Public Health Association of Australia submission on the National Health and Climate Strategy Consultation Paper

Contact for recipient:
A: Department of Health and Aged Care,
GPO Box 9848
Canberra ACT 2601, Australia
E:Health.Climate.Consultation@health.gov.au

Contact for PHAA:
Terry Slevin – Chief Executive Officer
A: 20 Napier Close, Deakin ACT 2600
E: phaa@phaa.net.au **T:** (02) 6285 2373

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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.

Executive Summary

Climate change is the biggest challenge to public health in the 21st century.[1] The combination of more frequent and more damaging weather events occurring and the incremental temperature rise means that the Nation's health and health system need to be strengthened.[1]

Simultaneously, the health system needs to be reducing its own contributions to climate change. Accounting for 7% of Australia's emissions, the health sector has a responsibility to ensure the protection, preservation and promotion of Australian's health through mitigating its impact on climate change.[2]

PHAA applauds the Government for their creation of the National Health and Climate Strategy Consultation Paper and strongly urges robust commitment to following through with subsequent action plans, investment, implementation and progress monitoring.

In its current form, the National Health and Climate Strategy still requires significant development. The Consultation Paper lacks defined vision, governance, timeframes, cross-sectoral consideration, detail and First Nations leadership.

PHAA makes the following over-arching recommendations for the final National Health and Climate Strategy. For a full list of PHAA recommendations, please see appendix 1.

- A strong governance structure. Ideally, an Advisory Board on Health and Climate, supported by an interdepartmental committee on health and climate, a robust health workforce and the ACDC.
- Review First Nations research and current adaptation and mitigation practices, embed First Nations leadership within the Strategy and protect the intellectual property of First Nations people.
- Define a vision and reassess the current objectives (Objective 1. Promoting and protecting health and wellbeing, Objective 2. A climate resilient community, Objective 3. A net zero health and aged care system).
- Measurement should not just be of health system emissions, the scope should be far broader and include several health and climate impact issues.
- Clear emissions reduction targets for the health system should be set at a 75% reduction in greenhouse gas emissions below 2005 levels by 2030 and net zero greenhouse gas emissions by 2035.
- Create emissions targets for areas where the health system interacts/relies on another sector.
- Adaptation of both the health system and the factors which affect the community's health.
- Develop ambitious timeframes for emissions reduction and adaptation.
- Health in All Policies should become an enabler and can be achieved through intersectoral collaboration, like an interdepartmental committee on health and climate.

Please do not hesitate to contact PHAA if you have any further questions.

Introduction

PHAA welcomes the opportunity to provide input to the Consultation Paper on the National Health and Climate Strategy. Particularly at this time, where the world has just experienced consecutive record-breaking hottest days and the hottest month ever recorded on Earth.[3] The resulting deaths of which are still being counted, but for perspective, in Europe's 2022 summer (the former hottest summer on record) over 61,000 people perished.[4]

Simultaneously, South Korea is experiencing stronger than usual monsoon season.[5] At least 40 people have already died from extreme flooding and landslides, and countless more have been displaced.[5] In Canada, there are currently 880 fires raging, with 25 million acres of land already destroyed.[6] Over 70 million Americans will be breathing in smoke filled air for days to weeks.[7] Two firefighters have already been killed, with deaths from secondary health impacts, like worsened asthma, still being identified.[7]

None of this is normal. We can no longer say "impending effects of climate change", the effects are here, and human and environmental health is suffering due to minimal attempts at climate mitigation and adaptation.

Climate change is a serious threat to human life and health, and is the biggest public health threat of the 21st century.[8] From direct impacts like heat stress and drowning, to indirect impacts, like decreased mental health and unreliable food sources, to environmental impacts like an increase in infectious diseases.[9]

We are too late to stop climate change completely, but we can stop it from becoming worse.[10] The 2020s are a pivotal time to reduce emissions, decrease reliance on unsustainable practices and energy resources and prepare communities for the changes that are occurring in the climate.[10]

In the Honourable Mark Butler MP's own words:

"Climate change poses a serious threat to the living standards of future generations and to the quality of our natural environment. And the longer we delay action to combat climate change, the more serious those threats will be for our children and grandchildren to manage… Most governments, communities and corporate boardrooms around the world are no longer debating whether they should take action on climate change – they're now debating what action they should take, and how quickly" – Hon. Mark Butler MP *Climate Wars*[11]

PHAA welcomes the debate and fully supports the Government's creation of a National Health and Climate Strategy that has a dual focus on emissions reduction and population adaptation and resilience.

