthen their mental health resilience.



HEALTH WORKFORCE

INCLUDED IN 9% OF COUNTRIES, (4% NAPS, 50% HNAPS)

National adaptation policies mentioned the role of the health workforce in responding to the mental health impacts of climate change, as well as climate change-related impacts on the workforce. This included:

- **Building the capacity of the health workforce** to respond to the mental health impacts of climate change was mentioned by 6% of countries (3% of NAPS and 28% of HNAPS). This included increasing the awareness of the connection between climate change and mental health, as well as strengthening public mental health services via training and advocacy workshops.
- **Cross-sectoral collaboration of the health workforce** to respond to the mental health impacts of climate change was mentioned in 5% of countries (3% of NAPS and 28% of HNAPS). This included the importance of involving different types of organisation – such as ministries of health, mental health advisory councils, educational institutions, faith-based organisations and community networks – when preparing to respond to the mental health impacts of climate change. Inclusion of the workforce from beyond the health sector, such as people working in the social sectors, was also highlighted.
- **Health workforce resources** were mentioned by 4% of countries (3% of NAPS and 11% of HNAPS). This included the need for an increase in the quantity and availability of mental health professionals (e.g., psychiatrists, clinical psychologists, mental health nurses) as part of the bigger move towards strengthening mental health systems globally. The importance of preparing surge mechanisms – the deployment of mental health and psychosocial workers to deal with the impact of climate hazards – was also mentioned.
- **Health workers** were mentioned by 3% of countries (2% of NAPS and 11% of HNAPS). Psychiatrists, mental health nurses, emergency service workers, volunteers and other mental health staff who respond to climate disasters can be at higher risk of poor mental health. Some policies highlighted the need for targeted mental health support services for healthcare workers working in the aftermath of extreme weather events. This included ensuring free, accessible, and high-quality mental health support with specialists, as well as providing training to health professionals on how to support first responders, together with the provision of relevant educational materials and integrated tools.

HEALTH SYSTEMS

INCLUDED IN 15% OF COUNTRIES, (11% NAPS, 56% HNAPS)

The role of health systems in preventing and responding to the mental health impacts of climate change was highlighted. This included:

- **Delivering services** to respond to the mental health impacts of climate change was mentioned by 11% of countries (9% of NAPS and 33% of HNAPS). This included the need to:
 - ensure mental health services are accessible during extreme weather events
 - make adequate mental health facilities and treatments available to deal with the growing mental health impacts of climate change

- guarantee the continuity of care for people using mental health services in response to long term mental health impacts of climate change.

- **Leadership and governance** of health systems (including mental health systems) were mentioned by 9% of countries (5% of NAPS and 42% of HNAPS). This included the need for cross-sectoral and interdisciplinary collaboration between government, healthcare professionals, service providers, and the wider community to ensure collaborative responses to climate-related psychological distress and mental ill-health. In addition, leadership and governance also included the development of national frameworks and plans focusing on disaster mental health and wellbeing.
- **Health information systems** were mentioned by 5% of countries (2% of NAPS and 33% of HNAPS) in the context of the need to improve the surveillance, monitoring, and early warning systems related to the mental health and psychosocial impacts of climate-induced disasters and extreme weather events.
- **Health financing** was mentioned by 2% of countries (1% of NAPS and 6% of HNAPS). This included funding mental health services for people affected by disasters as well as the establishment and delivery of mental health support services to emergency workers.
- **Access to essential medicines and technologies** was mentioned by 1% of countries (1% of NAPS and 6% of HNAPS). This included addressing the unavailability of evidence-based pharmacological treatments for a range of mental health conditions in some countries, which can be particularly problematic in the context of medication shortages following climate hazards.

INTERVENTIONS

INCLUDED IN 17% OF COUNTRIES, (14% NAPS, 50% HNAPS)

Mental health and psychosocial support Interventions following climate change-related hazards.

Interventions were coded in the current analysis using the mental health and psychosocial interventions (MHPSS) framework, as defined by the [Inter-Agency Standing Committee \(IASC\) Guidelines on Mental Health and Psychosocial Support in Emergency Settings \(2007\)](#).

- **Basic services and security provision** (e.g., providing services to address basic physical needs such as food, water, and shelter) in the context of mental health and psychosocial support were mentioned by 1% of countries (1% of NAPS and 0% of HNAPS). This included maintaining the supply of essential services during disasters to support mental health.
- **Community and family support** was mentioned by 4% of countries (4% of NAPS and 0% of HNAPS). This included the development of psychosocial networks as an adaptation option for dealing with post-disaster stress, which could also be integrated into general emergency strategy and operations.

