Northern Territory Election Briefing:

Heat, Climate Change, Health and the Need for Urgent Action



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Introduction

Extreme heat is a critical and growing health issue for Territorians. Although its effects are difficult to detect, there is strong evidence that heat causes premature illness and death^{1,2}. Urgent action is required in the Northern Territory (NT) to reduce the community health impacts of extreme heat and climate change.

The health impacts of extreme heat

Heatwaves have killed more Australians than all other extreme weather events combined³. Extreme heat causes increased illness and death related to heat stroke, as well as worsening heart, lung and kidney disease⁴. Deaths attributable to heat increases substantially with each degree of temperature increase in the external environment^{5,6}. Extreme heat has also been associated with increased rates of mental health admissions and interpersonal violence^{7,8}.

The NT is among the most heat-vulnerable areas of Australia. The last two years have seen record breaking extreme heat events that far exceeded predictions of global warming^{9,10}. Throughout December 2019 and January 2020 the mean maximum temperatures were around 4.0°C above the long-term average, with Katherine recording an extraordinary 54 days of 40°C or higher in 2019¹⁰.

Ongoing climate change and global warming mean that Territorians can expect to experience more frequent, severe and prolonged extreme heat events^{5,6,9}. Extreme heat conditions can also cause key infrastructure to fail and are associated with high demands on the health system and other essential services¹¹.

The elderly, people who live in remote regions and those who are experiencing socio-economic disadvantage, homelessness and pre-existing mental or physical illness are more vulnerable to the health impacts of extreme heat. As a result, many Aboriginal and Torres Strait Islander individuals and communities are significantly vulnerable to the health impacts of extreme heat^{1,12}. Urgent implementation of strong public health measures have the potential to significantly reduce the heat related health impacts for all NT residents^{1,13}.

Policy recommendations

1. URGENTLY IMPLEMENT A HEAT-HEALTH ACTION PLAN AND HEALTH RESPONSE STRATEGY FOR THE NT

Comprehensive Heat-Health Action Plans can reduce illness and death related to extreme heat events^{1,2}. Heat-Health Action Plans establish a coordinated approach to safeguard community health from extreme heat and manage the associated demands on the health system and other essential services. These plans should incorporate: early warning systems based on meteorological data; timely public health and medical advice; improvements to housing, such as energy security and insulation, to reduce thermal stress; urban planning to ensure access to public shade, greenspaces and cool spots; and ensuring the health system and social services are equipped and prepared to act with specific provisions to support vulnerable groups^{1,2,14}. The City of Melbourne's Heatwaves and Homelessness Strategy and South Australia's vulnerable persons contact list are examples of specific provisions targeted to support vulnerable community members².

Heatwave response plans already exist across a number of Australian jurisdictions. In 2016, health, climate and policy experts from around Australia called for urgent multi-sectoral government action on extreme heat¹⁵. Suitable heat health-action plans must be implemented as a matter of urgency in the NT to build heatwave preparedness and resilience, and to avoid excess mortality and service-strain related to heat in the coming decades.

Policy recommendation:

- The NT Government should urgently implement a comprehensive Heat-Health Action Plan
- The NT Government should commit to urgently upgrade infrastructure to enable all people to have access to safe environments during extreme heat events, including by: addressing extreme levels of homelessness; ensuring public housing is equipped with adequate cooling infrastructure; and where possible, rooftop solar is installed on all public housing, and ensuring energy security for all NT residents.

2. A HEALTH SYSTEM THAT LEADS THE WAY TOWARDS A HEALTHY AND SUSTAINABLE FUTURE

The health care sector contributes 7% of Australia's greenhouse gas emissions¹⁶. There are significant opportunities to reduce greenhouse gas emissions within the health care sector and simultaneously achieve efficiency gains and cost savings. Given the imminent threat that global warming and climate change pose to human health, it is of critical importance that the health sector be used as an example of the opportunities to transition to a healthy, sustainable and more prosperous future^{16,17}. In the United Kingdom, approximately \$160 million of annual energy cost savings are being realised through energy, water and waste efficiency¹⁸.

