

06/08/2019

Professor Weeramanthri
The Project Director
Climate Health WA Inquiry
Public and Aboriginal Health Division
PO Box 8172, Perth Business Centre WA 6849

Dear Professor Weeramanthri,

RE: AHPA (WA Branch) Response to the Inquiry into the impact of climate change on health in WA

I write on behalf of the Australian Health Promotion Association Ltd (AHPA®) (WA Branch), to support the proposed introduction of a climate change framework for Western Australia (WA) supporting the mitigation of population health impacts of climate change. The proposed framework aligns with the key recommendation under *Strategy 1 – Commit and collaborate to address major public health issues* of the Sustainable Health Review highlighting the necessity for mitigation and adaptation strategies to address to the health impacts and risks of climate change¹.

The Australian Health Promotion Association Ltd (AHPA®) is the peak body for health promotion in Australia, and the only dedicated professional association specifically for people interested or involved in the practice, research and study of health promotion. It aims to advance the health of all people in Australia through leadership, advocacy and support for health promotion action in practice, research, evaluation and policy. AHPA advocates for the development of healthy living, working and recreational environments for all people. It also supports the participation of communities and groups in decisions that affect their health. The Association supports more than 1000 members and subscribers, from government departments and agencies, universities, non-government organisations, community-based organisations and groups, private companies and industries, and students.

Health promotion not only embraces actions directed at strengthening the skills and capabilities of individuals but also actions directed towards changing social, environmental, political and economic conditions to alleviate their impact on populations and individual health. The World Health Organization defines health promotion as the process of enabling people to increase control over the determinants of health and thereby improve their health². Creating environments that make the healthier, safer choice easier for people is a core health promotion approach.

AHPA WA would like to provide support for and interest in being part of the consultation and development of forthcoming actions from this inquiry addressing the health impacts of climate change and is willing to contribute its professional support, advocacy and knowledge relating to health promotion and prevention in future action. We would like to highlight the range of health promotion related research published in a special issue³ and virtual issue⁴ of the Health Promotion Journal of Australia which may be of interest.

AHPA WA's key recommendations relating to this inquiry are:

Leadership and Governance

- Establish expert Ministerial level governance which facilitate horizontal and vertical collaboration in implementing climate change and health initiatives including health promotion stakeholders.
- Identification of consultative processes to collaborate proactively with vulnerable populations to enhance their adaptive capacity to the health impacts of climate change.
- Ensure a suitable funding envelop alongside policy support for health promotion research and action to mitigate the health impacts of climate change.
- Ensure that Health Promotion is a key pillar of the WA Government Climate Health response.

Research and Data

- Support WA's health and climate research capacity to evaluate specific health threats, priority needs and to monitor trends and opportunities for maximising multi-sector benefits.
- Evaluate economic savings from additional health benefits associated with emissions reductions strategies
- Establish a monitoring and evaluation framework that focusses on the health impacts of climate health, including disease outbreak, impacts of air quality and heat, mental health, food security and housing.

- Identify of measures to ensure long term food security for WA that supports rural and remote communities and vulnerable populations.

Health-Promoting and Emissions-Reducing Policies

- Develop policies that reduce risks to people's health and well-being while simultaneously reducing greenhouse gas emissions
- Promote healthy, low emissions lifestyles through provision of funding for public education programs
- Avoid adverse health impacts from industry and infrastructure projects by incorporating health impact assessments in the evaluation of project applications

Emergency and Disaster-preparedness

- Support identification of vulnerable populations and gaps in infrastructure in order to adequately prepare for the impacts of climate change.
- Development of occupational health and safety guidelines to mitigate exposure to environmental impacts of climate change

Supporting Healthy and Resilient Communities

- Develop measures to increase the capacities of communities to anticipate their climate risks and reduce impacts on health and well-being in their communities.
- Create population risk mitigation plans supporting vulnerable populations
- Engage vulnerable communities and health promotion experts to target mental health needs associated with the health impacts of climate change, especially rural and remote communities and primary producers.

Education and Capacity Building for A Sustainable and Climate-resilient Health Sector

- Resource the specialist health promotion and prevention workforce to support climate change mitigation strategies a focus on health equity
- raise awareness of the health impacts of climate change within the health workforce to create a low carbon, environmentally sustainable, climate-resilient health sector through training and education