- **Focused, non-specialised support** was mentioned by 8% of the countries (6% of NAPs and 33% of HNAPs). This included the provision of post-disaster psychological counselling by equipped/skilled health professionals and volunteers trained in disaster preparedness and response.
- **Specialised services** were mentioned by 5% of countries (2% of NAPs and 28% of HNAPs). This included strengthened specialised services for mental health assessment, treatment and management for conditions likely to emerge following disasters, including but not limited to PTSD.

CASE STUDY: AUSTRALIA'S NAP



The Australian government has provided funding to establish mental health services for people affected by disasters. It gave [Black Dog Institute](#) US\$8 million to establish and deliver the National Emergency Worker Support Service, which aims to provide a variety of mental health interventions. These include free evidence-based training for GPs and other healthcare providers to help diagnose and treat emergency service workers with PTSD as a result of climatic disasters.

The Australian government has also looked at other ways to address the mental health impacts of climate change. These include improving social and community connectedness and family support, and policy and advocacy initiatives such as the National Disaster Mental Health and Wellbeing Framework and the first National Mental Health Plan for Emergency Service Workers.

The government set up the Disaster Resilience Hub to provide primary care practitioners with tools to assist with disaster medical management education and training on PTSD treatment. It has also established the Australia-Pacific Climate Partnerships programme to analyse the impact of climate change on mental health, enhancing research and evidence-generation on this issue. Heat-health warning systems, including one in South Australia, are also being implemented to protect those most vulnerable, including people living with mental illness or experiencing homelessness.

The government also acknowledges that mental health funding has historically been short-term and reactive. It now emphasises the need for long-term, accessible, and integrated mental health support. The NAP calls for community-based resilience, workforce training, and cross-sector collaboration to promote psychological preparedness and recovery.



Countries also described various cross-sectoral interventions including:

- **Policy and advocacy interventions** were mentioned in 9% of countries (6% of NAPs and 39% of HNAPs). This included policies to strengthen multisectoral programmes to appropriately address mental health and psychosocial needs in the context of climate change, as well as implementing mental health promotion campaigns among the general population.
- **Research and evaluation** were mentioned by 7% of countries (5% of NAPs and 28% of HNAPs). This includes reviewing health systems' facilities and resources available for mental health, and conducting research on the impacts of climate change on mental health. Communicating generated insights was also important, with some countries noting the need to support stakeholders to share lessons learned in addressing the effects of climate change on mental health.
- **Climate adaptation interventions** with mental health co-benefits were mentioned by 5% of countries, (5% of NAPs and 11% of HNAPs). These included, for example, modifications to the built environment to make buildings and cities more climate resilient and sustainable, with simultaneous benefits for mental health.

CASE STUDIES: FINLAND'S HNAP



Finland's HNAP highlights the increase in rates of anxiety, depression, and suicide related to climate change, as well as increased psychological morbidity for people with pre-existing mental health conditions, especially during heatwaves.

Finland aims to address the mental health impacts of climate change by:

- becoming better able to support people with trauma, psychological crises, and stress disorders during extreme weather events
- improving the efficiency of mental health treatments to meet the extra need during summer heat cycles
- running mental health promotion campaigns.

Finland aims to integrate mental health into climate adaptation actions to build the resilience of individuals and society, and especially vulnerable groups such as refugees and older people. It also wants to make sure workers can manage heat-related mental health challenges.

The mental health co-benefits of adaptation in construction, land use, and housing are mentioned. So, too, is the need to monitor the mental health impacts of such adaptation through healthcare quality registers and the inclusion of mental health indicators into the national climate change adaptation indicator framework. The HNAP emphasises multi-sectoral, culturally sensitive approaches to strengthening mental health resilience skills across the social welfare and healthcare sector.

Climate anxiety is recognised as a growing concern and a focus area for public mental health campaigns. Research and evidence generation on the impact of climate change on mental health in Finland is also highlighted as a key need.



CASE STUDY: CHILE'S HNAP



Chile's HNAP highlights the profound impacts climate change can have on mental health conditions, whether indirectly or because of the acute impact of exposure to extreme weather events. It notes how climate change can contribute to psychological trauma, depression, anxiety, grief, and substance abuse, and can also have psychosocial impacts such as weakened social cohesion. Mental health is recognised not only as a health issue but also as a social and economic concern.

The government of Chile has planned a series of interventions requiring interdisciplinary collaboration between the National Risk Management Department in Emergencies and Disasters and the National Technical Board on Mental Health. One of these interventions is conducting studies on the impact of new climatic conditions on human health, including on mental health.



