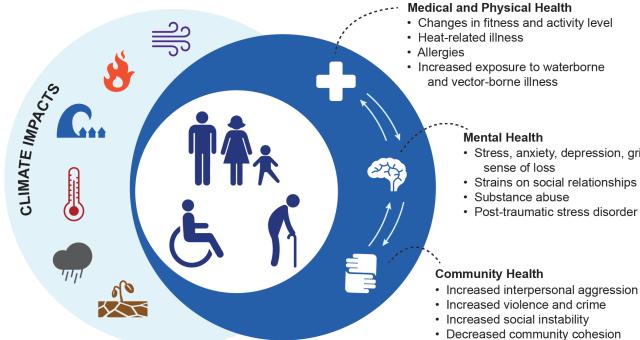
THE IMPACTS OF CLIMATE CHANGE ON HUMAN HEALTH IN THE UNITED STATES A SCIENTIFIC ASSESSMENT

MENTAL HEALTH AND WELL-BEING

The effects of global climate change on mental health and well-being are integral parts of the overall climate-related human health impacts. Mental health consequences of climate change range from minimal stress and distress symptoms to clinical disorders, such as anxiety, depression, post-traumatic stress, and suicidality. Other consequences include effects on the everyday life, perceptions, and experiences of individuals and communities attempting to understand and respond appropriately to climate change and its implications. The mental health and well-being consequences of climate change related impacts rarely occur in isolation, but often interact with other social and environmental stressors. The interactive and cumulative nature of climate change effects on health, mental health, and well-being are critical factors in understanding the overall consequences of climate change on human health.



Children are at particular risk for distress, anxiety, and other adverse mental health effects in the aftermath of an extreme event.



The Impact of Climate Change on Physical, Mental, and Community Health

At the center of the diagram are human figures representing adults, children, older adults, and people with disabilities. The left circle depicts climate impacts including air quality, wildfire, sea level rise and storm surge, heat, storms, and drought. The right circle shows the three interconnected health domains that will be affected by climate impacts: Medical and Physical Health, Mental Health, and Community Health (see Ch. 8: Mental Health). (Figure source: adapted from Clayton et al. 2014)⁷

- Stress, anxiety, depression, grief,
- Strains on social relationships
- Post-traumatic stress disorder

Exposure to Disasters Results in Mental Health Consequences

Key Finding 1: Many people exposed to climate-related or weather-related disasters experience stress and serious mental health consequences. Depending on the type of the disaster, these consequences include post-traumatic stress disorder (PTSD), depression, and general anxiety, which often occur at the same time *[Very High Confidence]*. The majority of affected people recover over time, although a significant proportion of exposed individuals develop chronic psychological dysfunction *[High Confidence]*.

Specific Groups of People Are at Higher Risk

Key Finding 2: Specific groups of people are at higher risk for distress and other adverse mental health consequences from exposure to climate-related or weather-related disasters. These groups include children, the elderly, women (especially pregnant and post-partum women), people with preexisting mental illness, the economically disadvantaged, the homeless, and first responders *[High Confidence]*. Communities that rely on the natural environment for sustenance and livelihood, as well as populations living in areas most susceptible to specific climate change events, are at increased risk for adverse mental health outcomes *[High Confidence]*.



Residents and volunteers in the Rockaways section of Queens in New York City filter through clothes and food supplies from donors following Superstorm Sandy. November 3, 2012.



(Top) Rescue worker receives hug from Galveston, TX resident. (Bottom) People experience the threat of climate change through frequent media coverage.

Climate Change Threats Result in Mental Health Consequences and Social Impacts

Key Finding 3: Many people will experience adverse mental health outcomes and social impacts from the threat of climate change, the perceived direct experience of climate change, and changes to one's local environment [*High Confidence*]. Media and popular culture representations of climate change influence stress responses and mental health and well-being [*Medium Confidence*].

Extreme Heat Increases Risks for People with Mental Illness

Key Finding 4: People with mental illness are at higher risk for poor physical and mental health due to extreme heat *[High Confidence]*. Increases in extreme heat will increase the risk of disease and death for people with mental illness, including elderly populations and those taking prescription medications that impair the body's ability to regulate temperature *[High Confidence]*.

