

Addressing the Human Health Risks of a Warmer Climate

Global temperatures are rising, polar ice caps are melting, and sea level is rising to fuel warmer, wetter weather and more powerful storms. This is impacting our health now and in the future. The [Lancet Countdown on health and climate](#) declared climate change to be the “greatest global health threat facing the world in the 21st century, but (recognized that) it is also the greatest **opportunity** to redefine the social and environmental determinants of health.” Florida Clinicians for Climate Action uses a mnemonic, **HEATWAVE**, to help remember the eight primary ways our changing climate puts our health at risk. (see below). Our tabletop discussion will be about innovating to find preparedness and mitigation solutions for these health challenges.

H - Heat illness: [Extreme heat, the ‘silent killer,’](#) is the #1 weather-related killer in the U.S. 2016, 2019, & 2020 were the warmest years ever recorded. The data show that we will continue to experience even more high heat and humidity days in the coming years. Heat indexes as low as 95°F can be life-threatening to some vulnerable groups like older adults, children, pregnant women, those with pre-existing medical conditions, and outdoor workers.

E - Heat and air pollution **exacerbate** [heart](#), [kidney](#), and [lung conditions](#). Heat exhaustion and heat stroke can lead to heart and kidney failure.

A - Asthma & Allergies. Increased rates of [asthma and allergies](#) in the past decades are in part due to longer pollen seasons, more allergenic pollen, and more mold brought on by warmer, wetter weather. Poor indoor air quality especially in homes with gas stoves increases ER admissions for asthma and worsens chronic lung diseases.

T - Traumatic [injury](#) rates are increasing due to more intense storms and heat.

W- [Water quality](#) and [waterborne-](#) & [foodborne illnesses](#) increase with higher water and air temperatures. Warmer water temperatures increase bacterial and algal growth. Heavy rains and sea level rise contribute to polluted runoff that contaminates our precious drinking water. Warmer air temperatures create a conducive environment for bacteria like salmonella and [vibrio](#)

A- [Air Pollution](#) (from wildfires and fossil fuel pollution) More frequent and severe drought-induced wildfires produce smoke, ground-level ozone, and particles polluting the air we breathe. Warmer temperatures exacerbate air pollution from burning fossil fuels which increases ozone and the impact of fine-particulate matter in addition to other pollutants such as nitrogen dioxide, carbon monoxide, sulfur dioxide, and lead. These air pollutants are harmful especially to our lungs, heart, and brains.

V- Vector-borne disease. [Mosquitoes and ticks](#) thrive in warmer, wetter weather. So they and the diseases they carry like Zika, Dengue, Lyme, and Chikungunya are spreading into new areas and infecting more people with a warming world.

E- Emotional stress results from extreme weather events like hurricanes, flooding, and heat waves. Climate change-induced extreme weather events have been shown to increase intimate partner violence, violent crime, and even lead to regional and international conflict. Climate anxiety and related depression are growing especially among [young people](#). The most vulnerable among us are hit first and worst by the climate crisis.

3 Questions to Start the Conversation

1. Do you feel as though your health or that of someone you know is at risk from the climate crisis?
2. How do these impacts affect different groups and communities differently?
3. How do we reduce the health risks of warmer, wetter, and more severe weather? Who is responsible, and who should be part of the planning and implementation of these solutions?

Starter list of Potential Strategies

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1. Create a state, regional, or local climate action plan
2. Create a heat action plan
3. Legislate outdoor worker heat protection regulation
4. Ordinances or building codes to prohibit new methane gas lines in communities
5. Incentives promoting rapid electric vehicle (EV) adoption, active transportation, and zero-emissions public transportation infrastructure and ridership.
6. Legislate mandatory air conditioning in all rental and public housing and incentivize the installation of energy-efficient and climate-friendly A/C-heat pumps.
7. Establish a regional/state-wide climate action think tank to inform climate action plans and lead implementation -consisting of legislators, energy experts, environmental and health experts, and community-based organizations.

Useful Resource Links

Videos

[CDC How Climate Affects Community Health](#)

[CDC BRACE Framework](#)

[WHO Climate change - one of the biggest global health threats of this century](#)

Literature

[FOURTH NATIONAL CLIMATE ASSESSMENT- Chapter 14 Human Health](#)

[CDC Climate & Health Program](#)

[RMI report](#) on the health harms of (methane) gas stoves

[Extreme heat: The economic and social consequences for the United States](#)

Tools

[U.S. Climate Resilience Toolkit](#)

A Model: [MDC Extreme Heat Toolkit](#)

[National Environmental Public Health Tracking Network](#)

[Heat & Health Tracker](#)

[The Climate Explorer - Very Hot Days](#)

Miscellaneous

Humorous [Late-night television segment](#) on gas stoves

Op-ed: [Florida needs to recognize the growing threat of extreme heat, especially for pregnant women](#)