

# MALDIVES

LANCET COUNTDOWN ON HEALTH AND CLIMATE CHANGE  
DATA SHEET 2023

## Health and climate change in the Maldives

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 reliable global and regional stocktakes on climate change and health. This document summarises key findings from the 2023 Report of the *Lancet* Countdown\* for the Maldives, which reveal that:



People are increasingly exposed to health-threatening **extreme heat**, with associated increases in heat-related illness and mortality.



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



People 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 the Maldives.



### Data gap

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

## 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.



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, each infant was exposed to an average of 12.7 life-threatening heatwave days per year, and adults over age 65 were exposed to an average of 13.3 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.

**22 million** potential labour hours lost due to heat exposure in 2022, an increase of 77% from 1991–2000 (indicator 1.1.4).

**US\$103 million** potential associated income loss in 2022, equivalent to 1.7% of GDP (indicator 4.1.3).



Construction workers were hit the hardest, seeing 48% of the potential hours lost and 49% of the potential income losses in 2022 (indicators 1.1.4 & 4.1.3).

## Infectious disease

Vulnerability to dengue infections is affected by physiological, social, financial, and geographical factors, as well as a community's capacity to adapt. 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.

17%

From 2012-2021, vulnerability to diseases transmitted by *Aedes* mosquitos, which include dengue, was 17% higher than in the 1990s, largely due to increases in urban population (indicator 2.3.1).

## 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.

17%

In 2022, over 90,000 people were living less than 1 metre above sea level. This puts over 17% of the population in a vulnerable position (indicator 2.3.3).

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).