



Public Health Association
AUSTRALIA

Public Health Association of Australia submission on Climate Health WA

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30 August 2019

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Preamble

The Public Health Association of Australia

The Public Health Association of Australia (PHAA) is recognised as the principal non-government organisation for public health in Australia working to promote the health and well-being of all Australians. It is the pre-eminent voice for the public's health in Australia.

The PHAA works to ensure that the public's health is improved through sustained and determined efforts of the Board, the National Office, the State and Territory Branches, the Special Interest Groups and members.

The efforts of the PHAA are enhanced by our vision for a healthy Australia and by engaging with like-minded stakeholders in order to build coalitions of interest that influence public opinion, the media, political parties and governments.

Health is a human right, a vital resource for everyday life, and key factor in sustainability. Health equity and inequity do not exist in isolation from the conditions that underpin people's health. The health status of all people is impacted by the social, cultural, political, environmental and economic determinants of health. Specific focus on these determinants is necessary to reduce the unfair and unjust effects of conditions of living that cause poor health and disease. These determinants underpin the strategic direction of the Association.

All members of the Association are committed to better health outcomes based on these principles.

Vision for a healthy population

A healthy region, a healthy nation, healthy people: living in an equitable society underpinned by a well-functioning ecosystem and a healthy environment, improving and promoting health for all.

The reduction of social and health inequities should be an over-arching goal of national policy and recognised as a key measure of our progress as a society. All public health activities and related government policy should be directed towards reducing social and health inequity nationally and, where possible, internationally.

Mission for the Public Health Association of Australia

As the leading national peak body for public health representation and advocacy, to drive better health outcomes through increased knowledge, better access and equity, evidence informed policy and effective population-based practice in public health.



Introduction

PHAA welcomes the opportunity to provide input into the Climate Health WA Inquiry and commends WA Health Minister Roger Cooke for his vision and leadership on this issue. The Sustainable Health Review clearly states that the WA health system must prepare itself to manage the health effects of climate change and must work in alignment with targets already agreed internationally and nationally. Specifically, Strategy 1, Recommendation 5, of the Sustainable Health Review aims to:¹

- 'Reduce the health system's environmental footprint and ensure mitigation and adaptation strategies are in place to respond to the health impacts and risks of climate change.'
- 'Set ongoing targets and measures aligned with established national and international goals.'

This has resulted in establishment of the Climate Health WA Inquiry under the Public Health Act 2016, and to Objective 2 of the recently released State Public Health Plan for Western Australia, which recognises the vital role public and environmental health services in identifying, preventing, managing and monitoring the health impacts of climate change.²

PHAA Response to the Terms of Reference

Action to ensure a safe climate is a critical and urgent public health priority requiring advocacy to ensure a safe environment and a just, equitable and ecologically sustainable society. The recent phenomenon of anthropogenic global environmental change is a novel and complex problem, different from previous public health issues, although some of the responses may include traditional public health actions. Response measures must rely fundamentally on mitigation to preserve a habitable climate. However, humans have already changed the climate, and some adaptation will be required. Governments should assist those least able to adapt on their own.

A broad suite of policy measures are required urgently. These include promoting energy efficiency, reducing energy demand, pricing carbon and supporting renewable energy. Many actions to promote a safe climate have additional benefits for health and well-being including physical activity, improved community amenity and healthier diets.

Establish current knowledge on the implications of climate change for health in Western Australia (WA) and recommend a framework for evaluating future implications

The effects of climate change are an emerging risk to health and have bearing upon sustainable development, disaster risk reduction, and health agendas. The health effects of climate change can be considered in terms of direct, indirect and flow-on, also known as primary, secondary and tertiary effects. For example, climate related change to rainfall volumes, distribution and seasonality will be detrimental to water supplies for residential and agricultural uses. Consistent with climate changes forecast by modelling in the IPCC Fourth Assessment Report (AR4), rainfall has already reduced in Southern and Western Australia.³ Clearly agricultural output and access to clean water have important health implications.

