LANCET COUNTDOWN: TRACKING PROGRESS ON HEALTH AND CLIMATE CHANGE

In collaboration with Wellcome

BANGLADESH

LANCET COUNTDOWN ON HEALTH AND CLIMATE CHANGE
DATA SHEET 2025

Health and climate change in Bangladesh

The Lancet Countdown on Health and Climate Change tracks the evolving relationship between climate and health through 50+ peer-reviewed indicators. Since 2016, it has provided peer-reviewed annual assessments, published in *The Lancet*. The 2025 report reveals the grave health toll of climate change inaction: fossil fuel dependence, rising emissions, and delayed adaptation are costing millions of lives. Recent climate policy rollbacks further threaten our ability to respond to the accelerating crisis, undermining progress towards a healthy future.

This document highlights key country-level findings from the 2025 Lancet Countdown report for Bangladesh, showing that:

In Bangladesh, populations are increasingly exposed to extreme heat, contributing to rising cases of heat-related illness and mortality, and undermining livelihoods and wellbeing.

Air pollution continues to pose a major health threat, with a high burden of disease and premature deaths linked to exposure to fossil fuel and biomass-derived $PM_{2.5}$

Combined with warming temperatures and changing rainfall patterns, the risk of mosquito- and water-borne disease transmission is rising in Bangladesh.

With the threats of climate change growing, protecting people's health and survival demands simultaneous and unprecedented efforts to advance adaptation and mitigation, and requires an "all hands on deck" approach.

Heat and Health

Exposure to high temperatures threatens lives and health, increasing 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. In the Bangladesh, heatwave exposure is rising, placing growing pressure on health systems.

"Public transport remains unbearable in extreme heat, outdoor workers have no protection, and cooling infrastructure in public spaces is non-existent...We need clear policies, climate-informed urban planning..."

Farzana Misha, health researcher, research/education institution

In 2024, people in Bangladesh were exposed to 28.8 heatwave days each, on average. Of these, 13.19 would not have been expected to occur without climate change. (Indicator 1.1.1)

Compared to 1990-1999, in 2024, people were exposed on average to 237 more hours during which ambient heat would have posed a moderate or higher risk of heat stress if undertaking moderate outdoor physical activity. (Indicator 1.1.2)

92%

For 2024, heat exposure resulted in a loss of 29 billion potential labour hours per year, 92% more than in 1990-1999. The agriculture sector accounted for 64% of the lost hours. (Indicator 1.1.3)

The associated potential income lost from labour capacity reduction due to extreme heat was US$24 billion in 2024, equivalent to 5% of GDP. The agriculture sector bore the brunt of these losses, accounting for 55% of total lost earnings in 2024. (Indicator 4.1.3)

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Air Pollution and Health

Air pollution continues to pose a major health threat in Bangladesh, with a high burden of disease and premature deaths linked to exposure to fossil fuel and biomass-derived $PM_{2.5}$. Transitioning to clean energy could significantly reduce these risks.

There were 225,000 deaths attributable to anthropogenic air pollution (PM2.5) in 2022 in Bangladesh, up by 38% from 2010. Fossil fuels contributed to 41.5% of all air pollution deaths in 2022 (30,600 deaths). Coal burning was responsible for 32% of all fossil fuel pollution-related deaths, primarily from power generation. (Indicator 3.2.1)

In 2022, household air pollution due to the use of polluting fuels in Bangladesh was associated with 74 deaths per 100,000. Mortality rates associated with household air pollution were higher in rural than urban areas (88 per 100,000 in rural and 50 per 100,000 in urban). (Indicator 3.2.1)

Loss of tree cover reduces natural filtration of air pollutants like $PM_{2.5}$, while low urban greenness limits cooling and resilience—worsening air quality and weakening adaptation to climate extremes.

In 2023, Bangladesh lost 20,000 hectares of tree cover, an increase of 1% from 2021 (Indicator 3.4)

Extreme Weather Events

Wildfires and droughts are increasing in frequency and severity due to climate change. These events degrade air quality, disrupt food and water systems, and elevate risks of respiratory, cardiovascular, and infectious diseases. In Bangladesh, health systems face rising demand during and after such events.

In 2020-2024, wildfire smoke (PM2.5) was accountable for an annual average of 593 deaths in Bangladesh, even though the PM2.5 concentration from wildfires was 11% lower than in 2003-2012. (Indicator 1.3.1)

From 2020 to 2024, an average of 69% of Bangladesh's land area experienced at least one month of extreme drought, nearly 4 times the 18% annually from 1951-1960. (Indicator 1.2.2)

From 2019-2023, 84% of people in Bangladesh were exposed at least once to dust levels exceeding WHO daily particulate matter (PM10) guidelines. (Indicator 1.2.4)

Vulnerability to Dengue

Climate change is increasing the suitability for transmission of vector-, food-, and water-borne diseases. In Bangladesh, changing temperature and precipitation patterns are expanding the risk zones for dengue and other climate-sensitive diseases.

The climate suitability (the average R_0) for dengue transmission by Aedes albopictus mosquitoes increased by increased by 90% from 1951-1960 to 2015-2024. (Indicator 1.3.1)

Testimonials were collected by The Geneva Learning Foundation as part of efforts to elevate health worker voices and recognize their lived experiences as valuable evidence in climate and health policy.

Romanello M, Walawender M, Hsu SC et al. The 2025 report of the Lancet Countdown on health and climate change: Climate change action offers a lifeline. Lancet 2025; published online October 2025. https://doi.org/10.1016/S0140-6736(25)01919-1

The Lancet Countdown was established in partnership with Wellcome.
For further information, visit lancetcountdown.org

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