

POLAND

LANCET COUNTDOWN ON HEALTH AND CLIMATE CHANGE DATA SHEET 2024

Health and climate change in Poland

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 Poland, which reveal that:



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.



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.



Air pollution is 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.

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, the total number of heatwave days experienced annually by children under the age of one doubled compared to what the equivalent demographic experienced from 1986-2005. Adults over age 65 experienced nearly 3x more heatwave days across the same timeframe (indicator 1.1.1).



From 2014-2023, each infant and adult over age 65 was exposed to an average of 11.8 heatwave days per year (indicator 1.1.1).

Green space promotes numerous health benefits and reduces heat exposure.



Green spaces promote numerous health benefits and reduce heat exposure. In 2023, out of 7 Polish urban centres evaluated, only one had high levels of green space, while 6 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.

34.4 million potential labour hours were lost due to heat exposure in 2023 (indicator 1.1.3).

US\$ 268 million was the potential income loss from labour capacity reduction due to heat in 2023 (indicator 4.1.3).



Agriculture workers were hit the hardest, seeing 44% of the potential hours lost (indicator 1.1.3) and 42% of the potential income losses in 2023 (indicator 4.1.3).

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 0.49 tCO₂e per person, 50% of total emissions using consumption-based accounting. In that year, production of red meat and dairy led to emissions of 0.59 tCO₂e per person, accounting for 50% of all agriculture production-related emissions (indicator 3.3.1).



In 2021, over 31,000 deaths were associated with excessive consumption of red meat and dairy, and nearly 69,000 deaths were associated with insufficient consumption of nutritious plant-based foods (including fruits, vegetables, legumes, wholegrains, nuts and seeds). Together, these accounted for 69% of all diet-related deaths that year (indicator 3.3.2).

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. 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.



\$8.6bn

In 2022, Poland had a net-negative carbon revenue, indicating that fossil fuel subsidies were greater than carbon prices. The country allocated a net total of US\$8.6 billion to fossil fuel subsidies in 2022 alone (indicator 4.3.3).



While the amount of energy from coal has decreased from 2022 to 2000, coal still accounted for 46% of Poland's total energy supply and a staggering 70% of electricity in 2022. In the same year, low carbon sources (including renewables) account for a record 16.7% of electricity but only 2.6% of the total energy supply (indicator 3.1.1).

HEALTH IMPACTS OF AIR POLLUTION

47,600 deaths

were attributable to anthropogenic air pollution (PM_{2.5}) in 2021 (indicator 3.2.1).



Fossil fuels (coal and liquid gas) contributed to 40.3% of these deaths (indicator 3.2.1).

US\$ 59.3 billion

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



In 2021, fossil fuels accounted for 46% of household energy supply, with biomass contributing 23%, and renewables and electricity, 19% and 12%, respectively. With this shift, 69% of household energy comes from dirty fuels (fossil fuels and biomass) (indicator 3.1.2).



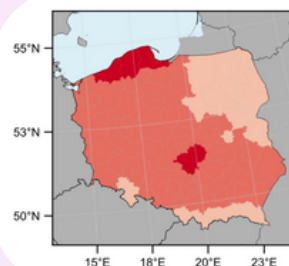
Notably, from 2000 to 2021, the share of energy coming from renewables decreased from 28% to 19%, while the share from biomass increased from 13% to 23% (indicator 3.1.2).

Vulnerability to vector-borne disease

There is a rising trend in tick climatic suitability. *Ixodes ricinus* ticks are the dominant European tick species associated with the transmission of pathogens, including for *Borrelia burgdorferi* causing Lyme disease and tick-borne encephalitis.



Poland 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 0.70 months from 5.06 to 5.77 months (indicator 1.3.6).**



Absolute change (month) of *Ixodes ricinus* climatic suitability between 1951-1960 and 2013-2022**

-1.18 - -0.82
-0.82 - -0.47
-0.47 - -0.01
-0.01 - 0.01
0.01 - 0.58
0.58 - 0.94
0.94 - 1.29

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 Daalen 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)

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