CHALLENGES, NEEDS, AND GAPS

INCLUDED IN 16% OF COUNTRIES (12% NAPs, 56% HNAPs)

- **Difficulties in coordination and integration** were mentioned by 8% of countries (6% of NAPs and 28% of HNAPs). This included the inadequate coordination between the health sector (including the mental health sector) with other sectors relevant to climate adaptation, such as economic, social, and education sectors.
- **Research and data needs** were mentioned by 8% of countries (6% of NAPs and 22% of HNAPs). The meaningful integration of mental health into adaptation policies was often hindered by limited national research on the impacts of climate change on mental health and the lack of inclusion of mental health indicators in national adaptation frameworks.
- **Policy and framework gaps** were mentioned by 6% of countries (5% of NAPs and 22% of HNAPs). This included the need for emergency response strategies and operations to include mental health and psychosocial considerations. It also included the need for mental health policymakers to be meaningfully engaged in planning for the projected future impacts of climate change on mental health.
- **Awareness and education gaps** among the health workforce and community were mentioned by 5% of countries (3% of NAPs and 28% of HNAPs). This included the need to promote education on mental health and wellbeing as well as community and psychological resilience in preparation for climatic events. This might involve helping people in community settings build skills to support each other to address climate distress and the need to increase awareness of the relationship between climate change and mental health among relevant stakeholders.
- **Cultural competency needs** were mentioned by 3% of countries (2% of NAPs and 11% of HNAPs). This included the need for mental health service providers to understand the community culture and context, and the need to implement appropriately adapted interventions to address the mental health impacts of climate change.
- **Resource limitations** were mentioned by 2% of countries (2% of NAPs and 11% of HNAPs). Addressing the mental health consequences of climate change was described as being under-resourced, especially where mental health services and professional staff are already severely lacking. There is often little epidemiological data on mental health issues in many settings, and the health system lacks capacity to provide basic mental health care. The projected additional burden of mental health conditions due to climate change was thought likely to increase the stress on existing limited resources.
- **Barriers to accessing mental health services** were mentioned by 1% of countries (1% of NAPs and 6% of HNAPs). To ensure people's mental health is adequately supported, continuity of access to primary healthcare, including mental health services, was highlighted. This was seen as especially important for vulnerable groups, such as people already living with mental health conditions, who might face additional barriers to accessing health services.
- **Sustainability of interventions** (i.e., ensuring ongoing and long-term implementation) was mentioned by 1% of countries (1% of NAPs and 0% of HNAPs). This included the need for a national commitment between all relevant national stakeholders to consistently and sustainably provide mental health services, and improve people's wellbeing before, during, and after disasters.



RECOMMENDATIONS

The analysis presented in this brief highlights that, while countries are increasingly including mental health in their national adaptation policies, this integration is often superficial. Mental health is frequently either mentioned in passing or with no corresponding adaptation action described. To address this, a set of recommendations has been developed providing an evidence-based call to action on how to effectively tackle the mental health challenges brought about and/or exacerbated by climate change.

The audience for these recommendations are policymakers developing or updating national adaptation policies working in different bodies or organisations (e.g., ministries, UN agencies, national NGOs).

The objective is to provide concrete recommendations and suggested content on the meaningful integration of mental health into national adaptation plans. Please note that the **suggested content** is a starting point – it should be adapted according to the policy document and the national context.

We encourage the **meaningful engagement in the policy development process** of a diverse range of stakeholders. This can include mental health professionals, other members of the health workforce, people with lived experience of mental health conditions, emergency responders, climate advocates, community-based organisations, educators, and youth-led movements, as well as people with vulnerabilities related to climate change and its impact on their mental health, including children and young people.

It is essential that mental health needs are considered within the cultural context in which they are taking place, and that responses are informed by the perspectives of the communities involved. Marginalised populations – including racial and ethnic minorities, people with disabilities, Indigenous peoples, those in rural or resource-constrained settings, and children and young people – should participate in policy development. Participation must go beyond consultation to include co-design approaches, co-decision-making, and shared ownership of adaptation strategies, so that local knowledge and lived experience are valued equally alongside technical expertise.

Mechanisms for **transparency, feedback, and accountability** should be embedded in the process to strengthen trust and relevance. This is essential to ensure policy effectiveness, legitimacy, and sustained relevance across contexts.

