

# FIJI

## LANCET COUNTDOWN ON HEALTH AND CLIMATE CHANGE DATA SHEET 2023

### Health and climate change in Fiji

The Lancet Countdown on Health and Climate Change is an academic collaboration of over 200 researchers from around the world, which annually takes stock of the evolving links between health and climate change through 40+ peer-reviewed indicators. Since 2016, these indicators have provided regular, reliable global and regional stocktakes on climate change and health. This document summarises key findings from the 2023 Report of the Lancet Countdown\* for Fiji, which reveal that:



**Unhealthy diets** are undermining health and wellbeing in Fiji, with deaths attributable to insufficient consumption of nutritious, plant-based foods.



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.



Large increases in urban population has contributed to higher vulnerability to *Aedes*-borne disease. Additionally, climatic conditions are suitable for the spread of **vector-borne diseases** including dengue and malaria.



Populations are vulnerable to the effects of **sea-level rise**, threatening both direct health impacts as well as indirect impacts of population migration and displacement.

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 Fiji.



#### Data gap

For many of the indicators, globally comparable data were unavailable for Fiji. More timely collection of data and actionable monitoring of climate change and health indicators in Fiji could support the development of locally-relevant, health-promoting climate change policies.

### Diet and Health

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.



In 2020, red meat and dairy accounted for 50.8% of all agricultural production-related emissions and for 58.3% of all consumption-related emissions in 2020 (indicator 3.3.1).



In 2020, more than 3,000 deaths were attributable to dietary risks that could be reduced through balanced, low-emissions diets.



Of these deaths, nearly 34% of were attributable to insufficient consumption of nutritious plant-based foods (indicator 3.3.2).

## 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.

**0.5°C**

From 2018 to 2022, the average summer temperatures that people were exposed to were 0.5°C higher than the 1986–2005 baseline average (indicator 1.1.1).



From 2013–2022, children under the age of one were exposed to 210% more heatwave days annually than the equivalent demographic were on average from 1986–2005. Adults over age 65 saw a 466% increase across the same timeframe (indicator 1.1.2).



From 2013–2022, each infant and adult over the age of 65 were exposed to an average of nearly 8.7 life-threatening heatwave days per year (indicator 1.1.2).

### ECONOMIC IMPACT OF HEAT

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

**30 million** potential labour hours lost due to heat exposure in 2022, an increase of 24% from 1991–2000 (indicator 1.1.4).



Agricultural workers were hit the hardest, seeing 79.5% of the potential hours lost and 72.6% of the potential income losses in 2022 (indicators 1.1.4 & 4.1.3).

### FUTURE PROJECTIONS

**2°C SCENARIO**

In a scenario in which temperatures are kept to under 2°C of heating, heatwave exposure for people over age 65 is projected to be 10 times greater by mid-century (2041–2060 average) (indicator 1.1.2).

## Sea level rise and health

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.

**6%**

In 2022, over 49,000 people were living less than 1 metre above sea level. This puts nearly 6% of Fiji's population in a vulnerable position due to sea level rise (indicator 2.3.3).

Without sufficient adaptation measures, sea level rise could prompt 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.

## Vulnerability to infectious diseases

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. Improvements in public health and in healthcare access can lead to reductions in vulnerability and protect populations from the negative health impacts associated with increasing climate suitability for transmission of dengue.



Conditions are suitable for the spread of malaria for nine months of the year.



After being relatively steady for decades, the basic reproduction number for dengue (R0, an indication of transmissibility) has been trending up since 2000. Compared to 1951–1960, average R0 from 2013–2022 has increased 18% (indicator 1.3).

**14%**

Likely due to increased urbanisation, vulnerability to *Aedes*-borne disease in 2012–2021 was 14% higher than in the 1990s (indicator 2.3.1).

FOR FURTHER INFORMATION, VISIT:  
**WWW.LANCETCOUNTDOWN.ORG**

\*Romanello M, di Napoli C, Green C et al. The 2023 report of the *Lancet* Countdown on health and climate change: the imperative for a health-centred response in a world facing irreversible harms. *Lancet* 2023; published online Nov 14. [https://doi.org/10.1016/S0140-6736\(23\)01859-7](https://doi.org/10.1016/S0140-6736(23)01859-7).

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