

Climate Change and Health

Health Professionals Joint Call for Action

Health professional groups **recognise human-caused climate change as an increasingly serious and urgent threat to health and health equity** in New Zealand and worldwide. In contrast, rapid and effective action on climate change represents **an important opportunity to improve health**, by avoiding negative health impacts and by realising significant health and equity co-benefits from well-designed climate policies.

We note that globally:

- Climate change is already contributing to global disease, disability and premature death – most seriously affecting people in poor countries, and the poorest within all countries.

We note that health threats for New Zealand include:

- Direct impacts – e.g. from high temperatures and other extreme weather events such as storms, floods and droughts, causing illness and injuries.
- Biologically-mediated impacts – e.g. changing patterns of infectious disease, global rises in food prices impacting on New Zealanders' nutrition.
- Socially-mediated impacts – e.g. loss of livelihoods, forced migration, economic vulnerability and increased risks of conflict.

We note opportunities for health through climate action, including:

- More walking, cycling and public transport reduces greenhouse gas (GHG) emissions, increases physical activity, and can reduce health-damaging air pollution and road traffic injuries.
- Healthy **food production** and diets that include more plants and fewer animal products could reduce agricultural GHG emissions, **while improving freshwater quality**, and reducing cancer and heart disease.
- Improving housing (e.g. insulation) reduces illnesses associated with cold, damp home environments, and also cuts GHG emissions from home heating.

These health co-benefits **could reduce the burden of ill-health from the leading causes of death and illness in New Zealand, such as cardiovascular disease, cancers, obesity and diabetes, with large cost savings to the health sector.** These direct benefits, along with indirect benefits from increased productivity of a healthier population, would help offset the early costs of addressing climate change.

We recognise that:

- Levels of health risk posed by climate change vary according to age, ethnicity, geographic location, and socioeconomic status.
- Those at highest health risk from climate change in New Zealand include Māori, Pacific peoples, children, elderly and low income people.
- Measures to address climate change have the potential to widen or reduce existing health inequities, depending on design and implementation.
- No country can solve climate change singlehandedly. Without taking rapid and sufficient action itself, New Zealand cannot effectively press for global emissions reductions.

Our vision is:

- A just transition to healthy people living in a healthy climate.

As health professional organisations we call for:

- A rapid, whole-of-society, transition to a **net-zero** GHG-emitting nation, **which is based in Te Tiriti o Waitangi** and designed to make the most of opportunities for health and creating a fairer society.
- **A national emissions reduction target of net zero greenhouse gas emissions by 2040. Different gases have different roles in this target, consistent with IPCC evidence about the role of long- and short-lived gases in the atmosphere and ocean and in achieving substantial reductions in the crucial next decade.**
- This target needs to be accompanied by robust interim targets **and emissions budgets** that fairly share the global **emissions** budget, with transparent, responsive monitoring of progress.
- Health sector planning to prepare for the locked-in health impacts of climate change, and rapidly adapting to a **net-zero emissions** future.
- Measures that prioritise and protect groups likely to be worst affected - Māori, Pacific peoples, children, elderly, and low income people.
- GHG emissions to be a key performance indicator for health sector organisations.
- Health (including equity) Impact Assessment (HIA) to be routinely undertaken to inform key climate-relevant policies.
- New Zealand to demonstrate leadership in promoting effective and fair global action to reduce GHG emissions.
- New Zealand to demonstrate leadership in protecting health from climate change in the climate-vulnerable Pacific region.

This call for action is supported by:

References

- Bennett H, Jones R, Keating G, Woodward A, Hales S, Metcalfe S. Health and equity impacts of climate change in Aotearoa-New Zealand, and health gains from climate action. *NZ Med J.* 2014;127:16-31. <http://www.nzma.org.nz/journal/read-the-journal/all-issues/2010-2019/2014/vol-127-no-1406/6366>
- Climate Vulnerability Monitor 2nd Edition: a guide to the cold calculus of a hot planet. DARA International and the Climate Vulnerable Forum, 2012. <http://daraint.org/climate-vulnerability-monitor/climate-vulnerability-monitor-2012/report/>
- Dhar D, Macmillan A, Lindsay G, Woodward A. Carbon pricing in New Zealand: implications for public health. *NZ Med J.* 2009;122:105-15. http://www.nzma.org.nz/_data/assets/pdf_file/0006/17799/Vol-122-No-1290-27-February-2009.pdf
- Haines A, McMichael AJ, Smith KR et al. Public health benefits of strategies to reduce greenhouse-gas emissions: overview and implications for policy makers. *Lancet.* 2009;374:2104-14. [http://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(09\)61759-1/fulltext](http://www.thelancet.com/journals/lancet/article/PIIS0140-6736(09)61759-1/fulltext)
- Hosking J, Jones R, Percival T, Turner N, Ameratunga S. Climate change: the implications for child health in Australasia. *J Paediatr Child Health.* 2011;474: 93-96. <http://onlinelibrary.wiley.com/doi/10.1111/j.1440-1754.2010.01699.x/full>
- Howden-Chapman P, Chapman R, Hales S, Britton E, Wilson N. Climate Change and Human Health: Impact and Adaptation Issues for New Zealand. In: Nottage RAC, Wratt DS, Bornman JF, Jones K (eds). *Climate Change Adaptation in New Zealand: Future Scenarios and Some Sectoral Perspectives.* Wellington: New Zealand Climate Change Centre, 2010. [http://www.nzclimatechangecentre.org/sites/nzclimatechangecentre.org/files/images/research/Climate%20Change%20Adaptation%20in%20New%20Zealand%20\(NZCCC\)%20high%208.pdf](http://www.nzclimatechangecentre.org/sites/nzclimatechangecentre.org/files/images/research/Climate%20Change%20Adaptation%20in%20New%20Zealand%20(NZCCC)%20high%208.pdf)
- Howden-Chapman P, Matheson A, Viggers H et al. Retrofitting houses with insulation to reduce health inequalities: results of a clustered, randomised trial in a community setting. *BMJ.* 2007;334:460-464. <http://www.bmj.com/content/334/7591/460>
- Jones R, Bennett H, Keating G, Blaiklock A. Climate change and the right to health for Māori in Aotearoa/New Zealand. *Health and Human Rights Journal.* 2014;16:54-68. <http://www.hhrjournal.org/wp-content/uploads/sites/13/2014/06/Jones2.pdf>
- Macmillan A, Connor J, Witten K, Kearns R, Rees D. The societal costs and benefits of commuter bicycling: simulating the effects of specific policies using system dynamics modeling. *Environ Health Perspect.* 2014;122:335-344. <http://ehp.niehs.nih.gov/1307250/>
- McCoy D, Montgomery H, Sabaratnam A, Godlee F. Climate change and human survival. *BMJ.* 2014;348:g2351. <http://www.bmj.com/content/348/bmj.g2351>
- McMichael AJ, Campbell-Lendrum C, Kovats S, Edwards S, Wilkinson P et al. Global Climate Change. In: Ezzati M, Lopez AD, Rodgers A, Murray CJ (eds). *Comparative quantification of health risks: global and regional burden of disease due to selected major risk factors.* Geneva: World Health Organization, 2004. <http://www.who.int/publications/cra/chapters/volume2/1543-1650.pdf?ua=1>
- Metcalfe S, Woodward A, Macmillan A, Baker M, Howden-Chapman P, et al, New Zealand Climate and Health. Why New Zealand must rapidly halve its greenhouse gas emissions. *NZ Med J.* 2009;122:72-95. http://www.nzma.org.nz/_data/assets/pdf_file/0010/17785/Vol-122-No-1304-09-October-2009.pdf

Phipps R, Randerson R, Blashki G. The climate change challenge for general practice in New Zealand. *NZ Med J.* 2011;124:47-54. <http://www.nzma.org.nz/journal/read-the-journal/all-issues/2010-2019/2011/vol-124-no-1333/view-hipps>

Smith KR, Woodward A, Campbell-Lendrum D, Chadee D, Honda Y, et al. Human Health: Impacts, Adaptation, and Co-benefits. In: *Climate Change 2014: Impacts, Adaptation and Vulnerability. Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change* [Field CB, Barros VR, Mastrandrea MD, Mach KJ, et al. (eds.)]. Cambridge University Press, Cambridge, UK and New York, NY, USA, 2014. http://ipcc-wg2.gov/AR5/images/uploads/WGIIAR5-Chap11_FGDall.pdf

Watts N, Adger WN, Agnolucci P, Blackstock J, Byass P, et al; Montgomery H, Costello A; for The 2015 Lancet Commission on Health and Climate Change. Health and climate change: policy responses to protect public health. *Lancet.* 2015 Jun 24. pii: S0140-6736(15)60854-6. doi: 10.1016/S0140-6736(15)60854-6. [http://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(15\)60854-6/](http://www.thelancet.com/journals/lancet/article/PIIS0140-6736(15)60854-6/)

Wilson N, Nghiem N, Ni Mhurchu C, Eyles H, Baker MG, Blakely T. Foods and dietary patterns that are healthy, low-cost, and environmentally sustainable: a case study of optimization modeling for New Zealand. *PLoS ONE.* 2013;8:e59648. doi:10.1371/journal.pone.0059648. <http://www.plosone.org/article/info%3Adoi%2F10.1371%2Fjournal.pone.0059648>

Woodward A, Smith KR, Campbell-Lendrum D, Chadee DD, Honda Y, et al. Climate change and health: on the latest IPCC report. *Lancet.* 2014;383:1185-9. [http://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(14\)60576-6/fulltext](http://www.thelancet.com/journals/lancet/article/PIIS0140-6736(14)60576-6/fulltext)

World Health Organization and World Meteorological Association. *Atlas of Health and Climate.* Geneva: WHO, 2012. <http://www.who.int/globalchange/publications/atlas/en/index.html>