It is important to acknowledge that not all the suggested recommendations will be relevant and readily implementable in all countries. **These recommendations need to be adapted based on individual countries' resources and contexts, and co-designed in the ways outlined above.**

1. Recognise the diverse negative impacts of climate change on mental health, including the increased risks certain groups with specific vulnerabilities may face

The [2022 Intergovernmental Panel on Climate Change Sixth Assessment Report \(IPCC AR6\)](#) states with very high confidence that climate change has already negatively impacted mental health globally, and is expected to worsen with future climate change. This is reflected at the national level. Climate change and health vulnerability and adaptation assessments in various countries highlight the range of negative mental health impacts resulting from climate change (e.g., see the [Alliance for Transformative Action on Climate & Health \(ATACH\) progress tracker](#)).



Suggested content: “Climate change is already having multiple negative impacts on mental health. These are likely to increase over time if no coordinated and adequately resourced action is taken to address both the drivers of climate change and its mental health and psychosocial consequences. The rise in frequency and intensity of extreme weather events – such as floods, heatwaves, wildfires and storms – is increasing the number of people directly exposed to potentially adverse events, such as the loss of loved ones, injury, displacement, or the destruction of homes and livelihoods. These experiences significantly increase people’s risk of experiencing psychological distress. They may also lead to the development or worsening of mental health conditions, including anxiety and depressive disorders, post-traumatic stress disorder (PTSD), suicide, and substance misuse.

People and communities are increasingly being exposed to multiple extreme weather events and their socioeconomic consequences, with possible compounding impacts on mental health. Exposure to extreme weather events can also worsen mental health in people with pre-existing mental health conditions. These impacts can last for many years following the event. Extreme weather events can also negatively impact mental health indirectly by worsening the social determinants of mental health, such as poverty, forced displacement, loss of livelihoods, and gender inequalities. The multiple physical health impacts of climate change – from increased rates of infectious diseases to malnutrition – can also have profound negative consequences for people’s mental health. And the anticipation, uncertainty, and chronic stress associated with slow-onset events (e.g., sea level rises, droughts, desertification) can create cumulative psychological strain over time. Finally, the experience, or the prospect of experiencing, climate-related stressors can elicit various challenging psychological reactions, such as worry, grief, and concern. Although in most cases these reactions are rational responses to the threat of climate change and can contribute to taking action, they can still have a negative impact on mental health and psychosocial wellbeing. [Consider including national level data where available.]

Certain groups – such as children, pregnant women, people with disabilities, farming and fishing communities, Indigenous peoples, and those who have been displaced – face increased risks, while also possessing unique strengths and sources of resilience.” [Consider editing based on particular groups which may be particularly vulnerable in specific national settings, bearing in mind the intersectionality of these vulnerabilities.]

2. Monitor the mental health impacts of climate change and any mental health risks and co-benefits of adaptation at national level to ensure appropriate and effective adaptation responses

Countries often fail to monitor the impacts of climate change on mental health, as well as the mental health co-benefits of adaptation. For example, according to the [WHO 2021 Health and Climate Change global survey](#), only 21% (14 out of 66 countries) of countries have climate-informed health surveillance systems in place for mental and psychosocial health. The monitoring of impacts and co-benefits is essential to ensure that appropriate and effective adaptation action takes place.



Suggested content: “It is essential that the mental health and psychosocial impacts of climate change are appropriately monitored across the life course within health and decision-making information systems. Doing so will inform timely, relevant, and effective national-level adaptation responses. It’s important that data and evidence on mental health conditions (e.g., on outpatient consultations, hospital admissions, prescriptions, suicide attempts, deaths by suicide) is collected systematically and linked with climate and weather data. This integration can help identify at-risk populations, anticipate service needs, and inform targeted public health interventions. In line with the [WHO guidance on vulnerability and adaptation assessments](#), the inclusion of mental health in vulnerability and adaptation assessments is an important first step to ensuring evidence-based recognition and prioritisation of mental health and psychosocial wellbeing in adaptation planning, in ways relevant to countries’ climate change contexts. Existing efforts to monitor health and adaptation, such as the [Global Goal on Adaptation](#) and the [Baku Adaptation Roadmap](#), should include appropriate considerations for mental health indicators.

Mental health and psychosocial indicators should be systematically integrated into the monitoring, evaluation, and reporting frameworks of adaptation policies. This will ensure that lessons learned inform the design and implementation of future adaptation actions.”

3. Ensure specific adaptation actions are planned and implemented to protect and promote good mental health, as well as to prevent and manage mental health problems

The [2022 Intergovernmental Panel on Climate Change Sixth Assessment Report \(IPCC AR6\)](#) emphasises that improving access to mental health care is a form of effective adaptation (see C.3.7). In addition to this, we outline other concrete examples of integrating mental health into adaptation policies below, with suggested wording. Examples of how these actions have been implemented in different countries are available as case studies throughout the report.