PHAA Response to the National Health and Climate Strategy Consultation Paper Inquiry Terms of Reference

Governance

With no clear definition of a governing structure, PHAA makes the following recommendations as to how the National Health and Climate Strategy (NHCS or "the Strategy") could be implemented through the Australian Centre for Disease Control (ACDC) and what changes need to occur to the public health workforce.

Australian Centre for Disease Control

The ACDC will have the core mission of protecting the health of Australians. Consistent with PHAA's submission on the *Role and Functions of an Australian Centre for Disease Control* and the functions we delineated for the ACDC, we believe the NHCS' implementation appropriately aligns with the ACDC's remit.

The focus on a One Health approach in both the NHCS and the ACDC should make planning and execution easier to coordinate for two main reasons: cross over of workforce skills and of functions/needs.[12]

Aligned workforce skillset

One Health is an integrated, unifying approach that aims to sustainably balance and optimize the health of people, animals and ecosystems.[13]

To achieve this, the ACDC workforce will need to have a diverse range of expertise for emergency response and regular surveillance tasks. ACDC would need experts in public health, medicine, veterinary medicine, social science, engineering, immunology, etymology, ecology, environmental health, economics etc.

These skills are also required for the mitigation and adaptation challenges presented by climate change. Particularly regarding monitoring, disaster response, implementation management and workforce training. Implementation of the NHCS will rely on these abilities of the ACDC. The ACDC's multi-disciplinary structure could allow for easier collaboration internally and externally with other agencies.

Should the ACDC not become the delivery agency for the NHCS, the alternative might the Department of Health and Aged Care (DoHAC) or a smaller advisory board collaborating with agencies and departments.

Alignment of workforce functions and requirements.

Considering the ACDC's potential functions, there are responsibilities that crossover with the implementation needs of the NHCS, including:

- Managing and preventing biosafety emergencies.
- Collaborating with research institutions and laboratories.
- Designing and implementing national public health programs.
- Disease prevention and control (including infectious disease).

- Disease surveillance, evaluation, and data analysis.
- Emergency preparedness and response.
- Expert advice and guidance.
- Health promotion.
- Health workforce education and development.
- International collaboration.

The aligning skillset and functions of the ACDC and the NHCS provides an opportunity to effectively and efficiently protect the health of all Australians from climate change.

Recommendation: PHAA supports the placement of the NHCS within the remit of the ACDC.
Recommendation: The NHCS must take full advantage of the breadth of health specialities internally within the ACDC and externally.

Implementation

PHAA notes that the consultation paper does not consider how the NHCS should be implemented.

Responsibilities

PHAA recommends an Advisory Board on Health and Climate be established (perhaps by legislation) to advise the Health and Climate Change Ministers on the implementation of the Strategy. The Advisory Board should include representatives of hospitals, general and allied health professionals, Aboriginal Community Controlled Health Services, public health specialists, emergency disaster co-ordinators, climate scientists, consumers and climate and health experts and national climate agencies.

The Advisory Board should be supported by an interdepartmental committee on climate change made up of senior health officials and climate change coordination representatives from all jurisdictions. As well as representatives from different departments who may be involved in that department's climate initiatives. The committee should produce for the Board an annual report on climate and health mitigation and adaptation progress. This report and recommendations should then be presented to the Ministers.

The Advisory Board should be responsible for setting research agendas, and approving grants and research programs outside of existing structures, such as the National Health and Medical Research Council. The Advisory Board function should be linked into the ACDC to ensure alignment on strategy and initiatives. There should also be coordination with EnHealth and the Australian Health Protection Principal Committee, with shared implementation objectives on key areas of the Strategy.

Appropriate governance structures means efficient action and structured intersectoral collaboration.

Recommendation: An Advisory Board on Climate and Health should be established to oversee the implementation of the NHCS. The Board should report directly to the relevant Ministers.
Recommendation: The Advisory Board on Climate and Health must have public health, First Nations, clinical health, emergency response and climate officials as members.
Recommendation: Annual progress reports on implementation should be created by the intersectoral committee on climate and health and presented to the Advisory Board.