The direct, indirect and flow-on effects are related. For example, climate change is already causing higher surface temperatures, rising sea levels, more frequent and severe flooding and drought events. In combination with increasing ocean acidification, biodiversity and ecosystems are affected, increasing pressures on the global food system.

Food production in Australia is predicted to decline by 15-30%,⁴ challenged by shorter growing seasons, changing rainfall patterns, and faster rates of land degradation.^{5,6} The quality of crops including fruits, vegetables and grains is likely to be reduced by heat and drought.^{7,8} Projected population increases will further challenge the ability of the food system to deliver a constant supply of affordable, nutritious food to all Australians.⁹⁻¹¹ These changes are likely to adversely affect food security, population health and global health equity.

Climate change and its relationship to disaster is clearly articulated in the Sendai Framework for Disaster Risk Reduction which identifies the importance of climate change and disaster risk reduction. The Sendai Framework calls for 'addressing climate change as one of the drivers of disaster risk' and that 'more dedicated action needs to be focused on tackling underlying disaster risk drivers, such as the consequences of poverty and inequality, climate change and variability'.¹² The focus of the Sendai Framework for action in respect to climate change is specifically related to disaster risk assessment. This is noteworthy in that it articulates the relationship between climate change and disaster risk and sets the tone of policy relationship between the Sendai Framework for Disaster Risk Reduction and the United Nations Framework Convention on Climate Change Paris Agreement.¹³ This clarity assists in defining the scope of the Sendai Framework and identifying the need for collaboration in disaster risk assessment and management across policies and sectors.

The Intergovernmental Panel on Climate Change Fifth Assessment report described four climate change impact categories associated with contemporary disasters: reduced food yields due to drought, increased morbidity and mortality due to extreme heat waves, fire and extreme weather events; and, changes in infectious disease geographical spread and seasonal variation due to alterations in weather and vector distribution.¹⁴

Climate change was described by the Lancet Commission in 2009 as "the biggest global health threat of the 21st century".¹⁵ Findings from the 2017 Lancet Countdown on Health and Climate Change noted a 46% increase in the frequency of weather-related disasters since the year 2000. Indicator 1.4 of the Lancet Countdown '*Lethality of weather related disasters*' found no clear trend in lethality of weather related disasters in this time period however 90% of disasters in the last 20 years have been associated with weather related events.¹⁶ Importantly the burden of deaths associated with disasters caused by natural hazards predominantly affect poorer countries,¹⁷ and the ability and responsibility of health professionals as public health advocates in ensuring action on climate change is proposed in the Lancet Countdown.¹⁶

The Australian Department for Climate Change has recognised that the increasing risk to the built and natural environments related to increasing frequency and intensity of extreme weather events which is identified in the National Strategy for Disaster Resilience.¹⁸

The Lancet Commission on Health and Climate Change initiated five thematic workgroups to develop and monitor health impact due to climate change.¹⁹ These thematic areas included: climate hazards; health resilience and adaptation; health co-benefits of climate change mitigation; economics and finance; and political and broader engagement; and found that the impact of global warming on human health was a health emergency.¹⁹

An assessment of the implications of climate change for health in Western Australia must specifically recognise the variable impacts for various geographical regions of WA, and various communities within WA. For example, local Aboriginal communities should partner with the WA Government to identify health and climate risks specific to their communities and regions. These partnerships must then flow through to co-design of policies and programs to address knowledge gaps and utilise Indigenous cultural knowledge and practice to inform mitigation and adaptation initiatives in WA.

In 2007 WA Health, in partnership with the World Health Organisation (WHO) Collaborating Centre of Environmental Health Impact Assessment at Curtin University, considered the potential health impacts that may arise in Western Australia from Climate Change. The outcomes of this process have been published as: *Health impacts of climate change: Adaptation strategies for Western Australia*.²⁰ This report, along with the subsequent guidance document *Climate Change, Vulnerability and Health: A Guide to Assessing and Addressing the Health Impacts*²¹ may provide useful local context for Western Australia. This HIA framework has been used in the National Climate Change Adaptation Research Facility responses to adaptation assessments, in local level research projects, in assessments in the Asia Pacific region, as well as being used as the basis for the United Nations Framework Convention on Climate Change global Vulnerability and Adaptation Assessment training.

