LANCET COUNTDOWN: TRACKING PROGRESS ON HEALTH AND CLIMATE CHANGE

NIGERIA

LANCET COUNTDOWN ON HEALTH AND CLIMATE CHANGE
DATA SHEET 2024

Health and climate change in Nigeria

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 Nigeria, which reveal that:

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

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

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 6.2 and 7.5 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 4x greater than the equivalent demographic from 1986-2005. Adults over age 65 experienced 5.5x heatwave days across the same timeframe (indicator 1.1.1).

ECONOMIC IMPACT OF HEAT

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

US$15 billion potential income loss from labour capacity reduction due to heat in 2023 (indicator 4.1.3).

19.9 million potential labour hours were lost due to heat exposure in 2023, an increase of 150% from the 1990-1999 annual average (indicator 1.1.3)

Agricultural workers were hit the hardest, seeing 77% of the potential hours lost (indicator 1.1.3) and 66% of the potential income losses in 2023 (indicator 4.1.3).

From 2014-2023, individuals were exposed to moderate or higher risk of heat stress for more than 2600 hours per year during light outdoor activities (like walking) (indicator 1.1.2).

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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, R0) by *Aedes albopictus* mosquitos increased 73% from 1951-1960 to 2014-2023, and has nearly reached 1.6 (indicator 1.3.1).

From 2014-2023 there were an average of 5 months per year when conditions in Nigeria lowlands (<1500m) were suitable for the spread of malaria by *P. falciparum* and *P. vivax* (indicator 1.3.2).

51 mil

From 2014-2023, the average annual population living within 100 km from coastal waters with conditions suitable for *Vibrio* transmission reached 51 million, with the estimated total number of cases in that time frame reaching close to 220,000 per year (indicator 1.3.3).

Extreme weather events 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.

Each year from 2019-2023, an average of 53% of Nigeria's land area experienced at least one month of extreme drought, while 37% experienced at least three months of drought, and almost 22% experienced at least six months of drought (indicator 1.2.2). These 1-month, 3-month, and 6-month estimates represent increases of 39%, 32%, and 22% respectively, compared to 1950-1960 (indicator 1.2.2).

From 2018-2022, nearly 208 million people in Nigeria were exposed to sand and dust levels that exceeded the WHO threshold at least once during the 5-year period, with 100% of the population exposed (indicator 1.2.4).

Air pollution, energy transition and health co-benefits

The continued use of fossil fuels and biomass lead to high levels of air pollution, which 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.

In 2021, there were over 21,100 deaths attributable to anthropogenic air pollution ($PM_{2.5}$) in Nigeria. Fossil fuels (coal and liquid gas) contributed to 13.5% of these deaths (indicator 3.2.1).

The persistent net subsidising of fossil fuels for billions of dollars restricts funds available for health-supportive services, and hampers a transition towards clean, zero-emission energy.

In 2022, Nigeria had a net-negative carbon revenue, indicating that fossil fuel subsidies were higher than carbon prices. The country allocated a record-breaking net total of US$19.4 billion in fossil fuel subsidies in 2022 alone (indicator 4.3.3).

HOUSEHOLD ENERGY SUPPLY

Household energy use is a key determinant of health and is linked to economic development. However, people still use dirty fuels and technologies for cooking. The use of dirty fuels for cooking represents a substantial health hazard, especially exposing women and young children to high levels of air pollution.

In 2021, biomass accounted for close to 98% of household energy supply (indicator 3.1.2).

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

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