Timeframe

The NHCS needs timeframes. Climate change is already threatening the lives of many Australians and decreasing the health sector's ability to care for the public.[14,15]

PHAA supports a three-year timeline, however, the NHCS is going to require much longer-term action, monitoring, reporting and revision. An initial three-year plan is needed for completing the National Health Vulnerability and Adaptation Assessment and National Health Adaptation Plan, creating the governance infrastructure, developing the workforce and initial implementation of action items.

Also, the NHCS' actions should all have measurable goals and timelines for achievement. An action plan to accompany the Strategy should set clear timelines for targets in the short, medium and long-term. Monitoring of these achievements would be in the annual progress report presented to the Advisory Board.

Another timeframe that impacts on the NHS is the establishment of the ACDC in January 2024 with an initial focus on health emergencies.[16] As climate change is a health emergency,[17] implementing the NHCS should form one of the ACDC's first priorities.

Recommendation: The NHCS requires a timeframe for implementation. The timeframe should include short, mid and long-term actions and measurable indictors.
Recommendation: Implementing the NHCS should form one of the ACDC's first priorities

Public Health Workforce

To implement this Strategy it is essential that the staff of the national public health workforce (PHW) be taken into account. In particular, the Strategy must focus on workforce development and co-ordination.

Public Health Workforce Development

There is a pressing need for the Australian PHW to grow in size. It must also develop in disciplinary diversity, rather than focusing only on medico-centric public health. The PHW also needs to grow across jurisdictions, as currently there are significant variations between states and territories. Enhancing the public health workforce with a wide skillset and experience is essential to prepare for future emergencies.

In the most recent WHO evaluation of Australia's capabilities under the International Health Regulations, which commit signatory nations to developing capabilities to respond to and manage acute public health threats and events, several areas for improvement were observed:

- Develop the public health workforce both generally and for surge capacity, but particularly in areas with limited specialists (including radiation and toxicology specialists and clinical virologists).
- Harness the use of genome data in disease surveillance.
- Conduct training and exercises across Australian Government agencies and jurisdictions to identify areas requiring improvement, sharing and implementation of lessons.
- Greater coordination between the human and animal health sectors, including integration of laboratory networks across sectors.[18]

The WHO report noted that although Australia had training opportunities, there was a concerning shortage in number of workforce and a shortage of essential specialists.[18]

Recently the WHO has defined the PHW as including people who are trained and work entirely in public health as a core but relatively small profession, distinct from other parts of the health and care workforce.

Figure: Composition of the workforce which delivers the essential public health functions (WHO)
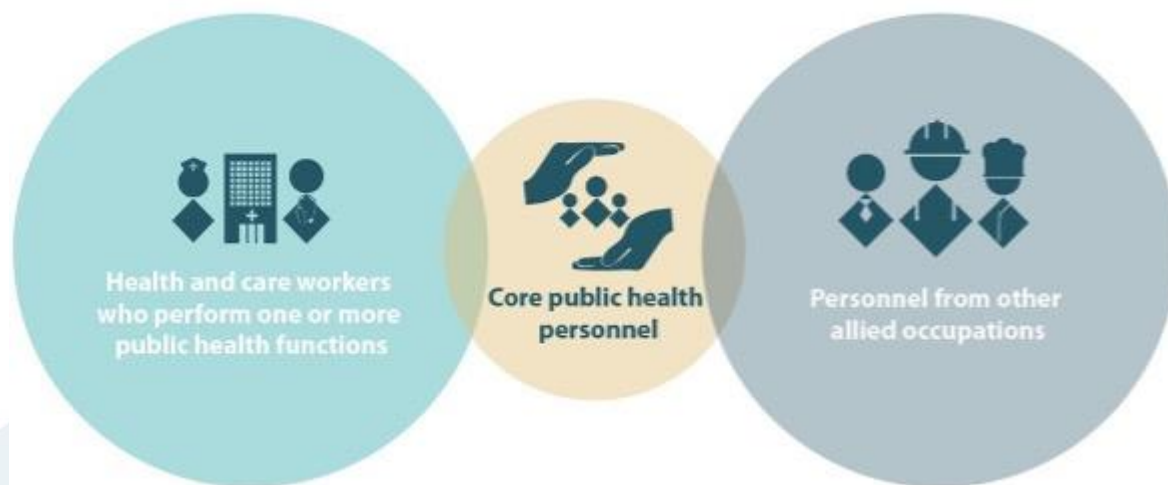
During the 2019-20 Black Summer Bushfires, pharmacists exercised emergency public health measures, like promoting mental health awareness. However, pharmacists reported feeling inadequately trained to deliver effective mental health promotion considering the scale of the disaster.(19) Developing the PHW requires public health emergency training that includes climate emergencies.