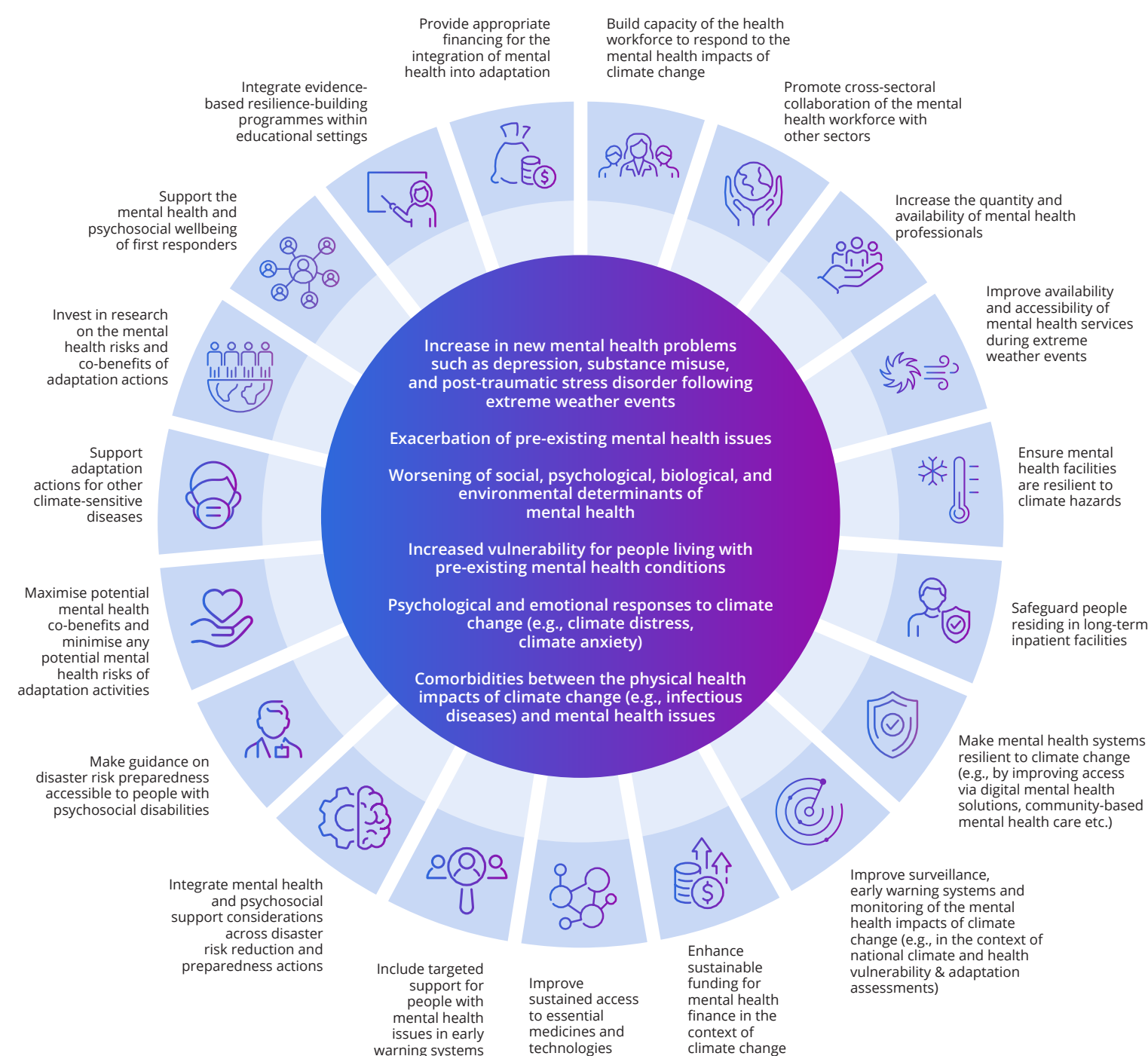


Suggested content: “Improving access to high-quality, culturally appropriate, acceptable, and affordable mental health care is in and of itself an effective form of adaptation, supporting communities and individuals in their responses to climate change. Other concrete examples of integrating mental health into adaptation policies could include:

