

TRINIDAD AND TOBAGO

LANCET COUNTDOWN ON HEALTH AND CLIMATE CHANGE
DATA SHEET 2024

Health and climate change in Trinidad and Tobago

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 Trinidad and Tobago, which reveal that:



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



The already high burden of **chronic non-communicable diseases** in the Twin Island Republic will be worsened by more frequent flooding and other weather extremes.



The economy is still overly dependent on **non-renewable fossil fuels**. However, decreasing fossil fuel subsidies may point to more efforts to pursue renewable energy.

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 Trinidad and Tobago.

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.

0.4°C

Mean summer temperature over 2018-2022 was 0.4°C higher than the mean temperature between 1986-2005 (indicator 1.1.1).



On average between 2019-2023, there was a 17-day and 10-day increase in exposure to health-threatening heat for each infant under 1 and person over 65, respectively, compared to 2000-2004. In 2023 alone, the respective groups experienced 70 and 41 health-threatening heat days (indicator 1.1.2).

ECONOMIC IMPACT OF HEAT

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

200
million

Over 200 million more hours were lost across outdoor labour sectors from 2014 through 2023 than in 1991-2000. This was associated with a US\$3.7 billion loss of earnings, 68% more than earnings lost due to heat from 1991-2000 (indicators 1.1.4, 4.1.3).

\$2.3B

Over 400 million work hours were lost in the construction sector from 2014-2023 (104% higher than 1991-2000), associated with US\$2.3 billion loss of earnings over the same period (indicators 1.1.4, 4.1.3).



Work hours lost in the service sector were almost 100% higher in 2014-2023 versus 1991-2000, associated with a 115% increase in income lost over the comparative periods (indicators 1.1.4, 4.1.3).

Vulnerability to infectious disease

Trinidad and Tobago bears the burden of endemic dengue transmission. Several recent outbreaks were linked primarily to the *Aedes aegypti* and *albopictus* vectors, whose reproduction cycles progress more rapidly in a warmer temperature range.



Climate suitability for the transmission of dengue was up by 2% and 4% for *Aedes aegypti* and *Aedes albopictus* respectively over the period of 2013-2022, compared to 1951-1960 (indicator 1.3.1).

95%

In 2022, 95% of Trinidad and Tobago's was suitable for the proliferation and transmission of the *Vibrio cholerae* (cholera) bacteria (indicator 1.3.1).

Extreme weather events and sea level rise

In most SIDS, annual extreme events like tropical cyclones have contributed to developmental instability through constant anticipation of climatic shocks. In Trinidad and Tobago, flooding is a common occurrence affecting infectious disease transmission, food security, and access to necessary services.

250,000

Two flood events in 2018 and 2022 affected a combined 250,000 persons (indicator 2.3.2).



Over 5,000 persons were living within 1 metre of the Trinidad and Tobagonian coastline in 2022 (Indicator 2.3.3).

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.

Without sufficient adaptation measures, sea level rise could prompt the location 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

Trinidad and Tobago has high rates of death by non-communicable diseases (NCDs). 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.



In 2019 and 2021, over 9,500 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).

Regular engagement in physical activity, such as jogging, significantly reduces the risk of cardiovascular complications. 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 an average 460 and 440 hours per year during light outdoor activities (like walking), and moderate outdoor activities (like running), respectively, when compared to 1991-2000 (indicator 1.1.3).

Energy transition and health co-benefits

Trinidad and Tobago is one of the few oil-producing SIDS, with oil and gas exportation accounting for 40% of the nation's GDP. Carbon prices help economies transition away from high-carbon fuels, whereas fossil fuel subsidies provide incentives for health-harming emissions and slow the low-carbon transition. Redirecting fossil fuel subsidy funds to incentivise the expansion and affordability of low-carbon power and to health-promoting interventions would deliver net benefits to local populations and support a just transition.



Trinidad and Tobago provided a net subsidy to fossil fuels, indicating that fossil fuel subsidies were higher than carbon prices, and were roughly equivalent to US\$346 million (indicator 4.2.4).

Transitioning energy systems to renewables would benefit human health, simultaneously reducing air pollution; mitigating greenhouse gas emissions; and contributing towards universal, affordable and clean energy.

\$40.5M

A part of US\$40.5 million was approved by the Green Climate Fund to pursue renewable energy development in several countries including Trinidad and Tobago (indicator 2.2.4).

Adaptation and scientific engagement

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



Trinidad and Tobago reported having an overall high capacity for health emergency management based on the International Health Regulations (IHR) (indicator 2.2.5).

\$1.5M

US\$1.5 million was disbursed to Trinidad and Tobago through the Green Climate Fund for the development of a National Adaptation Plan in 2022 (indicator 2.2.4).



Only 15 scientific papers were published between 1990 and 2023 on climate change impacts on health from Trinidad and Tobago. Just one scientific publication covered climate-related health adaptation and none covered climate change mitigation (indicator 5.3).

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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