Climate change and health

Climate change is categorised by a change in climate conditions, more evident in the mid to late 20th century onwards⁵. These changes are exacerbated climate conditions that have been seen across the world including increased frequency and severity of weather-related events, such as droughts, floods, and, fires. Climate change has become a global concern, with the issue appearing on many political agendas and becoming a focus of various inquiries, such as this one. Australia has the world's most variable climate and further severe weather-related events will continue to affect population health. The Lancet Commission on Health and Climate⁶ persuasively argued that climate change not only the greatest challenge for the 21st century but also our greatest global health opportunity. Implementation of the recommendations outlined in the Commission see better health through investment in public health and climate change research, transition to greener cities to support and promote lifestyles that are healthy for people and the planet and reviewing the cost savings from preventing poor health through action on climate change⁷. The Shanghai Declaration on Promoting Health in the 2030 Agenda for Sustainable Development⁸ suggests a critical and evolving role for health promotion in the future. It noted "*We face a new global context for health promotion. People's health can no longer be separated from the health of the planet and economic growth alone does not guarantee improvement in a population's health.*" Climate change is a significant health issue for our population⁹; and the Health Promotion workforce, with its flexible and transferable skills and foundations in social justice, equity and public health is well placed to support action on climate change.

Vulnerable populations

Populations vulnerable to the health effects of climate change, include people with low socio-economic status, people located regionally and remotely, Aboriginal and Torres Strait Islander peoples, the elderly and children. Exposure and sensitivity to the health effects of climate change as well as their capacity to adapt their living circumstances all contribute to the vulnerability of these groups. Western Australians living regionally and remotely, including many Aboriginal and Torres Strait Islander communities, are susceptible to the impacts of extreme weather conditions such as droughts, cyclones and flooding. Damage to infrastructure, a major loss of food products and a reduction in accessibility of already limited health services may be a result of these events¹⁰. These vulnerable population groups must be supported and collaborated with to find solutions and build resilience¹¹.

Emerging and re-emerging infectious diseases

The WHO estimates that between 2030 and 2050, climate change is expected to cause approximately 250,000 additional deaths per year, resulting from malnutrition, malaria, diarrhoea and heat stress¹². In addition, the direct costs to health as a result of these deaths is expected to be between US 2-4 billion/year by 2030. These costs exclude health determining sectors such as agriculture, water and, sanitation. The outbreak and spread of infectious diseases are of concern when globally, severe weather-related events are increasing in frequency. Australia has effective health systems and infrastructure in place as well as access to vaccines, infectious diseases are currently not a major contributor to burden of disease. Though infectious diseases are not a leading cause of disease burden currently, the Australian Infectious Diseases Research Centre has stated that new infections are continuing to emerge as a result of environmental disruptions¹³. Recent examples include multi drug resistant tuberculosis, dengue, pathogenic *E. coli* and, malaria. These diseases and more will continue to emerge if there are continued environmental disruptions such as floods, droughts and, fires. WA will need to have an effective responses teams to reduce and manage these disease outbreaks when severe weather events occur, as well as surveillance to identify and predict severe weather-related events. As social and economic factors play a significant role in determining the risk of infectious diseases, vulnerable populations in WA will also need to be identified and supported. There is an ongoing and critical role for the CDCD in monitoring and evaluation the spread of infectious diseases in WA and the need for investment in research, surveillance and monitoring of climate change and public health¹⁴

Air quality

Climate change in Australia is expected to increase mortality and morbidity rates from air pollution, bushfires and dust storms¹⁵. The extreme weather-related events such as bushfires and dust storms are expected to increase as a result of climate change. With these increases, bushfires and dust storms can cause extreme air pollution which can lead to an increase in mortality and morbidity rates. A study examining the morbidity and mortality rates for bushfires and dust storms in Sydney from 1994 – 2007 found there was increases in mortality for both weather-related events¹⁶. Both events are exacerbated by higher temperatures. Extreme high temperatures also contribute to increased levels of ozone and other pollutants in the air that exacerbate cardiovascular and respiratory disease¹⁷. This contributes directly to the deaths of people living with cardiovascular and respiratory disease, particularly vulnerable populations. With the increase in intensity and frequency of higher air temperatures, heat stress presents as a further health issue. Heat stress will take a greater toll on those who are more vulnerable, including young children and, the elderly population. Furthermore, increases in extreme heat events will create a health hazard for those who are physically active and for those who work outside with limited access to cooling systems and infrastructure to reduce their heat exposure¹⁸. Mitigation should consider not just minimising impact but consider long term impacts, such as how interventions to improve air quality can result in local and short-term health benefits¹⁹.

Food security

Food security is the state where all people, at all times, have access to foods that allow them to live a healthy and active life²⁰. This includes having social, physical and economic access to food that is safe, sufficient and nutritious. Therefore, food security is essential to a fulfilling life. Food security can be described at an individual or national level and, can be associated with significant implications if it is not met. Food insecurity has been shown to impact academic performance and social skills in children²¹, and has been found to be a strong predictor of health care utilisations and costs incurred by adults²². WA produces the most grain in Australia, and contributes significantly to Australia's meat and livestock, dairy, wool, horticulture and honey products²³. Australian farmers supply 93% of Australia's domestic food supply²⁴ and Australia also exports approximately 65% of agriculture produce overseas²⁵, with the biggest exports being beef, wheat and other meats²⁶. Given a significant contribution of Western Australia to the agricultural industry in Australia, climate change and natural disasters in Western Australia may threaten food security at a national level in Australia and at an international level.

