LANCET COUNTDOWN: HEALTH AND CLIMATE CHANGE SMALL ISLAND DEVELOPING STATES

JAMAICA

LANCET COUNTDOWN ON HEALTH AND CLIMATE CHANGE
DATA SHEET 2024

Health and climate change in Jamaica

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 Jamaica, 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.

A series of **floods**, and **hurricanes** in recent years have resulted in damages exceeding US$1.5 billion.

Vector-borne outbreaks have increased more frequently in Jamaica with the climatic suitability for transmission of **dengue.**

Millions of **work hours** were lost due to greater **heat exposure**.

These findings underline 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 Jamaica.

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.

0.9°C Summer temperature increased by 0·9°C in 2022 compared with temperatures during 1986–2005 (indicator 1.1.1).

On average between 2019–2023, there was a 38-day and 39-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).

Coupled with the low urban greenness level of Jamaica as reported for 2023, there should be more actioned to safeguard cooling mechanisms and housing in the country with an urban population of 43% (indicator 2.2.3)

ECONOMIC IMPACT OF HEAT

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

86% Work hours lost in the service sector were almost 86% higher in 2014–2023 versus 1991–2000, and associated with a 77% increase in income lost over the comparative periods (indicators 1.1.4, 4.1.3).

900 million Nearly 900 million work hours were lost in the agriculture sector, which was equivalent to around US$6.8 billion loss of earnings, over the period 2014–2023 (indicators 1.1.4, 4.1.3).

Vulnerability to infectious disease

The suitability for transmission of many infectious diseases, including vector-borne, food-borne, and water-borne diseases, is influenced by shifts in temperature and precipitation associated with climate change.

The climatic suitability for transmission of dengue in Jamaica increased by 14% for *Aedes aegypti* and 20% for *Aedes albopictus* in the 2013–2022 period when compared to 1951–1960 (indicator 1.3).

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Extreme weather events

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 16 major storms have affected Jamaica between 2000 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.



Storms and hurricanes recorded between 2000 and 2023 have affected over 700,000 persons and resulted in 61 deaths (indicator 2.3.2).



Storms and hurricanes recorded between 2000 and 2023 incurred damages valued over US$1.5 billion (indicator 4.1.1).

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.



From 2019-2021, close to 10,400 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 3,000 and 3,400 average hours per year during light outdoor activities (like walking) and moderate outdoor activities (like running), respectively. This is a 28% increase compared to 1991-2000 (indicator 1.1.3).

Adaptation, planning and resilience for health

Climate adaptation policies, strategies, and measures play a pivotal role in building resilience against multiple climate hazards.



Through collaboration with the World Meteorological Organization, the Jamaican health sector has reported having climate and data services, climate monitoring, climate analysis and diagnostics service, and predictions (indicator 2.2.1).



The health sector has yet to be supported by the WMO's climate change projections (indicator 2.2.1). WMO's climate change projections are yet to be integrated into the health surveillance system in Jamaica.



The Jamaican Government had two climate-related health concerns in the 2022 Policy Statement at the UNGA (indicator 5.4.1).

FOR FURTHER INFORMATION, VISIT:
WWW.LANCETCOUNTDOWN.ORG

Gordon-Strachan G, Parker S Y, Harewood H C et al. The 2024 small island developing states report of the *Lancet* Countdown on health and climate change. The *Lancet* Global Health 2024; published online December 2024.

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