# **Climate Changes Mental Health**



The burning of fossil fuels causes the release of carbon dioxide, which builds up in the atmosphere and causes Earth's temperature to rise—this is climate change. Upstream burning of fossil fuels produces heat-trapping toxins that are released into the air, harming our health downstream. The Earth's average temperature has increased by nearly 1.5°F in the last century, with recent years being the warmest on record. However, climate change refers to the lasting disruption of our weather patterns, not just temperature increases. Some of these weather-related changes include increased floods and droughts, wildfires, intense storms, heat waves, and rising sea levels. These conditions have far-reaching environmental, social, agricultural, and economic effects and are ultimately harmful to our health and well-being. Climate change not only affects our physical health but can also harm our mental health and wellness.

#### **FAST FACTS**

- More than **40 million adults** in the U.S. suffer from a **mental illness.**
- Victims of natural disasters are at an increased risk of anxiety, depression, PTSD, and suicide.
- 25-50% of people exposed to an extreme weather disaster are at risk of adverse mental health effects.
- Up to 54% of adults and 45% of children suffer depression after a natural disaster.
- Forty-nine percent of the survivors of Hurricane Katrina developed an anxiety or mood disorder, and 1 in 6 developed PTSD. Suicide and suicidal ideation more than doubled.
- After a record drought in the 1980s, the suicide rate doubled, including more than 900 farmers in the Upper Midwest.



#### **BACKGROUND ON MENTAL HEALTH**

Mental health encompasses emotional, psychological, behavioral, and social wellbeing. It determines how people cope with the normal stress of life and function within their community. Mental illness, on the other hand, adversely affects one's thinking, feelings, and/or behaviors. As a result, it can lead to difficulties in functioning. Climate change can cause and intensify stress and anxiety, adversely affecting mental health. For example, events such as extreme storms or extreme heat can lead to depression, anger, and even violence. Everyone is at risk, but not everyone is affected equally. Groups that are especially vulnerable to the mental health impacts of climate change include children, the elderly, and women. Also at risk are disadvantaged groups, those with existing mental illness, and those with close ties to the land, including farmers and tribal communities.

#### CASE STUDY: THE MENTAL WEIGHT OF BROKEN LEVEES

The severity of Hurricane Katrina was far exceeded by the considerable destruction, devastation, displacement, and death left in its aftermath. Some residents trapped in their homes escaped to their roofs to await rescue. From there, they watched as the remains of their neighbors and loved ones floated through the flooded streets. Some families were separated into different places of refuge. Over a million people were displaced and nearly 2,000 died. Thousands were left traumatized. Those who remained were unable to access basic resources such as schools, shelters, and emergency services. The heavy mental toll extended to those who evacuated as well. Indeed, Katrina's overwhelming burden produced many stressors. Survivors had to cope with profound loss, disrupted social ties, and resulting surges in violence. Mental health services were not widely available. Thus, years later, the psychological scars caused by Katrina continue to linger.







### WHAT CAN BE DONE?

## Climate Change Impacts on Mental Health

#### **IMMEDIATE IMPACTS**

Natural disasters are sudden in their onset and include destructive storms, floods, wildfires, and extreme heat.

Natural disasters may cause posttraumatic stress disorder (PTSD), anxiety, depression, and stress. Self-harm, including substance abuse and suicidal ideation, may also occur.

**READINESS:** Seek education about what to expect and how to prepare for future climate events.

#### **GRADUAL IMPACTS**

Slowly progressing, long-term conditions associated with climate change include rising temperatures, elevated sea levels, and changing precipitation patterns.

Chronic stress can result from the gradual impacts of climate change. For example infectious diseases, chronic diseases (asthma and allergies), nutritional deficiencies, and injuries can contribute to stress.

> MONITORING: Know your health, and determine whether you are stressed (signs include low energy, tension, and headaches). Seek treatment and/or support if needed.

#### **INDIRECT IMPACTS**

Climate change can affect the way we think about ourselves, each other, and the world.

After a climate event or resulting displacement, people may experience a diminished sense of self, difficulty relating to others, diminished social interaction, and solastalgia (the loss of a sense of place, solace, and security tied to one's physical environment). Community impacts include domestic abuse, child abuse, and violence (e.g., assault and civil conflict). Economic insecurity and physical damage are other potential effects.

**COOPERATION:** Establish social ties and connections with community members. This will help to withstand changes and encourage adaptation.

#### Prepare for emergencies:

- Prepare in advance for emergencies by having and practicing an emergency plan. Include food, water, flashlights, and a first aid kit in emergency preparedness kits. Also consider including items, such as books and games, that can help reduce stress. If you are taking medication for a mental health condition (or other health conditions), get your refills ahead of the storm if possible.
- Evacuate ahead of a disaster if at all possible. Evacuating early reduces the risk of stress/anxiety symptoms. The further one evacuates from the site of a disaster, the less severe the mental health impacts are likely to be.
- Check in on vulnerable neighbors during extreme weather.

#### Seek treatment:

- Mental health conditions are often stigmatized, but treatment for them can be effective and enhance overall well-being. Seek treatment if you or someone you know may be suffering from a persistent and/or debilitating mental health condition.
- Be aware of mental health services such as counseling and therapy. Also keep in mind informal means of care such as self-care and spiritual and community-based services.
- Engage in healthy coping behaviors and seek comfort in community events following a weath-er-related disaster.
- Monitor signs of behavioral and psychological changes in children. Such changes include an inability to speak, bed-wetting, stress or fright when not in danger, and self-harm. Watching excess television coverage of an extreme weather event can cause distress. Parents should monitor what their children watch and reassure and comfort them so they feel protected.

#### Resources:

- To learn more about psychological impacts of climate change, visit www.ecoamerica.org/ mental-health.pdf.
- For more information on climate solutions and what you can do to reduce your carbon foot-print, visit www.apha.org/climate and www. climateforhealth.org.

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