Recent natural disasters in Australia have demonstrated the significant impact on food supply. Cyclones Larry, Yasi and Olwyn created significant disruption in Australia's fruit supply^{27,28}. Cyclone Olwyn also impacted on Carnarvon's water supply with residents were left without electricity and water²⁹. WA has also experienced bushfires and droughts in recent years, which may also threaten the state's agricultural production. Bushfires that destroyed properties in Yarloop and Waroona in 2016 have affected the soil quality in the area, with some farmers fearing that the soil quality could be affected for decades³⁰. Additionally, large areas of northern WA experienced serious to severe rainfall deficiencies, including the north-eastern Gascoyne and western Pilbara³¹. Parts of southern WA also experienced serious to severe rainfall deficiencies, including areas of the South West and Great Southern²⁵. This lack of rainfall has the potential to seriously affect WA's agricultural production. These natural disasters impact on our ability to ensure food security within our populations and impact on health. Flooding and bushfires also prevent fresh produce and

other food supplies from being delivered to regional and rural areas. Food to these areas is often delivered via road, and road closures as a result of flooding or fire can delay the delivery of food, which places these communities at risk of food insecurity.

Mental health and wellbeing

Natural disasters and climate change can significantly impact on people's mental health and wellbeing. Post-traumatic stress is the most commonly reported mental health issue following a natural disaster, followed by depression, substance misuse and anxiety³². People often experience high levels of stress following a natural disaster, prolonged levels of which can leave people vulnerable to mental health issues³³. Following a natural disaster, people may also experience unemployment or be displaced from their homes and this can contribute to depression³⁴. Australian farmers severely hit by drought have reported significantly higher rates of mental health problems and lower mental health wellbeing scores³⁵. Prolonged exposure to drought may lead to feelings of hopelessness in farmers, and hopelessness has been associated with depression and suicide³⁶. Extreme drought and other natural disasters can also contribute to a loss of income for farmers, contributing to financial insecurity; added stress and further impacts on mental health and wellbeing. Due to the nature of their work often placing them in regional and rural locations away from communities, farmers are also at risk of experiencing social isolation, another factor effecting mental health and wellbeing³³. Mental health issues have a significant impact on the economy. In 2014 it was estimated that the cost of severe mental illness in Australia was \$56.7 billion per year, and in 2015-16 it was estimated that the cost of mental health illness on the workplace was \$12.8 billion³⁷. If the severity of natural disasters and weather-related events continue in Australia, it is expected that the amount of people experiencing poor mental health or mental illnesses will rise, along with an expected increase in the costs to the health system of Australia.

Secure Shelter

In Australia, climate change is expected to impact on buildings and the broader built environment in several ways. These impacts will be seen through increased frequency and intensity of extreme weather events, such as cyclones and mid-latitude storms, leading to storm surge, flooding, wind damage and coastal erosion. These effects are further amplified when they occur in conjunction with rising sea levels, particularly around the vulnerable coastlines of north-west WA and further south along Geographe Bay³⁸. Climate change-related damage to community housing within localised coastal settlements has also been reported in several localities³⁹. The role of housing in Australia goes far beyond providing shelter and security. For a majority of people, a home is their most significant financial asset⁴⁰. With at least 85% of Australians residing within 60 km of the coastline, the anticipated effects of housing damage or loss associated with climate change could be substantial. Conservative economic estimates of the expected cost to Australian homes through coastal erosion alone stand at \$88 billion. The impact of climate change on the future of housing may lead to temporary or forced displacement, rising debt and reduced access to insurance⁴¹. These impacts will have far-reaching consequences on the mental health of an individual, family or community, particularly those facing forced displacement and has been documented in studies assessing the health impacts of extreme weather events⁴². The health impacts resulting from the damage, loss or habitability of property will vary depending on an individual's or community's level of resilience and preparedness. Generally, coastal communities residing outside major cities have less adaptive capacity to respond to climate change and may be more vulnerable to damage or loss of property and subsequent health consequences. The situation is compounded for Aboriginal and Torres Strait Islander communities that already face additional layers of social, economic and health-related disadvantage⁴³.

The Climate Health WA Inquiry provides an excellent opportunity for our state's climate health response to focus on preventative measures and health promotion and to meaningfully contribute to the 2030 Agenda for Sustainable Development⁴⁴. The AHPA WA Branch would like to congratulate the Hon. Roger Cooke and the Western Australian Government for recognising climate change as a significant health threat to the WA community. Please contact me via [REDACTED] for additional information or if you have queries in relation to this submission.

Yours sincerely

[REDACTED]
Carl Heslop
AHPA WA Branch President

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