- Regular capacity building for the health workforce (and other relevant stakeholders) on the mental health impacts of climate change, on risk and vulnerability factors, and on appropriate mental health and psychosocial support interventions (e.g., by including climate change and disaster preparedness in the training curricula for mental health, social work, education, and primary care professionals).
- Ensuring mental health facilities and other relevant mental health infrastructure are equipped to be resilient to climate stressors (e.g., have sufficient access to water, food, sustainable energy sources, essential psychotropic medications, and cooling systems). Even when facilities are partially or fully compromised by extreme weather events, they must be able to remain operational or ensure continuity of care. This resilience and sustainability must align with the [WHO Guidance for Climate Resilient and Environmentally Sustainable Healthcare Facilities](#). Special measures should be in place to ensure the safety, human rights, and wellbeing of people residing in long-term inpatient facilities.
- Strengthening the resilience of mental health systems to climate change. For example, consider how access to mental health services may be impacted during extreme weather events, and possible solutions such as digital or community-based mental health services, and task-sharing models including [scalable psychological interventions](#). This resilience building should align with the [WHO Operational Framework for Building Climate-Resilient and Low Carbon Health Systems](#).
- Embedding mental health and psychosocial considerations within climate and health vulnerability and adaptation assessments (e.g., in the [WHO Vulnerability & Adaptation Assessments](#), or in the [World Bank Climate and Health Vulnerability Assessments](#)), ensuring participatory methods, attention to both risks and resilience factors, and adherence to do-no-harm principles. Guidance can be drawn from the [MHPSS Preparedness Assessment Toolkit as part of the MHPSS READY package](#).

- Early warning systems for extreme weather events should include targeted support for individuals living with mental health conditions, ensuring they receive timely, accessible, and actionable information. This includes tailored notifications (e.g., for incoming heatwaves) and clear guidance on protective measures, such as accessing cooling centres. Integrating mental health considerations into early warning efforts aligns with the objectives of the [UN Early Warnings for All Initiative](#) and contributes to more inclusive and effective risk communication and response strategies.
- Integrating mental health and psychosocial support considerations across disaster risk reduction and disaster preparedness actions and policies, ensuring coherence with the [Sendai Framework for Disaster Risk Reduction](#) commitments and national disaster risk reduction action plans.
- Ensuring that guidance and efforts to increase public awareness on disaster risk preparedness (e.g., how to improve personal preparedness at home) are accessible for people living with psychosocial disabilities, including through user-friendly formats, community interpreters, cultural mediators, and peer-led initiatives.
- Minimising the possible negative mental health impacts of adaptation activities (e.g., forced relocation) and avoiding maladaptation.
- Supporting adaptation actions for climate-sensitive diseases (e.g., health surveillance systems for vector-borne or water-borne diseases), as this will also positively impact mental health.
- Investing in research to understand how mental health and psychosocial wellbeing are impacted by climate change and the interventions adaptable for climate-affected settings (e.g., therapy modalities not requiring in-person contact and pharmacological interventions that do not impact thermoregulation).
- Ensuring mental health care structures are in place to support the mental health and psychosocial wellbeing of first responders (such as firefighters, search and rescue teams, etc.) who are disproportionately exposed to climate-related hazards and cumulative stress. The general healthcare workforce will need similar support as they, too, face a growing workload and stress as climate change exacerbates other health conditions.
- Building foundational knowledge in schools about how to prepare for and respond to climate impacts. Educational institutions should normalise emotional responses to climate change as understandable reactions to environmental threats. When appropriate, they should implement evidence-based resilience-building programmes that teach stress management and emotional regulation, and encourage agency to take appropriate climate action. They should also promote meaningful connections to land, nature, and community as sources of wellbeing.

Please note this is not a comprehensive list. Local mental health needs (identified through consultation with affected communities) should be considered when integrating mental health and psychosocial considerations into adaptation efforts.



Infographic showing the impacts of climate change on mental health (in the middle of the circle) and possible adaptation actions which can be implemented to protect mental health from the impacts of climate change (on the external part of the circle). These actions were identified through our analysis of mental health in national adaptation policies as well as through the recommendation development process by experts.

4. Identify the many co-benefits to mental health that appropriate adaptation measures and actions can have

Suggested content: “Adaptation can have a number of positive co-benefits for both physical and mental health, as adaptation ultimately means individuals, families, and communities experience less loss and damage. Examples of co-benefits for mental health may include:

- Increasing green spaces such as parks and planting more trees can help cool the urban environment and make communities more resilient to extreme weather events and heatwaves. Access to safe, inclusive and well-maintained green and blue spaces is associated with improved mental health, reduced stress, increased physical activity, and greater social cohesion.
- Improving building standards (e.g., installing better insulation and ventilation) to make homes more resilient to climate extremes can also reduce energy poverty, indoor overheating, and exposure to environmental stressors, all of which have implications for mental and physical wellbeing.
- Community-based adaptation strategies (e.g., working together to make the local community more resilient to extreme weather events) can contribute to a stronger sense of belonging and of community and collective agency. This can bolster people’s mental health, help them recover after adversity, and facilitate access to care.”

