

NEW ZEALAND

LANCET COUNTDOWN ON HEALTH AND CLIMATE CHANGE
DATA SHEET APRIL 2024

Health and climate change in New Zealand

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 2018, the Medical Journal of Australia (MJA)-Lancet Countdown report has provided regular, reliable national stocktakes on climate change and health for Australia. This document summarises key findings from the 2023 report of the MJA-Lancet Countdown, which reveal that:



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



Extreme weather: People are vulnerable to both the effects of sea-level rise and drought, threatening both direct health impacts as well as indirect impacts of population migration and displacement



Renewable energy: There has been a steady increase in the proportion of New Zealand's total energy supply coming from renewables

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 New Zealand.

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.



From 2018 to 2022, the average summer temperatures that people were exposed to were 1.0°C higher than the 1986–2005 baseline average (indicator 1.1.1).



2X

Children under the age of one experienced over twice as many heatwave days annually from 2013–2022 as they did from 1986–2005. On average, each infant is experiencing 10 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.

2.2 million potential labour hours lost due to heat exposure in 2022, 244% more than in 1991–2000 (indicator 1.1.4).

US\$19 billion potential associated income loss in 2022, equivalent to 4.2% of GDP (indicator 4.1.3).

FUTURE THREATS

2°C WARMING SCENARIO

In a scenario in which temperatures rise to 2°C of heating, heatwave exposure for over 65s is projected to be nearly 3x at mid-century (indicator 1.1.2).

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.

99%

In 2020, red meat and dairy accounted for 99% of all agricultural production-related emissions in New Zealand (indicator 3.3.1).



In 2020, 10,000 deaths were associated with insufficient consumption of nutritious plant-based foods (including fruits, vegetables, legumes, wholegrains, nuts and seeds) and overconsumption of red meat and dairy (indicator 3.3.2).

23%

23% of the aforementioned deaths were attributable to excessive consumption of dairy, red meat, and processed meat (indicator 3.3.2).

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. The health impacts of fuel-derived air pollution could be avoided by transitioning to zero-carbon energy systems. This would also contribute to climate change mitigation.



Over the last two decades, New Zealand has seen a steady increase in the proportion of its total energy supply coming from renewables, making up 25% in 2020. However, 8% of total energy still came from coal in the same year (Indicator 3.1.1).



New Zealand has seen small increases in electric road travel, but this still accounted for less than half of a percent in 2020 (indicator 3.1.3).



New Zealand had the 10th highest healthcare GHG emissions per capita (indicator 3.4).

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.

Sea level rise

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, nearly 47,000 people were living less than 1 metre above sea level in New Zealand (indicator 2.3.3).

Without sufficient adaptation measures, sea level rise could prompt relocation of vulnerable populations. The health impacts of human relocation will depend on the policies put in place to protect the health of migrant or immobile populations.