

Summary of Lancet Countdown and MJA-Lancet reports

BRIEFER FOR MPs/PARLIAMENTARY CANDIDATES

SUMMARY

- Climate change is the biggest global health threat of the 21st Century
 - [The Lancet Countdown: global analysis](#)¹, [MJA-Lancet countdown: Australian context](#)²
 - 5 key indicators: climate change impacts, exposures and vulnerabilities; adaptation, planning and resilience for health; mitigation actions and health co-benefits; economics and finance; public and political engagement.
 - Health effects are already being experienced and projected to worsen.
 - Despite Australia's vulnerability to the threats of climate, we lag behind other high income countries due to policy inaction and a slow transition to renewables.
 - Australia has the technical knowhow - climate action is an opportunity to protect human lives and health.
-

INTRODUCTION

The Lancet Countdown: tracking progress on health and climate change is an independent, global monitoring system, dedicated to monitoring the health impacts of climate change and the global response to climate change. A collaboration between the UN, leading academic institutions and intergovernmental agencies, the *Lancet* Countdown tracks 41 indicators across five domains to monitor global progress in climate change. In 2018, the Medical Journal of Australia (MJA) and Lancet collaborated to produce an Australian-specific Countdown to understand where Australia stand, compared to the rest of the world in these domains, and how we are responding to the threat climate change is posing to the health of Australians.

Climate change impacts, exposures and vulnerability

With increasing global temperatures, there has been increased vulnerability to heat stress around the world, with increased exposure to heatwaves. Health risks associated with heat exposure include heat stress, cardiovascular disease and renal disease. An estimated A\$5.8 billion are lost per year within Australia as a result of heat stress related loss of productivity. It is estimated that in WA by 2070, heat exposure will make it dangerous to perform manual labour on 15-26 days per year.

Climate change intensifies drought, resulting in reduced crop yields, food insecurity and malnutrition, and remains one of the most dangerous determinants of premature mortality. In Australia, wheat yield potential declined 27% between 1990-2015. There are other health serious risks associated with a hotter climate, with higher mean annual temperatures predicting elevated suicide rates in Australia's warmer states and territories. This trend reflects an extreme manifestation of trauma, as the frequency, duration, intensity and unpredictability of weather-related hazards result in psychological suffering.

Adaptation planning and resilience for health

As the health impacts of global warming are increasingly evident, and predicted only to intensify with future warming, adaptation strategies which improve community resilience are necessary to safeguard our health. The responsibility for climate change adaptation planning falls across all jurisdictions in Australia—local (city council), state/territory and national. The role of the healthcare sector at the forefront of adaptation is under-recognised both globally and throughout Australia. The Health and Human Wellbeing Climate Change Adaptation plan for Queensland is the first of its kind in Australia. It comprehensively addresses the impacts of climate change on health and wellbeing, identifying gaps and barriers to adaptation, opportunities and co-benefits, as well as a pathway to respond to these.

To enhance resilience in a changing climate, healthcare systems must be able to detect health emergencies early and be prepared to respond to them. Health-related infrastructure is key to this, and while the role of the healthcare sector in response to emergency service coordination is understood around Australia, more work needs to be done to ensure long term resilience to a changing climate and the capacity to cope with less acute events.

Mitigation actions and co-benefits

The near-term consequences of climate change are closely linked to the success of mitigation efforts globally. Mitigation also has immediate co-benefits including reducing air pollution and increasing health related behaviours.

Globally, 90% of people do not breathe safe air, with Australia far from immune. Between 2010 and 2016 air pollution worsened in almost 70% of cities worldwide, with impacts for cardiovascular and respiratory health. Particulate matter was responsible for 2.9 million premature deaths in 2019, and coal was responsible for 460,000 of these. Globally, since the 2017 Lancet Countdown report there has been a shift of investment towards clean energy technology, with accelerating growth in new low-carbon power generation, and a downward trend in global demand for coal. Australia stands as one of the world's largest coal exporters, and tracks behind countries such as Germany and the UK with only 17% of our electricity generation from renewable sources and 15% from low carbon sources in 2015. Additionally, Australian cities have a high proportion of private car driving trips. Shifting to active transport improves air quality, and has added health benefits towards reducing obesity through promoting increased physical activity.

Economics and finance

The consequences of climate change come with clear costs, both to human health and the economy, including increased healthcare costs and decreased workforce productivity.¹ The reduction of greenhouse gas emissions in line with the Paris Agreement could see a 2:1 return on investment through associated improvements in health alone. The clear economic and health benefits of transitioning away from fossil fuels, is highlighted by the funds divested from fossil fuels. Australia has the most divestments per capita of any developed nation. Over 140 organisations including pension funds, universities, medical colleges and corporations have committed to divesting from fossil fuels, contributing to the \$428 billion committed worldwide.

The Lancet Countdown report outlined that adequately pricing carbon could be the single most important intervention in responding to climate change. In 2018 carbon pricing instruments covered 13.1% of global anthropogenic green-house gas emissions. The revenue of carbon pricing is increasingly being allocated to funding climate change mitigation activities. With no national or state based carbon price, Australia stands at odds with global trends, and is missing out on the economic, environmental and health benefits.

Public and political engagement

Despite a 78% increase in newspaper coverage of health and climate change globally, there has been a 50% decline in Australian media stories between 2007-2017. Consequently, many Australians are being missing out on vital current information, leading to lacklustre community support and political will nationally.

CONCLUSION

Indicators and data presented in the 2018 *Lancet* countdown report highlight further need for accelerated climate action globally. Given the impacts of climate change are already being experienced across Australia, it should be of concern that the nation has gone backwards across a number of indicators, now lagging behind other high-income countries such as Germany and the UK. However, Australia has the knowledge and skills to step-up our climate response. As a nation, Australia has an enormous opportunity and an imperative to take action on climate change, to protect the human health and livelihoods.

Full texts:

1. Watts et al (2018), The 2018 report of the Lancet Countdown on health and climate change: shaping the health of nations for centuries to come. *Lancet*; Dec8;392(10163):2479-2514. DOI: 10.1016/S0140-6736(18)32594-7.

2. Zhang et al (2018), The MJA–Lancet Countdown on health and climate change: Australian policy inaction threatens lives. *Med J Aust*; 209 (11): 474. DOI: 10.5694/mja18.00789