Please note this is not a comprehensive list. Other local adaptation strategies are also likely to provide significant mental health co-benefits.

5. Ensure appropriate financing is available for the integration of mental health into adaptation efforts

The financing gap for global mental health is estimated to amount to [US\\$200 billion](#), while aid for mental health dropped by [a third from 2018 to 2021](#). According to the [WHO Mental Health ATLAS 2020](#), governments spend on average no more than 2% of their health budgets on mental health. This is a false economy: mental health conditions impose a high price on society, with anxiety and depression alone costing an approximate US\$1 trillion in lost productivity, [according to the WHO](#). Climate change is set to exacerbate the problem. The additional societal costs of mental health problems due to climate change, air pollution, and inadequate access to green space is projected to reach an estimated [US\\$537 billion per year by 2050](#). This highlights the need to earmark adequate financing to protect and promote mental health in the context of climate change.

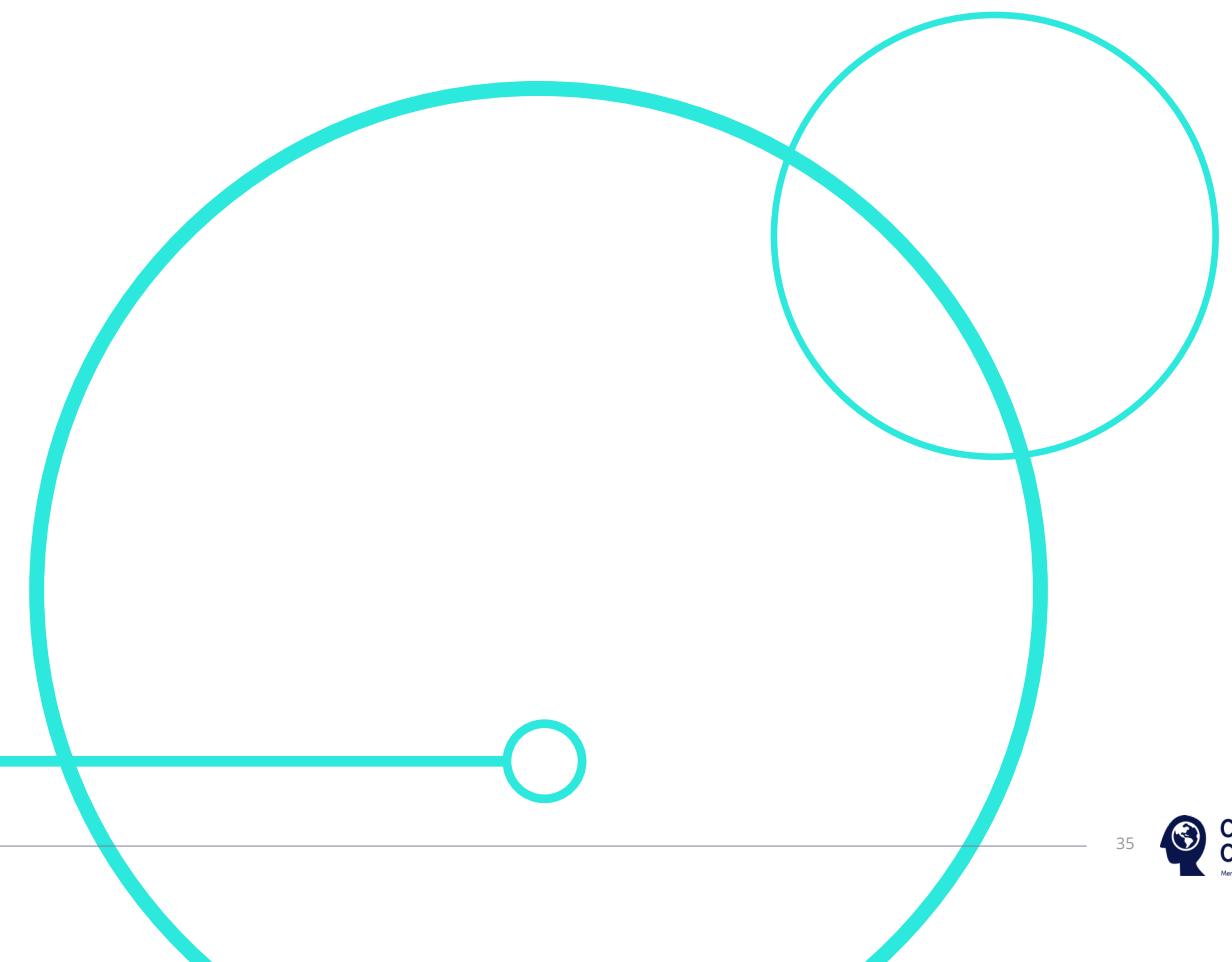


Suggested content: “As part of adaptation efforts, appropriate resources must be made available to prevent and provide care for the likely increase in mental health and psychosocial conditions resulting from climate change. This includes the importance of explicitly including in adaptation planning the need for integrated climate financing to protect mental health and the planet. A long- and short-term resource-mobilisation strategy should be developed in collaboration with the Ministry of Health and relevant climate ministries, ensuring sustainable, equitable, and high-quality interventions.

