



Government of **Western Australia**
North Metropolitan Health Service



NMHS Submission

Climate Health WA Inquiry

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Introduction

This submission provides a summary of climate change impacts on health particularly for populations served by North Metropolitan Health Service (NMHS), as well as a summary of opportunities and action identified by the NMHS that could be taken in response to climate change.

The NMHS acknowledges the global health threat that is climate change and that as an organisation we have the opportunity to make changes that will contribute to reducing or slowing the effects of climate change.

The NMHS is in the early stages of considering its organisation-wide response to climate change. The NMHS is committed to identifying and progressing system wide changes to ensure a coordinated response to this important health issue.

Background Context

Health impacts of climate change

General information regarding current and projected climate change impacts in Western Australia, state and global health impacts of climate change, and health system responses, is summarised in the attached [Report of the Climate and Sustainability Forum Working Group 2018](#). This forum took place as part of the Sustainable Health Review.

Further articles providing useful updates on climate and health include:

- The most recent [COP24 Special Report on Climate Change and Health](#) outlines the increasing risks to health with delays in climate action, and outlines the role of the health community particularly in regards to United Nations negotiations on the climate crisis.
- The MJA recently published the "[Lancet Countdown down under: tracking progress on health and climate change in Australia](#)". This article outlines the status of key climate and health indicators in Australia.
- This Conversation article considers "[How climate change affects the building blocks for health](#)" and presents a [useful model](#) for considering impacts, based on New Zealand examples.
- This [MJA article](#) presents a summary of the evidence in relation to kidney disease resulting from climate change.
- The New England Journal of Medicine had a [recent special edition on the climate crisis](#) and health, and has [multiple articles](#) on the topic.

Health impacts of climate change for populations serviced by the North Metropolitan Health Service

In the NMHS region, concern exists for the resident population in relation to the health impacts of current and predicted increases in coastal flooding and storm surges, heatwaves and temperature increases, and flooding and storm events. Such impacts could include short-term injury, illness or death, infectious diseases increases, longer term psychological impacts, and

damage to healthcare infrastructure and essential services or critical infrastructure such as electricity and water supply. Air quality in the area may be adversely impacted by increasing bushfires, prescribed burning efforts and urban smog. Indirect health effects of socioeconomic disruption such as food and water insecurity or food price increase may also be a risk. In general, specific impacts have not been documented, quantified or costed. The extent of impacts going forwards will depend on the level of action taken now (both reducing emissions and in preparing for impacts).

The NMHS area has multiple communities that are identified as more vulnerable to the health impacts of climate change. These include low socioeconomic communities particularly in outer suburbs, culturally and linguistically diverse populations located chiefly in the north east corridor, Aboriginal people throughout the area, those with existing illness or disability, elderly populations throughout the area and in the Western suburbs, and outdoor workers spread throughout the north metropolitan corridor. In addition, women and newborns (serviced by the tertiary Women and Newborns Health Service) are a vulnerable group, particularly in relation to health impacts of heat for pregnant women. Studies have linked heat to higher rates of prematurity. It is also generally considered that the very young and elderly are most vulnerable to heat. As a leading mental health service provider, NMHS recognises multiple international studies have also linked heat to worsening mental wellbeing, violence, and mental health related presentations to hospitals.

There are several recognised environmental parameters increasing the vulnerability of populations in the North Metropolitan area. Firstly, there are large populations located along the coast, therefore vulnerable to sea-level rise, storm surges and coastal erosion. Secondly, the “urban heat island” effect is a well-recognised phenomenon and is likely to be a significant issue increasing the ambient heat in newer or more densely populated suburbs, associated with less green space and flora canopy. Those suburbs further inland are also more likely to be hotter than locations closer to the coast.

Financial Case

Many other jurisdictions across the world have made substantial financial savings through many measures to increase the sustainability of health services. These include in relation to energy efficiency, renewable energy use, waste and water reduction, and redesign of services and products. A key [example](#) is evident in the workings of the Sustainable Development Unit, part of the National Health Service in the United Kingdom, which estimates £1.85bn in savings since being established in 2007.

Action to Date at NMHS

There is an increasing level of support for action in response to climate change across NMHS, however NMHS acknowledges a requirement to establish a more coordinated and wide-spread approach to climate change, waste reduction and sustainability.

The Sir Charles Gairdner and Osborne Park Health Care Group and Women and New Born Health Service are members of the Global Green and Health Hospitals Network an international community of hospitals, health care facilities and health organisations dedicated to reducing their ecological footprint and promoting public and environmental health.

There are small pockets of action across NMHS including clinicians at NMHS who are currently undertaking a research project to understand the amount of renewable energy used by Health

Service Providers and the establishment of a Sir Charles Gairdner Hospital Global Green and Health Hospitals Clinical Engagement Working Group.

Activities Under Consideration at NMHS

The NMHS is exploring the following internal actions to protect the health of the local community from climate change. These actions could be supported by the Department of Health as discussed below.

Establishing a NMHS Climate and Sustainability Committee

This Committee would be tasked with developing and implementing the framework discussed below.

The work of the Committee would be enhanced by forming part of a broader governance mechanism or collaboration coordinated by the system manager. One option for this would be the establishment of a “Sustainable Development Unit” (SDU) at the system manager level, based on the successful NHS model, and as recommended in the Sustainable Health Review. An SDU could provide support, guidance and coordination to Health Service Provider efforts.

