

UNITED STATES

LANCET COUNTDOWN ON HEALTH AND CLIMATE CHANGE DATA SHEET 2024

Health and climate change in the U.S.

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 U.S., which reveal that:



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



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



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 9.3 and 8.4 heatwave days per year, respectively. This was more than double what it was from 1986-2005 (indicator 1.1.1).



From 2014-2023, individuals were exposed to a moderate or higher risk of heat stress for nearly 600 hours per year during light outdoor activity (like walking) (indicator 1.1.2).

Green space promotes numerous health benefits and reduces heat exposure.



In 2023, out of 49 U.S. urban centres evaluated, 21 (43%) had moderate levels of green space, and 4 (8%) had high levels. Meanwhile, 15 (31%) had low, 5 (10%) had very low, and 4 (8%) had exceptionally low levels of greenness. This is a decline from 2020 when 28 (57%) urban centres had moderate levels of greenness or above (indicator 2.2.3).

ECONOMIC IMPACT OF HEAT

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

3.4 billion

potential labour hours were lost due to heat exposure in 2023, an increase of 69% from the 1990-1999 annual average (indicator 1.1.3).

US\$103 billion

was the potential loss of income from reduced labour due to heat - this is a record high (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.



From 2014-2023 there were an average of 1.7 months and 2.3 months per year when conditions in U.S. lowlands (<1500m) were suitable for the spread of malaria by *P. falciparum* and *P. vivax*, respectively. This was an increase of 39.7% and 32.1%, respectively, compared to the 1951-1960 average (indicator 1.3.2).



From 2014-2023, the length of coastline with conditions suitable for the transmission of *Vibrio* pathogens at any given time during the year was 50% greater than in 2000-2004. In these last 10 years, the average annual population living within 100 km from coastal waters with conditions suitable for *Vibrio* transmission reached 66 million (indicator 1.3.3).

Air pollution, energy transition and health co-benefits

The low adoption of clean renewable energy and 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. All of these lead to increasing demand on care services.



In 2022, renewable energy accounted for only 3.1% of the total energy supply in the U.S., and coal made up 11% (indicator 3.1.1).



Although annual CO₂ emissions from the U.S. energy system have been slowly decreasing since 2000, they increased 7% from 2020 to 2021 – the largest year on year increase in two decades (indicator 3.1.1).



In 2022, the U.S. had a net-negative carbon revenue, indicating that fossil fuel subsidies were higher than carbon prices. The country allocated a net total of over US\$9 billion in fossil fuel subsidies in 2022 alone (indicator 4.3.3).



In 2021, fossil fuels accounted for more than 93% of all road transport energy, and electricity accounted for less than 1% (indicator 3.1.3).



In 2022, the U.S. contributed 15.9% of the world's consumption-based CO₂ emissions. For a production-based accounting, the U.S. contributed 13.5% of the world's CO₂ emissions. The U.S. was the world's second-highest emitter of CO₂ based on both consumption- and production-based accounting (indicator 4.2.5). By either accounting, the U.S. is the world's second greatest emitter of CO₂.

¹ In this estimate, fossil fuels include coal and liquid gas.

HEALTH IMPACTS OF AIR POLLUTION



In 2021, there were approximately 125,800 deaths attributable to anthropogenic air pollution (PM_{2.5}) in the U.S.. Fossil fuels contributed to 39% of these deaths (about 50,000 deaths) (indicator 3.2.1).¹

US\$669 billion

the monetised value of premature mortality due to anthropogenic air pollution in 2021 (indicator 4.1.4).

Engagement in health and climate change

To respond to the health impacts of climate change, locally relevant data and research is required to inform policies and to enable governments to take a leading role in championing health-centred climate action on mitigation and adaptation within the U.S. in international negotiations.



In 2023, for instance, 83% of all papers published globally on climate change and health focused on impacts; for papers that focused on the U.S., 64% were about impacts, while 5% focused on adaptation and 7% focused on mitigation (indicator 5.3.1).



Over 80% of U.S. cities reporting on their climate action have undertaken a climate risk and vulnerability assessment (indicator 2.1.3).

FOR FURTHER INFORMATION, VISIT WWW.LANCETCOUNTDOWN.ORG

Romanello M, Walawender M, Hsu SC et al. The 2024 report of the *Lancet* Countdown on health and climate change: Facing record-breaking threats from delayed action. *Lancet* 2024; published online October 2024. [https://doi.org/10.1016/S0140-6736\(24\)01822-1](https://doi.org/10.1016/S0140-6736(24)01822-1)

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