Australia should professionalize its PHW through accreditation of core public health education programs, enabling graduates to become registered as public health practitioners. Furthermore, the need to maintain continuing professional development can be delivered through an associated credentialing program for regular re-registration.

Assigning responsibility of the NHCS within the ACDC ensures the ACDC can play a clear role in developing the skills of the PHW. The ACDC should also be responsible for specialty fellowship training, as well as traineeship and mentorship exchange programs in areas related to emergency preparedness and response, such as Public Health Leadership and Public Health Informatics programs, noting that this training can apply to both the adaptive and mitigative fields.

Public Health Workforce Co-ordination

The ACDC should foster the multi-sectoral involvement required to implement, measure and monitor the NHCS. The ACDC can take on a coordination role to support public health responses and cross sector collaboration, with real-time data sharing, better planning and building relationships across jurisdictions.

As seen in previous climate disasters, responsibilities between federal, state and local levels are often poorly demarcated. The NHCS provides an opportunity to assign both adaptation and mitigation responsibilities within the public health and emergency workforce across the various levels of government.

Recommendation: Define the public health workforce.
Recommendation: Public health workforce training must be included in the ACDC.
Recommendation: The implementing body of the NHCS must assign health system and public health adaptive and mitigative responsibilities across the jurisdictions.

First Nations Leadership

Q4. What existing First Nations policies, initiatives, expertise, knowledge and practices should the Strategy align with or draw upon to address climate change and protect First Nations country, culture and wellbeing? & Q5. What types of governance forums should be utilised to facilitate co-design of the Strategy with First Nations people to ensure First Nations voices, decision-making and leadership are embedded in the Strategy?

The Strategy as it stands does not adequately speak to First Nations concepts, knowledge, initiatives, or policies.

The NHCS requires further revision of the knowledge already available. Also, writing on this part of the Strategy must be led by a First Nations person in order to properly convey key concepts and expertise. Acknowledging that there should be First Nations voice core to the production of each part of the NHCS.

Further, while the Strategy acknowledges the importance of First Nations peoples understanding of the environment to its success, it does not recognise the need for legislation to protect Indigenous Knowledges to ensure First Nations peoples are not further subjugated through this process.

First Nations peoples currently do not feel safe to share their wisdom around land management and native plants/animals, due to ongoing misappropriation of their knowledge. The NHCS recognises the importance of this knowledge, however there is no mention of Intellectual Property (IP) and the need for appropriate benefit-sharing with First Nations communities. Indeed, the knowledge that First Nations peoples have from over 65,000 years of land management, cultivation of native plants and sustainable practices, will benefit all Australian's health. However, until this wisdom is acknowledged and protected through appropriate legislation and benefit-sharing, it is important that policies include a call for this protection, acknowledge First Nations IP, and include appropriate benefit-sharing.

Recommendation: Ensure that this section of the NHCS is developed, and to the extent possible written, by First Nations people.
Recommendation: Include a section around First Nations IP and benefit-sharing with community that acknowledges First Nations peoples, by design, as the owners of native plant/animal and land management practice IP.
Recommendation: First Nations governance groups should be able to provide high-level guidance on the Strategy at key points in its development, implementation planning, implementation rollout and monitoring.
Recommendation: First Nations governance to consist of a convened group of First Nations peoples, including experts, and key sector representatives of First Nations health and wellbeing (e.g., NACCHO and the Lowitja Institute).

