

THE GAMBIA

LANCET COUNTDOWN ON HEALTH AND CLIMATE CHANGE DATA SHEET 2024

Health and climate change in The Gambia

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 country-level findings from the 2024 report of the *Lancet* Countdown for The Gambia, which reveal that:



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



Climatic conditions have grown increasingly suitable for the spread of **infectious diseases** including dengue, malaria, and vibrio.



Air pollution is harming peoples' health, with a high burden of disease and deaths that could be avoided by transitioning to zero emission, clean energy sources.

These findings underline the urgency of redirecting finance away from health-harming fossil fuels; and towards strengthening local health systems, adapting to climate change, and pursuing efforts to reduce greenhouse gas (GHG) emissions through interventions that simultaneously deliver health co-benefits.

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 people, and those with underlying health problems are particularly at risk.



From 2014-2023, each infant and adult over age 65 was exposed to an average of 2.6 and 2.9 heatwave days per year, respectively. In 2023 alone, the same groups were exposed to an average of 6.9 and 7.4 heatwave days per year, respectively (indicator 1.1.1).



From 2014-2023, the total number of heatwave days experienced annually by children under the age of one was 11.5x greater than the equivalent demographic from 1986-2005. Adults over age 65 experienced 9x more heatwave days across the same timeframe. (indicator 1.1.1).



From 2014-2023, individuals were exposed to a moderate or higher risk of heat stress for an average of 2,700 hours per year during light outdoor activities (like walking). In 2023 alone, this estimates was over 3020 hours (indicator 1.1.2).

ECONOMIC IMPACT OF HEAT

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

US\$106 million

potential income loss from labour capacity reduction due to heat in 2023 (indicator 4.1.3).

195 million

potential labour hours were lost due to heat exposure in 2023, an increase of 222.7% from 1990-1999 (indicator 1.1.3).



Agriculture workers were hit the hardest, seeing nearly 64% of the potential hours lost (indicator 1.1.3), and 60.5% of potential income loss in 2023 (indicator 4.1.3).

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.



The climatic suitability for the transmission of dengue (represented by the basic reproduction number, R_0) by *Aedes aegypti* mosquitos decreased 23.6% between 1951–1960 and 2014–2023, however, the R_0 remains high at 1.8 (indicator 1.3.1).



From 2014–2023 there was an average 3 months per year when conditions in The Gambia's lowlands (<1500m) were suitable for the transmission of malaria by *P. falciparum* and *P. vivax* parasites, representing a 17% decrease compared to 1951–1960 (indicator 1.3.2).



From 2014–2023, the average annual population living within 100 km of coastal waters with conditions suitable for *Vibrio* transmission reached 1.36 million, with the estimated total number of cases during that period exceeding 5,800 per year. These figures are 26x higher than those recorded between 1990–1999 (indicator 1.3.3).

Drought and health

Increasingly frequent and intense droughts threaten crop yields, undermine food security, water security and sanitation, and increase the risk of malnutrition and infectious disease transmission.



In 2023, The Gambia's entire land area experienced at least three months of extreme drought, and 50% of land area experienced at least six months (indicator 1.2.2).

Marine food security

Climate change is exacerbating food insecurity and undernutrition by reducing crop yields, labour capacity, and access to water and sanitation; disrupting supply chains; and compromising marine resources through higher coastal sea surface temperatures, reduced oxygenation, ocean acidification, and coral reef bleaching.



The sea surface temperature in coastal areas of The Gambia has increased 0.53°C in 2021–2023 compared to 1981–2010 (indicator 1.4.2). This shift underscores the threat to marine food security induced by climate change.

Air pollution, energy transition and health co-benefits

People worldwide still use dirty fuels and inefficient technologies to meet their household energy needs, leading to high concentrations of indoor air pollution, and to other health harms from energy poverty. High levels of air pollution increases the risk of respiratory and cardiovascular disease, lung cancer, diabetes, neurological disorders, adverse pregnancy outcomes, and leads to a high burden of disease and mortality.



Indoor $PM_{2.5}$ derived from the burning of solid household fuels resulted in nearly 65 deaths per 100,000 in The Gambia in 2020 (indicator 3.2.2).

US\$30 million was the monetised value of premature mortality due to anthropogenic air pollution in 2021 was (indicator 4.1.4).

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. This highlights the need for investment in technology transfers and cheaper financing for countries that still rely heavily on fossil fuels.

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@lancetcountdown | www.lancetcountdown.org | info@lancetcountdown.org