Identify and recommend a program of work to manage the implications of climate change for health in WA which will:

Protect the public from the harmful health impacts of climate change

The 'Protecting the health of vulnerable people from the humanitarian consequences of climate change and climate related disasters' paper was submitted to the Inter-Agency Standing Committee Task Force on Climate Change by the WHO in 2009. Five policy directions designed to protect and enhance human health and well-being from the risks of climate change were proposed which included strengthening of public health systems, enhancing capacity to address public health emergencies, strengthening surveillance and control of infectious disease, improving the use of early warning systems by the health sector, and enhancing local public health interventions to enhance community resilience to climate-change and climate-related disasters.²²

Strengthen the preparedness and resilience of communities and health services against extreme weather events, with a focus on the most vulnerable in the community

Natural disasters are increasing in frequency and size; the effects of these events on affected communities result in public health crisis. The 2017 Lancet Countdown on Health and Climate Change reported a 46% increase in the frequency of weather related disasters since the year 2000 and noted that the burden of deaths associated with disasters caused by natural hazards predominantly affected vulnerable populations.¹⁶

To improve outcomes of the health impacts of disasters actions are required to reduce exposure to hazards, decrease vulnerability of people and property, improve management of land, the environment, and preparedness for adverse events. Public health practice, as an evidence-based means of inquiry and action, can provide a guidance to systematically investigate the underlying causes of disasters, and inform strategies to improve disaster risk reduction.

Reduce the contribution of WA health services to climate change and other detrimental impacts. Enable WA health services to implement change, including energy efficiency, to a more sustainable model

With the health sector contributing 7% of Australia's total carbon footprint,²³ reductions in health services emissions represent an important opportunity to reduce Australia's overall emissions, and highlight the importance of health to climate change through leading by example.

Models of health service adaption to climate change currently exist in practice and should be considered by the inquiry for adoption. The Global Green and Healthy Hospitals initiative endorsed by the Australian Healthcare and Hospitals Association provides a supportive, informed program to transition health services on the incorporation of energy efficient, waste reduction practices. It includes more than 1,200 members in 60 countries, representing over 36,000 hospitals and health centres. Australia has more than 55 members of the Initiative.²⁴

Guidance documentation already in existence for particular sectors within WA health services should be followed. For example, The Australian and New Zealand Government Framework for Sustainable Procurement,²⁵ and the sustainable procurement guidance contained within the Government of Western Australia's Procurement Practice Guide: A Guide to Products and Services Contracting, for Public Authorities.²⁶

The above programs of work to manage the implications of climate change for health in WA will require a formal plan, with monitoring and review processes inbuilt. To ensure a whole of government response and cross-sectoral contributions, the programs of work should include analysis of the extent to which climate change projections have been integrated into key government plans and policies.

Evaluate the likely benefits (health and wellbeing, social and economic) arising from climate change mitigation strategies, with a focus on WA health services

Climate change mitigation strategies will have numerous co-benefits including to health and wellbeing. For example, poor air quality is a major but poorly recognised cause of significant ill health and mortality globally and in Australia.^{27, 28} Major sources are domestic and wild fires, energy generation from fossil fuels, and industry and diesel vehicle emissions. Emissions contribute to both air pollution with direct impacts on human health, and contribute to increasing climate change. Evidence confirms a causal association between exposures to air pollutants, particularly PM2.5 and increased all-cause mortality, and increased incidence of heart disease, stroke, lung cancer, low birth weight and type II diabetes.²⁹⁻³⁴ Particular population groups may be more vulnerable to air pollution including children, pregnant women, the elderly, asthmatics and people with chronic disease.³⁵ Some measures to reduce air pollution have co-benefits for health. For example, reduction of private vehicle use through improving public and active transport, has health co-benefits, by improving physical activity levels in addition to reducing accident risk and air pollution from transport sources.

