

# ANTIGUA AND BARBUDA

## LANCET COUNTDOWN ON HEALTH AND CLIMATE CHANGE DATA SHEET 2024

### Health and climate change in Antigua and Barbuda

The Lancet Countdown on Health and Climate Change annually takes stock of the evolving links between health and climate change through 50+ peer-reviewed indicators. Since 2016, these indicators have provided regular, reliable global and regional stocktakes on climate change and health. Data in this year's report reveal that people all around the world are facing record-breaking threats to their wellbeing, health and survival from the rapidly changing climate. This document summarises key findings from the 2024 Small Island Developing States report for the *Lancet* Countdown for Antigua and Barbuda, which reveal that:



Trends in **heat and health** are particularly concerning, with populations experiencing increases in exposure to high temperatures, undermining livelihoods and threatening people's health and wellbeing.



The susceptibility to **hurricanes** is among the most onerous impacts on the nation's economy and wellbeing.



The country's climatic conditions have become more conducive to the proliferation of **dengue fever**.



Hundreds of **work hours** were lost due to greater **heat exposure**, with the loss of earnings amounting to millions of dollars.

These findings underscore the urgency of strengthening local health systems, adapting to climate change, and pursuing efforts to reduce greenhouse gas emissions through interventions that simultaneously deliver health co-benefits. These actions will help build healthier, more resilient populations, and forge the way to a thriving future for Antigua and Barbuda.

### Heat and health

Exposure to high temperatures threatens people's lives, health, and wellbeing, leading to death and heat-related disease, and increasing healthcare demand during heatwave episodes. Older people, socio-economically deprived communities, very young children, pregnant women, and those with underlying health problems are particularly at risk.

0.2°C

Mean summer temperature over 2018–2022 was 0.2°C higher than the mean temperature between 1986–2005 (indicator 1.1.1).



On average between 2019–2023, there was a 19-day and 17-day increase in exposure to health-threatening heat for each infant under 1 and person over 65, respectively, compared to average exposure in 2000–2004 (indicator 1.1.2).

#### ECONOMIC IMPACT OF HEAT

Heat exposure limits labour productivity, which undermines livelihoods and the social determinants of health.

85%

Work hours lost in the service sector were almost 85% higher in 2014–2023 versus 1991–2000, and associated with a 24% increase in income lost over the comparative periods (indicators 1.1.4, 4.1.3).

7.5 million

Nearly 7.5 million work hours were lost in the construction sector, which was equivalent to around US\$24 million loss of earnings, over the period 2014–2023 (indicators 1.1.4, 4.1.3).

### Vulnerability to infectious disease

Antigua and Barbuda bears the burden of endemic dengue transmission. Several recent outbreaks, including cases confirmed in 2023 and 2024, were linked primarily to the *Aedes aegypti* vector, whose reproduction cycles progresses more rapidly in a warmer temperature range.

23%

Climate suitability for the transmission of dengue through the *Aedes aegypti* mosquito was up by 23% over the period 2013–2022 compared to 1951–1960 (indicator 1.3.1).

## Extreme weather events and sea level rise

Storms and hurricanes can precipitate major wind- and flood-induced infrastructural damage, injury, morbidity, and, commonly, death. They can also incur losses and recovery costs that constitute a significant proportion of a country's GDP. In most SIDS, these annual extreme events have contributed to developmental instability through constant anticipation of climatic shocks.



Around eight major storms have made landfall in Antigua and Barbuda between 1990 and 2023. Climate projections indicate that the nation will be affected by less direct hurricanes, however the intensity of those that do hit is expected to increase.

32,000

Hurricanes that made landfall between 2000 and 2023 have affected over 32,000 persons and resulted in one death (indicator 2.3.2).

\$263M

Just two of the hurricanes recorded between 2000 and 2023 incurred damages valued at US\$262,600,000 (indicator 4.1.1).

### SLOW-ONSET DISPLACEMENT AND MIGRATION

Sea level rise can affect human health through episodic flooding, permanent inundation, erosion, soil and drinking water contamination, vector- and water-borne disease, and mental health impacts, with populations living less than 1 metre above sea level particularly vulnerable.

2%

Close to 2,000 persons, or just under 2% of the total population of Antigua and Barbuda, were living within 1 metre of the coastline in 2022 (indicator 2.3.3).



As a country that is predominately reliant on nature-based tourism, accounting for 80% of the nation's GDP, the degradation of coastal ecosystems has the potential to undermine economic stability.

Without sufficient adaptation measures, sea level rise could prompt the relocation of vulnerable populations. The health impacts of human relocation will depend on the policies put in place to protect the health of migrant or immobile populations.

## Diet and physical activity

Promoting shifts to healthier, more plant-based diets can substantially reduce agricultural GHG emissions, while also delivering major co-benefits for public health through improvements to dietary risk factors and reduced deaths due to unbalanced diets. Antigua and Barbuda faces the lifestyle risk factors for overweight and obesity, which places the population at risk for non-communicable diseases.



From 2019-2021, close to 500 deaths were attributable to imbalanced diets characterised by overconsumption of red and processed meat, and insufficient consumption of fresh fruits, vegetables, and nuts (indicator 3.3.2).

Promoting engagement in physical activity could reduce the risk factors associated with poor dietary outcomes. Yet, increased heating threatens the viability of this vital health benefit.



From 2019-2023, individuals were exposed to a moderate or higher risk of heat stress for nearly 2,500 and 2,800 average hours per year during light outdoor activities (like walking) and moderate outdoor activities (like running), respectively. This is a 9% and 10% respective increase compared to 1991-2000 (indicator 1.1.3)

## Adaptation and scientific engagement

Climate adaptation policies play a pivotal role in building resilience against the multiple climate hazards. However, there remain several key gaps hindering the growth of adaptation capacity in the country.



Antigua and Barbuda reported having an overall medium capacity for health emergency management based on the International Health Regulations (IHR), and low capacity exists for planning for health emergencies (indicator 2.2.5).

\$3M

US\$3 million was disbursed to Antigua and Barbuda through the Green Climate Fund for the development of a National Adaptation Plan in 2017 (indicator 2.2.4).



Research provides evidence for climate action, however, scientific publications remain low overall for SIDS. Only one scientific paper was published between 1990 and 2023 on climate change impacts from Antigua and Barbuda. No scientific publications were found that covered adaptation or mitigation from climate-related impacts (indicator 5.3).

FOR FURTHER INFORMATION, VISIT [WWW.LANCETCOUNTDOWN.ORG](http://WWW.LANCETCOUNTDOWN.ORG)

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