Concepts of health and wellbeing

The Australian Institute for Health and Wellbeing states that, "good health is … a holistic concept that includes physical, social, *emotional, cultural, spiritual and ecological wellbeing*, for both *the individual and the community*. This concept of health emphasises the connectedness between these factors and recognises the impact that social and cultural determinants have on health".[20]

Wellbeing is shaped by culture, experience and beliefs, therefore will be defined differently for everyone. The NHCS must demonstrate nuance about the negative impacts climate change are having and will continue to have on First Nations cultural practices.

For example, during PHAA's consultation for this submission with a Pakana woman and PHAA member, we were informed of her community's experience creating an adaptation to climate change to preserve cultural heritage and wellbeing for both community and individual. She articulates the impact of climate change, which forced the community to develop solutions:

"*in Tasmania the rise in acidity of the oceans is having devastating impacts on our marine life. The higher acidity of the ocean is stopping the kelp from being able to grow, this reduces the amount of kelp for molluscs to live on. These molluscs have the shells that are used in our practice called kanalritja. The high acidity is also resulting in the shells being very thin and fragile. This has resulted in the shells needed to practise kanalaritja being much fewer in number and being so fragile that they are more likely to break. Kanlaritja, which is one of our oldest cultural practices that have been passed down through our matriarchal lines since time immemorial, is under threat due to the extinction of these shells.*"

Through the collection, cleaning and stringing together of shells, an emotional and meaningful bond is made between the women as they work on the kanalaritja.[21] Importantly, the women also use this time to connect with each other and the Elders pass down stories, culture and knowledge. The flow on positive effects for health and wellbeing to the individuals and community are unquantifiable: sense of belonging, socialisation, feeling of connection to your ancestors, purpose, to list a few.

The intrinsic link between cultural, spiritual and ecological health and wellbeing is unique and must be part of the NHCS.

Recommendation: Revisit the language used around First Nations health and wellbeing. The Lowitja Institute's *Climate Change and Aboriginal and Torres Strait Islander Health Discussion Paper* is useful for direction as to the unique climate change impacts for First Nations people.

Current First Nations led adaptation and mitigation leadership

The kanalaritja story provides a clear example of a First Nations led approach to adaptation and mitigation. The threat of losing kanalaritja has led to the adaptive measure of 3D printing shells, which has been received as a positive way to ensure continued cultural practice.[21] However, there were concerns that this could mean less interest in mitigating climate change.[21] A concern shared in public health also.

Through discussion, there was agreement that mitigation must have ongoing attention, but if the changes needed to stymie climate change fail, then there is an option available for people to continue kanalaritja.

Recommendation: Mitigation and adaptation need equal and urgent action. We should continue mitigating climate change and we need to be protected from the harms already occurring.

Co-design to ensure First Nations voices, decision-making and leadership

In a recent study, six key principles were identified as foundational to effective co-design with Australian First Nations people: First Nations leadership, Culturally grounded approach, Respect, Benefit to community, Inclusive partnerships, and Transparency and evaluation.[22,23] Please note that there are accompanying best-practice approaches that support these principles (refer to recommended sources).

Recommendation: Review all First Nations led initiatives and projects already achieving mitigation and adaptation work. Then can provide feedback and endorsement on the findings and ensure the Strategy is community informed.

Recommendation: A First Nations governance group or review team should conduct case-studies with the First Nations individuals and groups acting on mitigation and adaptation.

PHAA recommends the following research materials for the drafting team to consider:

