

NETHERLANDS

LANCET COUNTDOWN ON HEALTH AND CLIMATE CHANGE DATA SHEET 2024

Health and climate change in the Netherlands

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



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.



Trends in **heat and health** are particularly concerning, with populations experiencing increases in exposure to high temperatures, undermining livelihoods and threatening people's health and wellbeing.



The suitability for transmission of many **infectious diseases**, including vector-borne, food-borne, and water-borne diseases, is influenced by climate change.

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.

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 11,000 deaths attributable to anthropogenic air pollution (PM2.5) in the Netherlands (indicator 3.2.1).

US\$43 billion is the monetised value of premature mortality due to anthropogenic air pollution in 2021 (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.



In 2022, the Netherlands had a net-negative carbon revenue, indicating that fossil fuel subsidies were higher than carbon prices. The country allocated a record net total of over US\$23 billion in fossil fuel subsidies in 2022 alone (indicator 4.3.3).



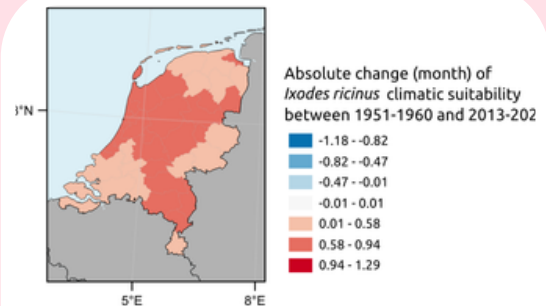
In 2022, low carbon sources (including renewables) contributed a record 35% of electricity in the Netherlands, continuing an upward trend since 2000, when they accounted for 5.5%. Similarly, low carbon shares for total energy supply increased from 1.5% to 7.2%. During the same period, coal use for electricity decreased from 27% to 12%, and its share in total energy supply from 10.5% to 8.8% (indicator 3.1.1).

Vulnerability to infectious diseases

Although there are multiple tick species associated with the transmission of pathogens, *Ixodes ricinus* ticks are the dominant European vectors, including for *Borrelia burgdorferi* causing Lyme disease and tick-borne encephalitis—two of the most prevalent vector-borne illnesses in the northern hemisphere.



The Netherlands witnessed an increase in months suitable for *Ixodes ricinus* nymph feeding activity when comparing 1951-60 with 2013-22, extending the period of suitable activity by 0.59 months, from 5.72 to 6.31 months (indicator 1.3.6).**



CLIMATIC SUITABILITY FOR *IXODES RICINUS* BY NUTS3 REGIONS IN THE NETHERLANDS. ORANGE-SHADED AREAS REPRESENT SUITABILITY CHANGE.**

Sea level rise and health

Sea level rise can affect human health through episodic flooding, permanent inundation, erosion, soil and drinking water contamination, vector- and water-borne disease, and mental health impacts, with populations living less than 1 metre above sea level particularly vulnerable.



In 2023, more than 5.5 million people in the Netherlands were living less than 1 metre above sea level (indicator 2.3.3).

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 Netherlands' overall mean increase in heat-related deaths was estimated to be 7 deaths per 100,000 inhabitants rising from approximately 11 in 2003-12 to 18 in 2013-22 (Europe indicator 1.1.4).**



From 2014 to 2023, each infant and adult over age 65 was exposed to an average of 6.8 and 6.7 heatwave days per year, respectively. In 2023 alone, the same groups were exposed to close to 8 heatwave days per year (indicator 1.1.1).



From 2014 to 2023, children under the age of one in the Netherlands were exposed to 45% more heatwave days annually than in 1986-2005. Adults over the age of 65 saw a 125% increase across the same time frame (indicator 1.1.1).

ECONOMIC IMPACT OF HEAT

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

US\$164 million was the potential income loss from labour capacity reduction due to heat in 2023 (indicator 4.1.3).

5.5 billion potential labour hours were lost due to heat exposure in 2023, an increase of 51.4% from the 1990-1999 annual average (indicator 1.1.3).



Construction workers were hit the hardest, seeing 50% of the potential hours lost (indicator 1.1.3) and nearly 57% of the potential income losses in 2023 (indicator 4.1.3).

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)

** 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 unprecedented action. The Lancet Public Health. [https://doi.org/10.1016/S2468-2667\(24\)00055-0](https://doi.org/10.1016/S2468-2667(24)00055-0)