Evaluation of the likely benefits arising from mitigation strategies should recognise the broad range of impacts associated with climate change. PHAA recommends the monitoring of the impacts of climate change utilising a health impact assessment (HIA) approach with a focus on harm prevention.

The concept of HIA is not entirely new, however the incorporation of government-initiated frameworks and policies before, during and after industry development has been a recent addition in many countries. HIA seeks to predict the impact of a development before the development proposal has been approved, so that negative impacts can be reduced or avoided, positive impacts can be enhanced and the probability of sustainable development increased. A key challenge in the application of HIA is identifying when it can contribute to improved project outcomes. In many cases existing standards and safeguards may already exist, and in this case resources to strengthen these may be of better value. Where these standards do not exist, or where there is an identifiable risk to health outcomes in a population HIA may be appropriate.

The Department of Health and Aging (Australia) have provided national guidance for end users of health risk assessment. This includes, but is not limited to:

- Changes where impacts on environmental health factors may be permanent and irreversible
- Situations where there is a high level of public interest in and/or concern about environmental health issues.
- Situations where vulnerable populations may be affected by environmental health issues e.g. placement of schools locating intensive horticulture locating new power generation plants locating toxic waste disposal plants locating sewage treatment plants³⁶

Whilst these criteria do not specifically include climate change mitigation strategies the impacts of such are predicted to have adverse effects on the health status of populations. As such there is breadth of scope in what has been identified to include impact effects and intervention effects designed to respond to or recover from climate change impact.

Define the role of the Department of Health in leading public policy on climate change and health

Evaluation of the likely benefits arising from mitigation strategies should recognise the broad range of impacts associated with climate change. PHAA recommends the monitoring of the impacts of climate change utilising as a health impact assessment (HIA) approach with a focus on harm prevention.

The Department of Health will have a key role in leading public policy as part of a coordinated, whole of government response. The WHO's COP24 Special Report: health and climate change included several relevant recommendations:³⁷

- Identify and promote actions to reduce both carbon emissions and air pollution
- Include the health implications of mitigation and adaptation measures in the design of economic and fiscal policies, including carbon pricing and the reform of fossil fuel subsidies
- Remove existing barriers to investment in health adaptation to climate change, especially for climate-resilient health systems and 'climate-smart' health care facilities
- Facilitate and promote the engagement of the health community as trusted, connected, and committed advocates for climate action
- Mobilise city Mayors and other subnational leaders, as champions of intersectoral action to cut carbon emissions, increase resilience and promote health
- Systematically track and report on progress in health resulting from climate change mitigation and adaptation

Establishing an independent Sustainable Health Unit within the WA Government would facilitate action on the above recommendations, with the required cross-sectoral co-ordination.

Recommend the terms of reference, scope and preferred methods for:

Undertaking a climate change vulnerability assessment for the health sector

A multi-sectoral approach to climate change vulnerability assessments will be critical to understanding the vulnerability of non-health sectors such as energy or water supplies, and their implications for health. For example, the recent Community Joint Statement for Healthy Affordable Homes notes that Australia's building efficiency standards have resulted in many Australian homes being susceptible to damp, heat and cold.³⁸ An analysis in the ACT found an average of 140 annual cold-related deaths, with 30% attributable to cold housing.³⁹

Other examples of developing climate change vulnerability assessments for the health sector, with guidance and learnings around framing and scoping of health impacts and associated indicators, identifying risk factors, accessing internal expertise for data analysis, and assessing adaptive capacity are available from Canada⁴⁰ and the US.⁴¹

Developing a Climate Change Adaptation Plan for the health sector

The Queensland Government has endorsed the 'Human health and wellbeing climate change adaptation plan for Queensland'.⁴² This plan is forward thinking in identifying the public health impact of climate change and seeking to implement process that aligns primary health prevention action with climate change mitigation practices. It can inform an assessment which identifies vulnerable populations, regions and sectors; assesses current coping capacity and adaptation needs; identifies and develops mitigation and adaptation opportunities; identifies gaps in knowledge for the assessment; and identifies appropriate strategies and sectors involved.

