LANCET COUNTDOWN: TRACKING PROGRESS ON HEALTH AND CLIMATE CHANGE
In collaboration with Wellcome

A decade tracking progress on health and climate change

COSTA RICA

LANCET COUNTDOWN ON HEALTH AND CLIMATE CHANGE
DATA SHEET 2026

Health and Climate Change in Costa Rica

The Lancet Countdown on Health and Climate Change tracks the connections between health and climate change. In its tenth iteration, the 2026 Global Report shows that the health impacts of climate change have escalated, and frequently accelerated, in the decade since the Paris Agreement came into force. The Lancet Countdown Latin America tracks these links across the region, and its 2026 report provides the latest assessment of progress and challenges on health and climate change across Latin America.

This document draws on findings from both the **2026 Lancet Countdown Global Report (indicators represented in bold)** and the forthcoming 2026 Lancet Countdown Latin America Report to present key insights for Costa Rica.

Increasing heat exposure is affecting vulnerable populations and workers in Costa Rica, with consequences for health, physical activity, labour capacity and livelihoods.

Costa Rica has increasingly incorporated health into national climate commitments, while continued development of climate-health research can strengthen the evidence informing policy.

Costa Rica has a largely low-carbon electricity system, but continued dependence on polluting fuels limits opportunities to improve air quality and protect health.

Heat and Health

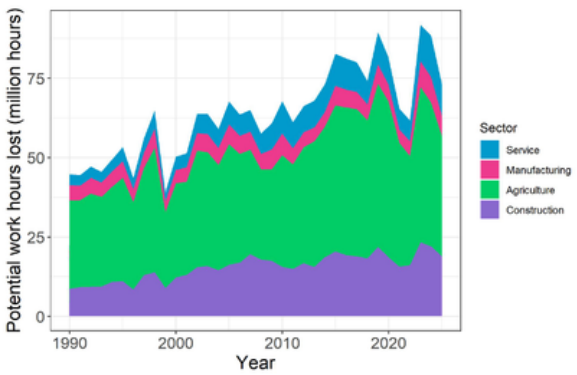
Exposure to high temperatures increases the risk of heat-related illness and mortality. Vulnerable groups, including older adults, young children, pregnant women, and those with pre-existing conditions, face the greatest risks.

Children under one year of age and adults over 65 in Costa Rica experienced an average of 2.8 and 2.3 additional heatwave days per year, respectively, between 2016 and 2025 compared with 2006–2015, reaching 3.2 and 2.6 heatwave days annually. **(Indicator 1.1.1)**

The average annual monetised value of heat-related mortality among people aged over 65 in Costa Rica was US$50 million between 2021 and 2025, equivalent to over 3,100 average annual incomes. This was a 376% increase compared with 2000–2004. **(Indicator 4.1.2)**

People in Costa Rica were exposed to over 900 hours per year in which heat posed a moderate or higher risk of heat stress during moderate outdoor physical activity between 2016 and 2025, over 100 hours (12.5%) more than the annual average in the 1990s. **(Indicator 1.1.2)**

Annual potential work hours lost, disaggregated by economic sector. Costa Rica, 1990 to 2025.



Heat exposure caused an average annual loss of 78.7 million potential labour hours in Costa Rica between 2016 and 2025, 61% higher than the annual average in the 1990s. Agriculture accounted for approximately 56% of these losses, followed by construction at 25%. **(Indicator 1.1.3)**

Heat-related labour capacity reduction in Costa Rica caused an estimated potential earnings loss of approximately US$390 million in 2025, equivalent to 0.38% of national GDP. Agriculture accounted for 46% of these losses, followed by construction at 26%. **(Indicator 4.1.3)**

Health in Climate Policy and Research

Integrating health into national climate commitments and strengthening scientific research can support evidence-informed responses to climate-related health risks. Costa Rica has incorporated health across multiple areas of its climate policy, while a growing body of research contributes to understanding the connections between climate change and health.

Costa Rica has mentioned health topics in all three of its NDCs. Health-related content peaked in its 2020 NDC at 136 mentions, while its most recent NDC in 2025 contained 54 mentions, mainly covering overall health and wellbeing. **(Indicator 5.4.1)**

Costa Rica's 2022 National Adaptation Plan (NAP), the Plan Nacional de Adaptación al Cambio Climático de Costa Rica, includes a dedicated health chapter. Its assessment identified health infrastructure and disaster risk as the most comprehensively addressed topics, including baseline information, proposed actions and indicators. However, infectious diseases were only partially addressed, while injuries and mental health were not covered. No financing was specified for the health topics assessed. (Indicator 2.2.1; Latin America Report)

Costa Rica's updated NDC, submitted in November 2025, includes climate information and early warning systems to support epidemiological surveillance of vector-borne diseases. (Indicator 2.2.1; Latin America Report)

An average of approximately eight scientific papers on climate change and health focused on Costa Rica annually between 2023 and 2025. Most examined the health impacts of climate change. **(Indicator 5.3.1)**

Energy Transition and Health

Fossil fuel combustion contributes to harmful air pollution, increasing the risk of respiratory and cardiovascular disease and premature mortality. Costa Rica's annual mean concentration of fine particulate matter ($PM_{2.5}$) was 15 μg/m^3, three times the World Health Organization's (WHO) recommended annual guideline of 5 μg/m^3.1 Reducing dependence on polluting fuels can improve air quality and protect health, while also reducing greenhouse gas emissions.

Electricity accounted for 70.6% of household energy use in Costa Rica in 2023, while liquid fossil fuels accounted for 16.7%. (Indicator 3.1.2; Latin America Report)

No electricity use was recorded in Costa Rica's road transport energy in 2023. (Indicator 3.1.3; Latin America Report)

In 2023, low-carbon sources accounted for 94.5% of Costa Rica's electricity generation, while the carbon intensity of the overall energy system increased by 2.4% compared with 2016, reaching 37.9 tCO_2/TJ. (Indicator 3.1.1; Latin America Report)

Fossil fuel subsidies in Costa Rica exceeded revenues from carbon pricing in 2024, resulting in net subsidies of approximately US$139 million, equivalent to 2.3% of current national health expenditure. These subsidies perpetuate dependence on polluting fossil fuels, undermining opportunities to improve air quality and protect health. **(Indicator 4.3.2)**

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