

HEALTH

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Key Messages

Exacerbating Health Inequities: While climate change poses health risks to all Georgians, those who already face disproportionate health challenges are among those most likely to be harmed.

Heat-Related Illness: 2019 was the warmest year on record for Georgia, surpassing the previous records set in 2017 and 2016. Scientists project that Georgia will experience more frequent and intense heatwaves, which will pose a direct threat to health, well-being, and productivity, particularly for low-income urban residents, outdoor laborers, young children, the elderly, pregnant women, and those with existing chronic conditions.

Pollen & Air Pollution: Georgia's pollen seasons are projected to get longer and more intense, affecting those with seasonal allergies, asthma, and other respiratory diseases. Warming temperatures threaten to impact air pollution levels in the Atlanta region and elsewhere.

Infectious Disease: Increased temperatures and changing rain patterns likely will alter the spread of infectious diseases in Georgia.

Overview

A changing climate will affect the health and well-being of Georgians through more frequent heat waves, more intense extreme weather events, worsening outdoor air quality, and greater spread of vector-borne diseases. These exposures pose serious health challenges that can result in hospitalization and death, as well as chronic stressors that can cumulatively degrade physical and mental health. The people more likely to be exposed to the impacts of climate change include those living in rural areas, coastal areas, or urban heat islands, outdoor athletes, and outdoor workers. Those at greater risk of harm when they are exposed include the elderly, the very young, pregnant women, those with existing conditions (including heart, kidney, and lung diseases as well as mental health conditions), many communities of color, and those below the poverty line [1, 2].

In recent decades, the Southeast has endured longer and more frequent heatwaves. 2019 was the warmest year on record for Georgia since observations began in 1895. [3] Currently most July days are above 90 degrees Fahrenheit with high humidity, and summer temperatures are projected to increase in the future [4]. Multiple days and nights with high heat and humidity can cause heat-related illnesses. Urban populations experience particularly high temperatures in the summer due to relatively less green space and large amounts of concrete that absorb and retain heat within cities [5]. Heat also poses the risks to rural Georgians who work outside and have reduced access to air conditioning [6, 7]. Periods of hot weather currently reduce the productivity of the workforce by an estimated 10% and could reduce worker productivity up to 20% by 2050 [8].

Both ozone pollution and pollen create respiratory challenges for Georgians with asthma and other lung diseases. Hotter summer temperatures create more ozone pollution in urban centers. Projections suggest that Atlanta will experience unhealthy levels of ozone for 35 days every summer [9]. This poor air quality increases the risk that children may develop asthma and causes more illness in those who already have asthma. In addition to ozone challenges, future climate conditions will also increase the length and severity of the pollen season [10, 11].

Warmer temperatures, changing rain patterns, and flooding can increase the risk of disease transmission and are also anticipated to create new habitat for mosquito species that carry diseases including dengue and West Nile virus [2, 12, 13].

Extreme weather events, such as hurricanes, prolonged rain, and floods, affect Georgians across the state every year. These extreme weather events cause physical injury and also have significant impacts on mental health [2, 14, 15, 16]. They can also disrupt healthcare delivery and make it harder for patients and health care workers to access hospitals in an emergency.

Georgia’s clinicians, hospitals, clinics, and public health agencies face numerous challenges as they work to manage the health of Georgians under current and future climate change scenarios. These challenges are amplified by the diverse needs of urban and rural populations across the state. To safeguard health, action is needed to address existing health inequities and enhance resilience in the health sector and in communities.

Resources

[Fourth National Climate Assessment Chapter on Human Health and Chapter on the Southeastern Region](#)

The 2018 Fourth National Climate Assessment from the 13-agency U.S. Global Change Research Program represents the findings of more than 300 U.S. government and non-governmental scientists and was published following an extensive review process that included public comments as well as an expert review by the National Academies of Sciences, Engineering, and Medicine.

[CDC Climate and Health Resources](#)

Detailed information from the Centers for Disease Control and Prevention (CDC) on the impacts of climate change on a wide range of health effects, including air pollution, allergens, temperature extremes, and vector-borne disease.

[CDC Heat & Health Tracker](#)

An interactive tool from the CDC that allows users to understand heat risk by zip code and county.

[A Physician's Guide to Climate Change, Health, and Equity](#)

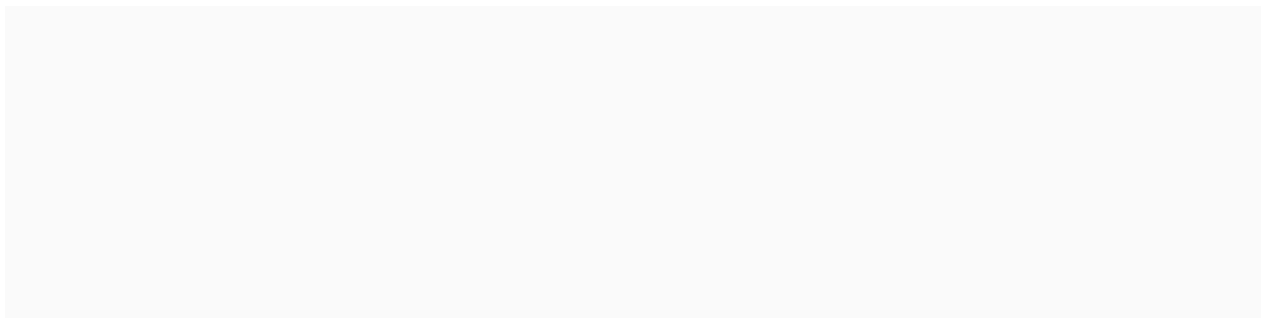
This guide from the Public Health Institute's Center for Climate Change & Health provides resources for physicians on the health impacts of climate change as well as how to integrate climate change into patient care and professional engagement.

[Climate Change Impacts on Mental Health](#)

2-page summary from the American Public Health Association on the linkages between climate change and mental health.

[Southeast Climate and Health Fact Sheet](#)

2-page summary from the American Public Health Association of climate change impacts on human health.



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