Conclusion

PHAA strongly supports the inquiry into Climate Health in Western Australia, and acknowledge the WA Government for taking a leading role in this area. We are keen to ensure that the Inquiry leads to strong action, in line with this submission. We are particularly keen that the following points are highlighted:

- An intersectoral approach will be essential in recognition of the drivers and impacts of climate change and vulnerabilities to climate change which fall outside the health system
- A Climate and Health policy with a plan of action including in-built monitoring and evaluation should be an outcome of this inquiry
- WA Health should partner with the Global Green and Healthy Hospitals network
- The WA Government should establish a Sustainable Health Unit
- Resourcing at the local level is essential to drive change throughout WA

The PHAA appreciates the opportunity to make this submission and the opportunity to contribute to the Climate Health inquiry in WA.

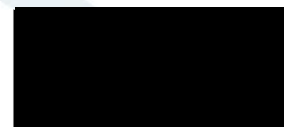
Please do not hesitate to contact us should you require additional information or have any queries in relation to this submission.



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30 August 2019

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2 September 2019

Dear Professor Weeramanthri,

Thank you for accepting this supplementary submission from the Public Health Association of Australia, to the Climate Health WA Inquiry.

This supplementary submission extends our previous comments under the Terms of Reference:

identify and recommend a program of work to manage the implications of climate change for health in WA, which will:

- *protect the public from the harmful health impacts of climate change;*
- *enable WA Health services to implement change, including energy efficiency, to a more sustainable model*

and

- *define the role of the Department of Health in leading public policy on climate change and health;*

As we submitted previously, the 'Protecting the health of vulnerable people from the humanitarian consequences of climate change and climate related disasters' paper identified among its five policy directions: enhancing capacity to address public health emergencies and enhancing local public health interventions to enhance community resilience to climate-change and climate-related disasters.¹

An exercise carried out by the ANU Medical School Population Health course identified Public Health Acts as a means that might be used by medical officers of health to take action to mitigate the health impacts of climate change.² Subsequent discussion within the medical officer of health community has however raised difficulties with how the Acts as conceived might be applied and with the need to work within limits of ministerial discretion.

¹ World Health Organization. Protecting the health of vulnerable people from the humanitarian consequences of climate change and climate related disasters. 6th session of the Ad Hoc Working Group on Long-Term Cooperative Action under the Convention (AWG-LCA 6), Bonn, June 1-12, 2009. <https://www.unhcr.org/en-au/protection/environment/4a1e4f0e2/protecting-health-vulnerable-people-humanitarian-consequences-climate-change.html>; UNCHR; 2009

² Tait P, Batten M, Deakin M, Van Zeyl M, Weber J. The power of public health officers to curb greenhouse gas emissions. Australian and New Zealand journal of public health. 2019;43(3):300-1.

The Inquiry provides the opportunity for WA to bring public health thinking into the 21st century. A more eco-social approach to public health thinking that brings in the ideas of ecological determinants of health in parallel to social and environmental, in line with the Millennium Ecosystem Assessment,³ will enable WA to meet a whole raft of public health challenges and threats that the last century writers of existing Acts did not imagine.

Thus we would like to add a further recommendation for the Inquiry to consider, that is that the Public Health Act be reviewed with the intent to broaden the concept of environmental health and put a more planetary health approach clearly into the legislation (an eco-social model) that focuses public health activity at ecological in addition to social health determinants. Additionally, in this domain, more formal links to state EPAs might be built into the legislation. Such an approach would apply to climate change, but also to other public health threats around water and food security, that occur due to related ecological change.

The PHAA appreciates the opportunity to make this supplementary submission. Please do not hesitate to contact us should you require additional information or have any queries in relation to this submission.

Yours Sincerely,



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