



Climate change is harming health: The need for urgent action

8 October 2025

James Renwick, Simon Hales, Rebecca Priestley, Alistair Woodward

Summary

Climate change is one of the best-recognised global threats to human health and wellbeing. In this Briefing we outline the major pathways linking climate and health and comment briefly on current national policies. We recommend community-led, intersectoral actions both to mitigate climate change through reducing greenhouse gas emissions and to adapt to the health impacts that can no longer be avoided.

Immediate, direct, observed impacts of extreme climate events on mortality and morbidity are increasingly attributable to climate change. Indirect impacts on health via altered distribution of infectious diseases and malnutrition are also important, but have complex non-climate causes. More indirectly still, climate change is leading to loss of livelihoods, migration and mental health problems via socio-economic mechanisms.

The current Government's policies are inadequate to address climate change risks. Policy solutions to health problems caused by climate change lie largely outside health care. The required transformational changes in agriculture, housing, energy and transportation systems are being resisted by industry interests in Aotearoa New Zealand and internationally.

While often framed as 'just' an environmental issue, climate change also has a profound impact on human health and wellbeing. Although this has been recognised for decades, it is often overlooked or downplayed. The health consequences of climate change were clearly outlined in a 2017 report from the Royal Society of New Zealand,¹ and since then, both the evidence and the urgency to act have only grown stronger.²

The most obvious impacts of climate change on human health are the ones we hear about on the news: injuries and deaths associated with extreme climate events. Increasing trends in the frequency and severity of extreme temperature and precipitation are partly attributable to climate change, and these are what impact people directly. In recent decades, about 37% of the 'excess mortality' associated with heat waves globally has been attributed to climate change.³

Droughts and heatwaves can lead to devastating fires, as observed in many parts of the world, resulting in loss of infrastructure and livelihoods, and 1.5 million deaths from air pollution globally.⁴ Floods in this country and elsewhere regularly result in loss of livelihoods, injuries and deaths, all of which are devastating for families and communities.⁵ Increasingly violent storms are wreaking more havoc and causing injuries and deaths beyond the direct effects of flooding. Recent evidence suggests that adverse health impacts of tropical cyclones can persist for months or years after the event.^{5 6}

Indirect effects of climate change can be as significant as those discussed above, including exposure to microbial contamination and carriers of new diseases.⁷ When and where it isn't raining, droughts are becoming more of a problem as the climate warms, damaging food production and limiting water availability, leading to malnutrition, increased disease susceptibility, and deaths.^{8 9} Moreover, as the climate warms, vector-borne diseases (such as dengue fever) have spread in latitude and altitude, affecting populations previously unexposed to those diseases.^{10 11}

Sea level rise (a result of the warming of ocean water and the melting of land ice) is relentlessly eating away at coastal land and leading to displacement of populations, as is already happening in Pacific Island nations. As the number of displaced people rises and the need for them to find a new home intensifies, this stresses the displaced populations and the infrastructure and politics of countries receiving such climate migrants.¹² Health services and other aspects of the operation of society can be disrupted, weakening the integrity of communities and countries.¹³

The health impacts of climate change are unevenly spread, as are most of the impacts of climate change. High-vulnerability regions are often some of the least well-resourced regions, deepening international inequalities.

All these negative impacts on communities, on livelihoods, and on the ability of societies to operate take a toll on our mental health. The stresses associated with seeing climate change impacts, alongside knowledge of our collective responsibility for making it happen, can be hard to cope with. 'Eco-anxiety' can be caused by observing the impacts of climate change, and knowing that worse is to come in future, unless we take action to cut emissions of greenhouse gases.^{14 15} Knowing that the world's political leaders are well informed about the hazards of climate change and at the same time seeing them taking no action results in a kind of cognitive dissonance, a doublethink that's required to accommodate the science and the lack of an effective policy response.

Should the global community fail to address climate change by reducing emissions of greenhouse gases, especially carbon dioxide, the impacts of climate change will only worsen. Currently, most of those impacts can be coped with, most of the time, at least in Aotearoa New Zealand. But there will come a point when adaptation is not possible, when the heat makes parts of the globe uninhabitable, or climate change takes away land from under our feet, displacing large populations.

On the other hand, transformative action to avoid the worst consequences of climate change would also have substantial health co-benefits, for example, by reducing urban air pollution.

In a unanimous decision issued on 23 July 2025, the International Court of Justice concluded that the production and consumption of fossil fuels "may constitute an internationally wrongful act...". Unfortunately, Aotearoa New Zealand's current Government is paying lip-service to climate change commitments, while rolling back mitigation policies and promoting the interests of polluting industries.¹⁶

Meanwhile, present adaptation policies pay insufficient attention to broader determinants of health and are likely to worsen health inequities. We agree with the Public Health Advisory Committee, who stated that: "Solutions for existential challenges like the climate crisis sit outside the health system, but can be 'win-win', with benefits for health equity, and for other positive social, economic, and environmental outcomes."¹⁷

What is new in this Briefing?

- Climate change is already harming human health in Aotearoa New Zealand and globally, through both *direct impacts* such as floods, heatwaves, and wildfires and *indirect impacts* such as food and water insecurity, and the spread of infectious diseases.
- Health impacts are unevenly distributed, with the greatest burden falling on vulnerable populations, deepening health and social inequalities.
- Current national policies in Aotearoa New Zealand on climate change mitigation and adaptation are inadequate and likely to worsen health outcomes and health inequalities.
- Industry interests have prevented transformational change in agriculture, energy and other sectors, in Aotearoa New Zealand and internationally.