- Garvey, G., Anderson, K., Gall, A., Butler, T. L., Cunningham, J., Whop, L. J., Dickson, M., Ratcliffe, J., Cass, A., Tong, A., Arley, B., & Howard, K. (2021). What Matters 2 Adults (WM2Adults): Understanding the Foundations of Aboriginal and Torres Strait Islander Wellbeing. *International Journal of Environmental Research and Public Health*, *18*(12), 6193. https://doi.org/10.3390/ijerph18126193
- Garvey, G., Anderson, K., Gall, A., Butler, T. L., Whop, L. J., Arley, B., Cunningham, J., Dickson, M., Cass, A., Ratcliffe, J., Tong, A., & Howard, K. (2021). The Fabric of Aboriginal and Torres Strait Islander Wellbeing: A Conceptual Model. *International Journal of Environmental Research and Public Health*, *18*(15), 7745. https://doi.org/10.3390/ijerph18157745
- Butler, T., Gall, A., Garvey, G., Ngampromwongse, K., Hector, D., Turnbull, S., Lucas, K., Nehill, C., Boltong, A., Keefe, D., & Anderson, K. (2022). A Comprehensive Review of Optimal Approaches to Co-Design in Health with First Nations Australians. *International Journal of Environmental Research and Public Health*, *19*(23), 16166. https://doi.org/10.3390/ijerph192316166
- Anderson, K., Gall, A., Butler, T., Ngampromwongse, K., Hector, D., Turnbull, S., Lucas, K., Nehill, C., Boltong, A., Keefe, D., & Garvey, G. (2022). Development of Key Principles and Best Practices for Co-Design in Health with First Nations Australians. *International Journal of Environmental Research and Public Health*, *20*(1), 147. https://doi.org/10.3390/ijerph20010147
- https://www.lowitja.org.au/content/Image/Lowitja_ClimateChangeHealth_1021_D10.pdf

Vision, Objectives, Principles

Q1. Do these objectives support the vision of the Strategy?

The National Health and Climate Strategy draft does not offer an overall vision statement.

Recommendation: PHAA supports the Climate and Health Alliance's (CAHA) suggested vision statement, "A climate resilient community and net zero healthcare system", and the following proposed purpose: "To support the development and coordination of initiatives that ambitiously minimise the impacts of climate change on the health of the population, and on the health system, and to guide efforts to reduce the health sector's contribution to climate change."

The objectives provided in the draft NCHS are non-descriptive and require refining. For instance, *measurement* is not an objective, but an enabler. Similarly, Health in All Policies (HiAP), is a mechanism to achieve better health objective, but is not an objective itself.

Recommendation: PHAA supports the CAHA's suggestion of renaming and merging the four objectives down to three:

- Objective 1. Promoting and protecting health and wellbeing. (*Instead of Health in All Policies*)

- Objective 2. A climate resilient community. (Instead of *adaptation*)
- Objective 3. A net zero health and aged care system. (Instead of *Measurement* and *Mitigation*)

Q2. How could these principles be improved to better inform the objectives of the Strategy?

We offer the comments made in the table below.

Principle	PHAA Recommendation
1. **First Nations leadership**	Support is dependent upon transparency of what First Nations leadership will look like.
2. **Tackling health inequities**	Principle title and subsequent explanations seem contradictory. Use of "tackling" seems to suggest DoHAC wants to decrease presence of health inequities, however description applies more to additional protections required for people who are susceptible to these inequities. A vision would help to identify where the focus will land regarding promotion, protection and prevention. We support protection in this Strategy.
3. **Population health and prevention**	Support.
4. **One Health**	Support. PHAA also recommends use of Planetary Health principles as well. This will assist in principle 2 also.
5. **Evidence -Informed Policy making**	Support. Also acknowledge that lived experience of patients, pilots, experiments, demonstration sites, data from organisations undertaking their own climate adaptation and environmental sustainability activity, and grey literature are important evidence to consider.
6. **Partnership-based working across all levels of government and beyond**	Public health workforce also to be included into this principle.

Objective 1: Measuring Health System Greenhouse Gas Emissions

Q.7 What additional data and information is required to support targeted emissions reduction efforts within health and aged care?

Australia should meet its emission reduction promises in line with The Paris Agreement.[24] This does not involve the expansion of the fossil fuel industry, nor the use of gas as a "transitional" product.

There are many health-related climate concerns that require measuring, not just health sector emissions. For instance, the various health impacts of climate change (e.g., morbidity, mortality, epidemiological studies, social surveys, recognising and monitoring heat stress presentations), occurrence of insurance pay-outs and fee increases and their drivers. Additionally, progress on the strategy's performance indicators will need to be monitored as well.

Recommendation: Measurement should not be limited to the greenhouse gas emissions of the health sector, but should include all health impacts from climate change.

Recommendation: Establish a capability to report on carbon emissions of the public *and* private health systems.

Objective 2: Mitigation

Q8. What do you think of these proposed focus areas for emissions reduction? Should anything else be included?

