

LANCET COUNTDOWN ON HEALTH AND CLIMATE CHANGE DATA SHEET 2024

Health and climate change in Italy

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 Italy, 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.



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 attributable to dietary risks 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.



From 2014-2023, each infant and adult over age 65 was exposed to an average of 18 heatwave days per year. In 2023 alone, the same groups were exposed to over 26 heatwave days per year (indicator 1.1.1).



From 2014-2023, the total number of heatwave days experienced annually by children under the age of one was 2.4x the equivalent demographic from 1986-2005. Adults over age 65 experienced 3.3x heatwave days across the same timeframe. (indicator 1.1.1).





In 2013-2022, Italy's overall mean increase in heat-related deaths was estimated to be 30 deaths per 100,000 inhabitants rising from approximately 129 in 2003-12 to 159 in 2013-22 (Europe indicator 1.1.4).**



ECONOMIC IMPACT OF HEAT

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

USS4.4 billion was the potential income loss from labour capacity reduction due to heat in 2023 (indicator 4.1.3).



Over 250 million potential labour hours were lost due to heat exposure in 2023, an increase of 90% from the 1990-1999 annual average (indicator 1.1.3). Construction workers were hit the hardest, seeing 38% of the potential hours lost (indicator 1.1.3) and 36% of the potential income losses in 2023 (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.

Leishmaniasis is a climate-sensitive zoonotic disease caused by Leishmania parasites and transmitted by female Phlebotomine sandflies. Cutaneous (most common and causes skin sores) and visceral (rarer, systemic, and with high fatality) leishmaniasis, caused by Leishmania infantum, are endemic in parts of Europe

leishmaniasis (Europe indicator 1.3.5).**

In Italy, the number of regions predicted to be suitable for leishmaniasis increased from 2001-10 to 2011-20, with new

areas in the north of the country identified as suitable for



Leishmania infantum icted climatic suitab Suitable only in 2011-2020 Suitable in 2001-2010 and 2011-2020 Suitable only in 2001-2010 uitable in both periods

CLIMATIC SUITABILITY FOR LEISHMANIA INFANTUM BY NUTS3 **REGIONS IN ITALY. PINK-SHADED AREAS REPRESENT SUITABILITY** CHANGE BETWEEN 2001-10 AND 2011-20.*

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.



US\$145 billion was the monetised value of premature mortality due to anthropogenic air pollution in 2021 (indicator 4.1.4).

\$46bn

In 2022, Italy 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\$46 billion in fossil fuel subsidies in 2022 alone (indicator 4.3.3).

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, low carbon sources (including renewables) contributed 29% of electricity in Italy, representing an increase from 18% in 2000. The share from renewables alone increased from 2% to 19%. However, coal use remained relatively stable, decreasing only slightly from 9.7% in 2000 to 9% in 2022 (indicator 3.1.1).

Household energy contribution from fossil fuels decreased from 76% in 2000 to 56% in 2021. In the same period, renewables increased slightly from nearly zero to 3%, and electricity remained relatively stable at 19%. Heavily polluting biomass use increased from 4.7% to 21.4% (indicator 3.1.2).

Diets 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 0.39 CO₂e per person, 74% of total emissions using consumption-based accounting. In that year, production of red meat and dairy led to emissions of 0.3 CO₂e per person, accounting for 76% of all agriculture production-related emissions (indicator 3.3.1).



In 2021, over 36,500 deaths were attributable to excessive consumption of red meat and dairy, and nearly 74,000 deaths were associated with insufficient consumption of nutritious plant-based foods (including fruits, vegetables, legumes, wholegrains, nuts. Together, these accounted for 68% of all diet-related deaths that year (indicator 3.3.2).

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