Implications for policy and practice

- Treat climate change as a major and urgent public health issue, integrating health protection into intersectoral climate adaptation and mitigation plans.
- Recognise that threats to health from climate change cannot primarily be addressed by improved health care.
- Strengthen research, surveillance, and health system preparedness to monitor and respond to emerging climate-related health risks.
- Develop community-led strategies to resist private interests that are preventing meaningful responses to climate change in Aotearoa New Zealand and internationally.

Author details

[Prof James Renwick](#), School of Geography, Environment and Earth Sciences, Te Herenga Waka | Victoria University of Wellington

[Prof Simon Hales](#), Co-Director, Public Health Communication Centre, Department of Public Health, Tākou Whakaihu Waka, Pōneke | University of Otago, Wellington

[Prof Rebecca Priestley](#), School of Science in Society, Te Herenga Waka | Victoria University of Wellington

[Prof Alistair Woodward](#), School of Population Health, Faculty of Medical and Health Sciences, Waipapa Taumata Rau | University of Auckland

References

1. Royal Society Te Apārangi. Human Health Impacts of Climate Change for New Zealand - Evidence Summary. <https://royalsociety.org.nz/assets/documents/Report-Human-Health-Impacts-of-Climate-Change-for-New-Zealand-Oct-2017.pdf>
2. IPCC. Factsheet - Health: Climate change impacts and risks.

<https://tinyurl.com/ipcchealth>

3. Vicedo-Cabrera AM, Scovronick N, Sera F, et al. The burden of heat-related mortality attributable to recent human-induced climate change. *Nature Climate Change* 2021;11(6):492-500. <https://doi.org/10.1038/s41558-021-01058-x>
4. Xu R, Ye T, Huang W, et al. Global, regional, and national mortality burden attributable to air pollution from landscape fires: a health impact assessment study. *The Lancet* 2024;404(10470):2447-59. [https://doi.org/10.1016/s0140-6736\(24\)02251-7](https://doi.org/10.1016/s0140-6736(24)02251-7)
5. Wilson N, Broadbent A, Kerr J. Cyclone Gabrielle by the numbers – A review at six months. *Public Health Expert Briefing* 2023. <https://www.phcc.org.nz/briefing/cyclone-gabrielle-numbers-review-six-months>
6. Huang W, Yang Z, Zhang Y, et al. Hospitalization risk and burden for cause-specific cardiovascular diseases following tropical cyclones: A multicountry study. *Science Advances* 2025;11(31):eadr0800. <https://doi.org/10.1126/sciadv.adr0800>
7. WHO. Climate change, air pollution, pollen and health: technical brief. Geneva: World Health Organization. <https://doi.org/10.2471/B09412>
8. Owino V, Kumwenda C, Ekesa B, et al. The impact of climate change on food systems, diet quality, nutrition, and health outcomes: A narrative review. *Frontiers in Climate* 2022;4 <https://doi.org/10.3389/fclim.2022.941842>
9. Salvador C, Nieto R, Vicente-Serrano SM, et al. Public Health Implications of Drought in a Climate Change Context: A Critical Review. *Annual Review of Public Health* 2023;44:213-32. <https://doi.org/10.1146/annurev-publhealth-071421-051636>
10. Colón-González FJ, Sewe MO, Tompkins AM, et al. Projecting the risk of mosquito-borne diseases in a warmer and more populated world: a multi-model, multi-scenario intercomparison modelling study. *The Lancet Planetary Health* 2021;5(7):e404-e14. [https://doi.org/10.1016/s2542-5196\(21\)00132-7](https://doi.org/10.1016/s2542-5196(21)00132-7)
11. Zavaleta-Monestel E, Rojas-Chinchilla C, Molina-Sojo P, et al. Impact of Climate Change on the Global Dynamics of Vector-Borne Infectious Diseases: A Narrative Review. *Cureus* 2025 <https://doi.org/10.7759/cureus.77972>
12. Marcus H, Hanna L, Tait P, et al. Climate change and the public health imperative for supporting migration as adaptation. *Journal of Migration and Health* 2023;7:100174. <https://doi.org/10.1016/j.jmh.2023.100174>
13. Martins FP, Paschoalotto MAC, Closs J, et al. The Double Burden: Climate Change Challenges for Health Systems. *Environ Health Insights* 2024;18 <https://doi.org/10.1177/11786302241298789>
14. Stanley SK, Hogg TL, Leviston Z, et al. From anger to action: Differential impacts of eco-anxiety, eco-depression, and eco-anger on climate action and wellbeing. *Journal of Climate Change and Health* 2021;1 <https://doi.org/10.1016/j.joclim.2021.100003>
15. Pihkala P. Anxiety and the Ecological Crisis: An Analysis of Eco-Anxiety and Climate Anxiety. *Sustainability* 2020;12(19):7836. <https://doi.org/10.3390/su12197836>
16. Hales S, Prickett M, Kerr J, et al. Proposed Emissions Reduction Plan: A weak response to a weak target. *Public Health Expert Briefing* 2024. <https://www.phcc.org.nz/briefing/proposed-emissions-reduction-plan-weak-response-weak-target>
17. Public Health Advisory Committee. Determining our Future - Social, Cultural, Economic and Commercial Determinants of Wellbeing in Aotearoa New Zealand: Actions to improve our health and wellbeing. Wellington: Ministry of Health. <https://www.health.govt.nz/publications/determining-our-future>



Source URL:

<https://www.phcc.org.nz/briefing/climate-change-harming-health-need-urgent-action>