The additional societal costs of mental conditions due to a rise in climate change-related hazards, air pollution, and inadequate access to green space are projected to reach an estimated US\$537 billion annually by 2050. So investing in preventive and responsive MHPSS measures offers high returns in public health savings, social stability, and economic productivity.”

Countries should integrate mental health and psychosocial support into proposals to climate financing mechanisms such as the [GCF Readiness Programme](#) and the [Adaptation Fund](#). Technical support is available from the WHO, other relevant agencies, and through partnerships with academic institutions and civil society organisations with expertise in MHPSS and climate adaptation.

Countries may also want to consider aligning these financing efforts with the [COP28 Guiding Principles for Financing Climate and Health Solutions](#).



6. Recognise that many places may be unable to fully adapt to climate change, resulting in significant losses and damages among people and communities. Therefore, appropriate mental health and psychosocial support needs to be resourced and provided to affected populations immediately



Suggested content: “When the limits of adaptation are surpassed, leading to loss and damage, appropriate mental health and psychosocial support must be provided to affected populations in line with international guidance set out in the [Inter-Agency Standing Committee MHPSS Minimum Service Package for Emergency Settings](#). This may include:

- ensuring appropriate social protection mechanisms are available to the affected populations
- providing basic psychosocial support (e.g., psychological first aid)
- group-based community mental health and psychosocial activities
- early childhood development activities
- the promotion of caregivers’ and teachers’ mental health
- brief scalable psychological interventions delivered by lay workers
- the assessment and management of common mental health conditions in primary healthcare settings
- pharmacotherapy where appropriate
- the protection of people with chronic or severe mental health conditions, including those residing in psychiatric hospitals and other institutions.

This support should be sustained through time, given the possible long-term nature of certain mental health and psychosocial impacts.”

7. Build collaborative, cross-sector partnerships – including with communities – that combine diverse forms of expertise to inform the design, delivery, and evaluation of efforts to integrate mental health into adaptation



Suggested content: “Preventing and responding to the mental health impacts of climate change, and harnessing opportunities for mental health co-benefits of adaptation, requires coordinated, collaborative efforts across sectors and diverse forms of expertise. The examples provided here highlight the roles of health systems, civil society, NGOs, and community-based organisations. Communities affected by climate change and most at risk of negative mental health consequences should also be meaningfully involved in adaptation planning to ensure that action can appropriately and effectively respond to their lived experience needs. This is because community members possess the greatest knowledge of local resources and appropriate coping strategies.”

Collaborative, cross-sector approaches should underpin action across recommendations 1-6.

FURTHER READING AND ADDITIONAL RESOURCES

- [IASC Technical Note Linking Disaster Risk Reduction \(DRR\) and Mental Health and Psychosocial Support \(MHPSS\)](#)
- [WHO Mental Health and Climate Change Policy Brief](#)
- [MHPSS READY: Operationalizing MHPSS Preparedness as part of Disaster Risk Management](#)
- [OHCHR Policy Brief on Climate Change and Mental Health by the UN Special Rapporteur on the Promotion and Protection of Human Rights in the Context of Climate Change](#)
- [WHO Quality Criteria for Health National Adaptation Plans](#)
- [IASC MHPSS Minimum Service Package for Emergency Settings](#)
- [Connecting Climate Minds Global Research and Action Agenda for Climate Change and Mental Health](#)
- [Connecting Climate Minds Global Online Hub: Regional agendas for climate change and mental health research and action](#)
- [Connecting Climate Minds Global Online Hub: Case studies of existing policies and interventions on climate change and mental health](#)
- [WHO Health at the Heart of National Adaptation Planning: A global review of national adaptation plans and health national adaptation plans](#)
- [Lawrance et al. \(2022\) The Impact of Climate Change on Mental Health and Emotional Wellbeing: A Narrative Review of Current Evidence, and its Implications. International Review of Psychiatry, 34\(5\)](#)
- [A Roadmap for Care + Change - People’s Resilience in Climate Resilience](#)

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If you have any questions on this document, feel free to contact us at alessandro@unitedgmh.org

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