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# THE MENTAL HEALTH IMPACTS OF CLIMATE CHANGE AND CLIMATE-FUELED DISASTERS

The mental health impacts of climate change and climate-fueled disasters are understudied and neglected despite evidence pointing to a serious and growing problem. Gaps need to be filled in terms of addressing the prevalence of mental health impacts, climate literacy, workforce shortages, prevention resources, and intervention services with attention to already vulnerable communities.

## Wide-Spanning Mental Health Impacts of Climate Change

Climate change is a serious, urgent threat to all living things that is following both predicted global warming temperature trends and escalating extreme weather with unpredictable onsets and intensification. It is rational and constructive to experience distress when one's health, food, and shelter are threatened and when one's environment can rapidly become dangerous when droughts, floods, toxic pollution, and wildfires occur (Clayton et al., 2021). Climate change poses risks to mental health through exposure to climate-related harms (e.g., contaminated water, diseases, food insecurity, injuries, loss of loved ones) as well as through the downstream effects of climate change (e.g., displacements, disruptions in daily life, economic strains, loss of social networks). The mental health effects of climate-related events can be acute and chronic, and they may simultaneously include anger, anxiety, autonomy loss, depression, despair, fear, grief, helplessness, personal identity loss, post-traumatic stress disorder, and self-esteem loss (Harper et al., 2022). Children and youth in numerous countries have additionally reported distress over their governments' inadequate responses to climate change and their concerns about climate change (Hickman et al., 2021).

## Interconnections Between Mental Health and Physical Health

The mental health impacts of climate change are closely connected to the physical health impacts of climate change. Individuals who experience psychological distress from climate-related events also tend to experience physical symptoms including poor sleep, lower immune system responses, heightened risk of autoimmune and cardiovascular diseases, and elevated risk for alcohol and substance abuse (Clayton et al., 2021). Indeed, in a famous 1954 speech, Dr. George Brock Chisholm, the first Director-General of the World Health Organization, observed that "without mental health there can be no true physical health." Despite this keen observation that mental health is central to physical health, mental health continues to be ignored, minimized, and stigmatized and accordingly, to be inadequately funded and made available (WHO, 2025). Numerous advocates including the Psychology Coalition at the United Nations successfully lobbied for the construct "wellbeing" to be added to the UN SDG3, renamed as "good health and wellbeing" in 2015 (Okorodudu et al., 2022).

## Climate Change as a Mental Health Multiplier: Heightened and Intersectional Vulnerability

While the mental health impacts of experiencing climate change firsthand and vicariously are widespread, the mental health toll of climate change is exacerbated by economic, health, and social inequalities (Clayton et al., 2021; Ojala et al., 2021). Climate change is often referred to as a "crisis multiplier" because it multiplies existing vulnerabilities, inequalities, and marginalization, negatively affecting not only SDG3 but also other SDGs such as poverty (SDG1), hunger (SDG2), education (SDG4), and gender inequality (SDG5). As examples, children, older adults, and persons living with a disability have heightened risks to the mental and physical health consequences of severe weather events including higher rates of injuries, diseases, displacement, loss of essential services, anxiety, depression, sleep disorders, and mortality (Levy et al., 2024). These risks are further heightened for individuals and communities facing compounded vulnerabilities from more than one marginalized and vulnerable identity including by age, gender, gender identity, Indigenous identity, migratory status, race, and more (Levy et al., 2024).

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## RECOMMENDATIONS

### 1. Raising Awareness about the Mental Health Impacts of Climate Change

The mental health impacts of climate change are relatively overlooked and understudied compared to the biodiversity, financial, physical health, and structural impacts of climate change. Mental health more generally has a long history of being a neglected area of global health due to a lack of awareness and stigmatization (WHO, 2025). Therefore, raising awareness about the far-ranging mental health impacts of climate change is a critical step forward in mitigation, adaptation, and resilience (Swim et al., 2011). With the use of reliable and valid measures of climate distress, the nature and scope of the mental health toll has been documented for individuals experiencing climate events first-hand, vicariously, or both. Indeed, the Intergovernmental Panel on Climate Change, top international experts on climate change, recognized the mental health impacts of climate change for the first time in their 2022 report (Harper et al., 2022). On the heels of these pivotal recognitions, community awareness efforts need to be scaled up in all sectors of society to spread awareness, to increase understanding of the impacts on mental health, to provide supportive services, and to build coping skills, hope, and resilience (Ojala, 2012). For example, climate literacy is increasingly being directed to children and their families in school settings with support from UNESCO, educators, psychologists, and other concerned stakeholders (Ramírez et al., 2025).

### 2. Filling in Gaps in the Mental Healthcare Workforce and Services

Insufficient mental healthcare personnel, services, and resources are a long-standing worldwide problem. Pointing to one gaping hole, results from a 2024 study of WHO member states indicated that two thirds of the countries had one psychiatrist per 200,000 or more people (WHO, 2025). Hand-in-hand with a sparse trained workforce, there is lagging worldwide financial investment in expanding the community mental healthcare. In a study of 49 countries, WHO (2025) found that government spending on mental healthcare was as follows: only 4.1% went toward emergency mental health support; only 3.6% went toward mental health prevention and promotion; and only 11.3% went to community mental health services. Most of the spending went toward psychiatric hospitals (47.4%) and mental healthcare services in general hospitals (14.6%). Therefore, there is an urgency to significantly scale up the mental health workforce and services to address mental health prevention and intervention efforts concerning climate change toward building community wellbeing and resilience.

### 3. Multi-sector Partnerships toward Addressing the Mental Health Impacts

Local, national, and international reports converge on the conclusion that the mental health effects of climate change is an escalating multi-sector problem with serious economic and health consequences (Clayton et al., 2021). Numerous reports document the economic costs of failing to address mental health in general with a 2016 study estimating that 12 billion work days are lost per year due to experiences of anxiety and depression across 80% of the world population at a financial cost of almost 1 trillion U.S. dollars (WHO, 2025). Multi-sector partnerships are needed to bridge education, healthcare, and policy implementation toward addressing scant financial investment along with lagging data on the mental health toll of climate change, shortages in the mental healthcare workforce, and inadequate climate literacy. Consistent with UN SDG Agenda and toward realizing SDG17 (partnerships), a whole-of-society or holistic approach is needed involving a diverse pool of stakeholders working collaboratively including but not limited to: civil society, climate activists, crisis responders, economists, policy makers, psychiatrists, psychologists, and statisticians. Additionally, preparedness, planning, and implementation should center on and amplify the participation and leadership of individuals who are facing the mental health impacts of climate change and climate-related disasters.

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