Policy recommendation:

The NT government should establish a Health Sector Sustainability Unit to:

- provide leadership and direction to the healthcare sector to implement sustainability initiatives
- drive rapid decarbonisation within the health sector as an example for the entire economy

The NT government should:

- mandate all public sector healthcare services join the Global Green and Healthy Hospitals network and
- fund a position to engage NT health services in accessing and utilising tools, resources, and guidance from the global network

3. IMPLEMENT URGENT CLIMATE CHANGE ADAPTATION AND MITIGATION TO SAFEGUARD HEALTH

Climate change and global warming pose an imminent threat to public health. Climate change is already leading to more frequent and severe extreme weather events, including extreme heat events, bushfires, floods and storms, as well as threatening food security, water security and increasing the risk of various infectious diseases including gastroenteritis, dengue and other vector-borne diseases^{5,6,19}. There is now increasing evidence that climate change and global warming are accelerating^{20,21}. The 2019-20 Australian Black Summer Bushfire Crisis and associated smoke haze event occurred at 1.1°C of average global warming above the pre-industrial era²². If we continue on a business-as-usual trajectory, 4°C of average global warming could have occurred by 2100 - within the lifetime of those born today²⁰. This level of warming would threaten the viability of many NT communities. As health professionals, we urge an immediate response to the climate crisis to safeguard community health. This should include the cessation of all fossil fuel extractive industries in the NT and rapid transition to a decarbonised economy. Such a transition would not only reduce the potentially catastrophic health and economic impacts of climate change, but would create new jobs and economic opportunities⁵.

Policy recommendation:

- The NT Government should adopt a Climate Change Act for the Northern Territory²³ to facilitate rapid decarbonisation and limit the impacts of climate change on human health
- The NT government should support an urgent reduction in greenhouse house gas emissions and transition to a decarbonised economy.

Conclusion

Extreme heat poses a significant threat to the NT community, with the public health impacts set to continue to increase due to the effects of ongoing global warming and climate change. A strong public health response through the implementation of a comprehensive NT Heat-Health Action Plan has the potential to dramatically decrease the community health impacts, especially for those who are most vulnerable. Urgent climate change mitigation is imperative to reduce ongoing global warming and climate change the associated risks to human health.

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Appendix A: About the Climate and Health Alliance

The Climate and Health Alliance (CAHA) is Australia's national peak body on climate change and health.

CAHA is an alliance of organisations within the health sector working together to raise awareness about the health risks of climate change and the health benefits of emissions reductions.

The membership of CAHA includes a broad cross-section of health sector stakeholders with 40+ member organisations, representing healthcare professionals from a range of disciplines, as well as healthcare service providers, institutions, academics, researchers, and consumers. Information about CAHA's membership and governance can be found at caha.org.au.

The Climate and Health Alliance has produced a significant number of reports and publications to assist policymakers and inform health stakeholders and the wider community understand the links between climate change and health, and to guide decisions regarding policy and solutions.

These include the Human Health and Wellbeing Adaptation Plan for Queensland; Framework for a National Strategy on Climate, Health and Well-being for Australia and the preceding Discussion Paper; a Review of Health and Climate Change Literature for the City of Melbourne; a joint report on divestment Healthy Investments (with Doctors for the Environment); the seminal report Coal and Health in the Hunter: Lessons from One Valley for the World; a multi-stakeholder Joint Position Statement and Background Paper on Health and Energy Choices; a joint report 'Our Uncashed Dividend' (with The Climate Institute) on the health benefits of reducing greenhouse gas emissions; Discussion Paper for the Roundtable on the Health Implications of Energy Policy and a subsequent Briefing Paper on the same topic.

CAHA has produced a film on the risks to health and climate from coal and gas, The Human Cost of Power; and has conducted many innovative and ground breaking public events, including a series of Greening the Healthcare Sector Forums, including several Healthcare Environmental Sustainability Forums with Western Health and Institute for Hospital Engineers Australia; the Our Climate Our Health Seminar, featuring an innovative thought experiment: Imagining 2030 as a healthy low carbon world; a Public Seminar on Protecting Health from Climate Change (with University of NSW); and a national Forum on Climate and Health: Research, Policy and Advocacy. CAHA also contributes to many conferences, community dialogues, and forums, both nationally and internationally on these issues.

For further information see caha.org.au