Developing a broad framework to guide NMHS system-wide action in relation to climate and health

This framework would include sustainable healthcare measures, but also extend to other considerations such as community preparedness and adaptation, education and capacity building, and research. It could be based on existing frameworks such as the Climate and Health Alliance’s Framework for a National Strategy On Climate, Health And Well-Being For Australia or the Lancet Countdown project (ref).

Such a NMHS framework would benefit from being guided by relevant policies or strategies developed at a system manager level. Relevant policies would include a systematic state-wide plan for adaptation measures to protect the community in part because NMHS is currently supporting local councils to develop their Public Health Plan as part of incoming requirements under the *Public Health Act 2016*. As such, NMHS advice to local councils could include a standardised state-level set of health adaptation measures local councils should consider implementing in response to climate change. Another useful and relevant policy would be a state-level comprehensive framework or strategy to address climate change and health. This could include hospital and health service sustainability measures, and address the broader role of the Department of Health in public education, emissions reduction, and community adaptation and preparedness for health impacts. This framework might include a target with a timeline for health services to be net zero emissions, in line with the WA Government’s recent policy [announcement](#) aspiring for the state to be net zero emissions by 2050. It might also include a specific section to address and promote the well-recognised immediate health ‘co-benefits’ of emissions reduction measures.

Provision of data support and evidence to support climate and sustainability measures

The newly formed Public Health Intelligence Team within the Mental Health, Public Health & Dental Services division of NMHS could provide services to guide and facilitate measurement and reporting of health facilities environmental and greenhouse gas emissions performance. In addition, Public Health could provide expert input on appropriate adaptation and disaster

management planning, and mitigation measures, as climate and health is a newly established area within the specialty of public health.

The above could be supported at a system manager level, including via collaboration with NMHS, by increased efforts to research and identify current and future impacts of climate change for populations serviced by NMHS, including under various emissions scenarios.

Public education

NMHS considers that there is an important role to raise the awareness of our serviced populations to the health risks of climate change. We recognise that climate change is often seen as an environmental problem, but there is an urgent need to draw the link between health and climate. Measures to achieve this could include posters and articles on social media and in printed publications.

These measures could be supported at a system manager level by increased efforts to publically draw the link between climate change and health impacts. Extreme weather events, particularly in relation to heatwaves, create a situation whereby early warnings are needed and provide an important opportunity to point out climate change as a factor in contributing to worsening weather events, and therefore affecting health.

Further initiatives

The NMHS Area Executive Group (AEG) recently received a presentation on Health, Climate Change and Sustainability by Dr Sallie Forrest, Public Health Physician. This presentation was followed by a discussion regarding action to be taken at NMHS to address climate change. The AEG discussed the following actions, activities and opportunities:

- reducing total energy use – heating/cooling is responsible for a large proportion of health [facility energy use](#), therefore accurately measuring temperatures, and seeing whether adjusting for slightly warmer/cooler (i.e. less heating/cooling) might offset power use. In 24/7 settings considering measures such as energy efficient lighting or low power modes when products not in use
- increasing use of renewable power – installation of solar across sites, similar to increasing use in residential homes, alternatively, purchasing a certain percentage of green power from the grid
- providing access to recycling bins across NMHS including in corporate areas
- creating more green spaces and community gardens
- creating NMHS re-useable coffee cups
- using eSignatures to reduce printing
- installing water refill stations across hospital sites so water bottles can be refilled rather than purchased.

These activities will be explored for feasibility and implemented as appropriate.

Activities for consideration by the WA health system

Increasing healthcare service specific carbon and sustainability measures

Reducing or changing travel patterns across the WA health system – measures could include car pooling, cycling, advocating for light rail, or increasing use of teleconferencing. Fleet vehicles could include a greater percentage of [hybrid vehicles](#).

Waste reduction and recycling: reviewing the increasing use of single use items, including consideration of life cycle analysis of energy use in comparison to reusable options. Examine where recyclable or biodegradable alternatives may be [appropriate](#) for infection control measures such as protective gowns and gloves. Reducing waste generation, but also assisting to create a secondary market for recycled materials by purchasing such products. This should be supported by recommendations to government to support such initiatives in order to manage recycled waste appropriately.

Procurement principles

WA health system's procurement process must support the WA health system to purchase, build and redevelop in an environmentally friendly way. In practice, current procurement policies constrain the WA health system's ability to purchase and build in an environmentally friendly, sustainable way. This is particularly important to the NMHS as we are about to commence a project to relocate the King Edward Memorial Hospital and it would be ideal for the newly constructed premises to be as "green" as possible.

Conclusion

The WA health system is in a unique position, it is clear climate change will impact on the WA health system whether it be through increased injury and disease or damage to healthcare infrastructure and essential services. However, the WA health system also has the opportunity to mitigate and reduce the impact of climate change by making changes to the way our system operates. As well as reviewing and changing the way we operate to reduce the impact of climate change, the WA health system also has the opportunity to be an advocate to encourage change and modifications to systems and processes more broadly for example by advocating for the establishment of a plastics recycling plant (something much needed in Western Australia and that would have broad positive impact across WA).

The NMHS supports the aim of the Climate Health WA Inquiry and look forward to viewing and supporting the recommendations.

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