

UNITED KINGDOM

LANCET COUNTDOWN ON HEALTH AND CLIMATE CHANGE DATA SHFFT 2024

Health and climate change in the UK

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 recordbreaking 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* and the 2024 Europe report of the Lancet Countdown** for the UK, which reveal that:



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



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.



Unhealthy, unsustainable diets are contributing to GHG emissions and undermining health and wellbeing, with deaths that could be reduced through balanced, low-emission diets.

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.



In 2013-2022, the UK's overall mean increase in heat-related deaths was estimated at 9 deaths per 100,000 inhabitants (indicator 1.1.4).**



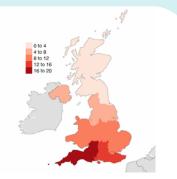
From 2014-2023, each infant and adult over age 65 was exposed to an average of 6.5 heatwave days per year (indicator 1.1.1).



Green space promotes numerous health benefits and reduces heat exposure. In 2023, out of 10 UK urban centres evaluated, 7 had moderate levels of green space, while 3 had low levels of greenness. This is a decline from 2020 when 9 urban centres had moderate levels of greenness (indicator 2.2.3).

ECONOMIC IMPACT OF HEAT

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



CHANGE IN HEAT-RELATED MORTALITY RATE IN THE UK EXPRESSED AS THE NUMBER OF DEATHS PER 100,000 INHABITANTS BETWEEN 2003-12 AND 2013-22.*

potential labour hours lost due to heat exposure in 2023, an increase of 166% from the 1990-1999 average **8.5 million** (indicator 1.1.3).



Construction workers were hit the hardest, seeing nearly 71% of the potential hours lost (indicator 1.1.3) and 75% of the potential income losses in 2023 (indicator 4.1.3).



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, the UK had a net-negative carbon revenue, indicating that fossil fuel subsidies were higher than carbon prices. The country allocated a record net total of US\$43 billion in fossil fuel subsidies in 2022 alone, an amount equivalent to 12% of the nation's health expenditure (indicator 4.3.3).



In 2022, nearly half of electricity in the UK was powered through low carbon sources (including nuclear, hydro, solar and others). However, low carbon sources still only made up only 14% of the total energy supply (indicator 3.1.1).

HEALTH IMPACTS OF AIR POLLUTION



In 2021, there were over 29,500 deaths attributable to anthropogenic air pollution $(PM_2 \cdot \mathfrak{s})$ in the United Kingdom. Fossil fuels (coal and liquid gas) contributed to 44% of these deaths (indicator 3.2.1).

US\$92 billion

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



Coal use has decreased in its share of the total energy supply in the UK from 16.4% in 2000 to 2.6% in 2022 (indicator 3.1.1).

Diet and health

Promoting shifts to healthier, more plant-based diets can substantially reduce agricultural GHG emissions, while also delivering major co-benefits for public health through improvements to dietary risk factors and reduced deaths due to unbalanced diets.



In 2021, consumption of red meat and dairy led to emissions of $0.54~\text{CO}_2\text{e}$ per person, 68% of total emissions using consumption-based accounting. In that year, production of red meat and dairy led to emissions of $0.44~\text{CO}_2\text{e}$ per person, accounting for 72% of all agriculture production-related emissions (indicator 3.3.1).



In 2021, over 38,500 deaths were associated with excessive consumption of red meat and dairy, and nearly 36,000 deaths were associated with insufficient consumption of nutritious plant-based foods (including fruits, vegetables, legumes, wholegrains, nuts and seeds). Together, these accounted for 32% of all diet-related deaths that year (indicator 3.3.2).

Healthcare sector emissions and harms

Quality healthcare requires the use of energy, goods, services, and infrastructure, which consumes resources and currently contributes to GHG emissions and air pollution. Delivering low-GHG-emitting and sustainable health systems is essential in a world that meets the goals of the Paris Agreement and enables a healthy future.



Greenhouse gas emissions from the UK's healthcare system have been trending down since 2010, but they have ticked up every year from 2019 to 2021, reaching 45 metric tons of carbon dioxide equivalent that year (indicator 3.5).

Reaching net-zero GHG emission healthcare will require continuous and meaningful improvements to environmental performance of healthcare facilities, operations, energy use, and supply chains as well as appropriate care delivery.

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
- ** van Daaler KR, Tonne C, Semenza JC et al. The 2024 Europe report of the Lancet Countdown on health and climate change: Unprecedented warming demands unprecendented action. The Lancet Public Health.

 https://doi.org/10.1016/S2468-2667(24)00055-0