

NETHERLANDS

LANCET COUNTDOWN ON HEALTH AND CLIMATE CHANGE
DATA SHEET 2023

Health and climate change in the Netherlands

The *Lancet* Countdown on Health and Climate Change is an academic collaboration of over 200 researchers from around the world, which annually takes stock of the evolving links between health and climate change through 40+ peer-reviewed indicators. Since 2016, these indicators have provided reliable global and regional stocktakes on climate change and health. This document summarises key findings from the 2023 Report of the *Lancet* Countdown* for the Netherlands, which reveal that:



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



Air pollution is increasingly affecting the health of local populations, with a high burden of disease and deaths that could be avoided by transitioning to zero emission, clean energy sources.



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.



Unhealthy diets are contributing to greenhouse gas (GHG) emissions and undermining health and wellbeing. Deaths attributable to dietary risks could be reduced through balanced, low-emission diets.

These findings underline the urgency of strengthening local health systems, adapting to climate change, and pursuing efforts to reduce greenhouse gas emissions through interventions that simultaneously deliver health co-benefits. These actions will help build healthier, more resilient populations, and forge the way to a thriving future for the Netherlands.

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 women, and those with underlying health problems are particularly at risk.

1.4°C

From 2018 to 2022, the average summer temperatures that people were exposed to were 1.4°C higher than the 1986–2005 baseline average (indicator 1.1.1).

133%

From 2013–2022, children under the age of one were exposed to 40% more heatwave days annually than the equivalent demographic were on average from 1986–2005. Adults over age 65 saw a 133% increase across the same timeframe (indicator 1.1.2).




From 2013–2022, each infant and adult over age 65 was exposed to an average of 7.5 life-threatening heatwave days per year (indicator 1.1.2).

ECONOMIC IMPACT OF HEAT

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

5 million potential labour hours lost due to heat exposure in 2022, an increase of 30% from 1991–2000 (indicator 1.1.4).

US\$178 million potential associated income losses in 2022 (indicator 4.1.3).

 Construction workers were hit the hardest, seeing 52% of the potential hours lost and 58% of the potential income losses in 2022 (indicators 1.1.4 & 4.1.3).

FUTURE THREATS

Unless urgent mitigation and adaptation action is taken, the health impacts of heat will increase drastically.

2°C SCENARIO

In a scenario in which temperatures are kept to under 2°C of heating, heatwave exposure for people over age 65 is projected to be 4 times greater by mid-century (2041–2060 average) (indicator 1.1.2).

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.

26%

In 2020, over 9,000 deaths were attributable to small particulate matter (PM_{2.5}) generated from human activities. This was a 40% decrease from 2005 (indicator 3.2.1).



Of these deaths in 2020, 38% were caused by PM_{2.5} from fossil fuel burning, while 15% were due to the use of biomass (indicator 3.2.1).



In 2020, the Netherlands had a net-negative carbon revenue, indicating that fossil fuel subsidies were higher than carbon prices. The country allocated a net total of US\$160 million in fossil fuel subsidies in 2020 alone.

RENEWABLE ENERGY TRANSITION

3%

Use of renewable energy has grown steadily in recent years, contributing 20% of total electricity output but only making up 3% of total energy supply in 2020. The same year, 6% of total energy supply came from coal (Indicator 3.1.1).



In 2020, fossil fuels still accounted for 93.1% of all road transport energy, and electricity accounted for only 0.08%. The use of biofuels has been slowly increasing over time, accounting for 6.8% of transport energy in 2020 (indicator 3.1.3).

6%

Total CO₂ fuel combustion has decreased only 6% in 2011-2020 compared to 1991-2000 (indicator 3.1).

Transitioning energy systems to renewables would benefit human health; reduce air pollution; mitigate greenhouse gas emissions; and contribute towards universal, affordable, and clean energy.

Carbon prices help economies transition away from high-carbon fuels, whereas fossil fuel subsidies provide incentives for health-harming emissions and slow the low-carbon transition. Redirecting fossil fuel subsidy funds to incentivising the expansion and affordability of low-carbon power and to health-promoting interventions would deliver net benefits to local populations and support a just transition.

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.

37%

In 2020, consumption of red meat and dairy lead to emissions of 0.93 CO₂e per person. In that year, red meat and dairy accounted for 37% of all agriculture-related emissions (indicator 3.3.1).



In 2020, over 10,700 deaths were associated with excessive consumption of dairy, red meat, and processed meat. Another 15,600 deaths were attributable to insufficient consumption of nutritious plant-based foods (indicator 3.3.2).

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 2022, 5.4 million people were living less than 1 metre above sea level (indicator 2.3.3).

FOR FURTHER INFORMATION, VISIT:
WWW.LANCETCOUNTDOWN.ORG

*Romanello M, di Napoli C, Green C et al. The 2023 report of the *Lancet* Countdown on health and climate change: the imperative for a health-centred response in a world facing irreversible harms. *Lancet* 2023; published online Nov 14. [https://doi.org/10.1016/S0140-6736\(23\)01859-7](https://doi.org/10.1016/S0140-6736(23)01859-7).