The health sector accounts for 7% of Australia's emissions.[2] Without action to reduce emissions, health facilities will be overburdened by extreme weather, staffing issues, increased infectious diseases and supply chain issues with food and water.[9] The health sector should not be approached as a 'silo' distinct from other parts of the economy. Along with the emissions of built environment, waste, etc., the health system intersects with other sectors that it could influence to reduce emissions. The NHCS must create an encompassing but health driven vision for mitigation and set clear goals for emissions targets.

Setting clear targets

Currently, the world is on track to warm by 3.2 degrees Celsius.[10] The Intercontinental Panel on Climate Change have been clear that the 2020s are a crossroads for driving that temperature rise down.[10]

Leading nations have made substantial emissions reduction pledges. The USA has pledged to reduce health sector emissions by 50% by 2030 (baseline no earlier than 2008) and achieve net-zero by 2050, publicly accounting for progress on this goal every year.[25] As well as designate an executive-level lead for their work on reducing emissions by 2023 and conduct an inventory of Scope 3 emissions by the end of 2024.[25]

The UK has committed to delivering the first net zero health service.[26] They aim to decrease the emissions the health sector control to net zero by 2040 and the emissions it can influence to net zero by 2045.[26]

Both nations have clear targets and have committed to reduce emissions of sectors which interact with the health sector. Australia's Strategy will need to set similar targets accompanied by an implementation timeline, frequent and transparent progress measuring and reporting, and key performance indicators.

Recommendation: NHCS should outline how the Department of Health can support emissions reductions that benefit health outcomes across all sectors, particularly those it directly interacts with.

Recommendation: The Government should set national targets of a 75% reduction in greenhouse gas emissions below 2005 levels by 2030 and net zero greenhouse gas emissions by 2035,[27] in line with best-evidence from the Intergovernmental Panel on Climate Change.[28]

Recommendation: Health system (and adjacent sectors) emissions target will need to be established along with strategies for communicating reduction targets, identifying carbon hotspots within and adjacent to the health system, prioritisation of mitigation actions, effective governance and accountability structures, appropriate resource allocation and policy development and set a common pathway for decarbonisation of the Australia's health and aged care system.

Recommendation: The Government should establish an applied research program for health institutions and organisations to develop mitigation measures along the model of the Australian Research Council Industry Partnership research grants.

Q9-17

PHAA does not have expertise in the hospital, clinical or transport energy usage and emissions of the healthcare sector. We support the recommendations of the Climate and Health Alliance on these matters.

Objective 3: Adaptation

What is this Strategy's scope for adaptation?

PHAA strongly encourages broad HiAP thinking. But it is unclear what the adaption vision is in this draft NHCS and how that differs from the adaption vision of the National Adaptation Plan.

The Strategy should consider what is the DoHAC's role in adapting the health system and community health, what is the goal and how do these differ/correspond to what might be included in the National Adaptation Plan.

Q.18 What health impacts, risks and vulnerabilities should be prioritised for adaptation action through the Strategy? What process or methodology should be adopted to prioritise impacts, risks and vulnerabilities for adaptation action?

PHAA would support a plan that has consulted broadly and diversely and keeps the interests of health at its core. We support the development of a National Health Vulnerability and Adaptation Assessment and National Health Adaptation Plan.

PHAA supports the need to adapt the health system and agrees with the identified areas in the Strategy. However, the Adaptation section is mono focused on adapting the health system against crisis situations.

The health system is broader than facilities, supply chain and ability to treat. The health system relies on people being well, otherwise it would be overburdened. It would be a missed opportunity to overlook community climate and health adaption alongside health system climate adaption.

Recommendation: Re-assess the NHCS objectives and use health in all policies as a mechanism for mitigation and adaptation.
Recommendation: Focus adaptation on both the protection of the health system and the protection of the community's health against the impacts of climate change.
Recommendation: Fully funded and implemented National Health Vulnerability and Adaptation Assessment and National Health Adaptation Plan less than 5 years after the National Health and Climate Strategy is finalised.

Health System

How to protect the health system from climate change

The implementation timeline for the NHCS should include systemic analysis by all health services, to determine their most likely impacts from climate change. A deadline should be set for all health services to develop a *Climate Change Adaptation Plan* outlining preparation requirements for climate challenges.

A *Climate Change Adaptation Plan* would include emergency preparedness, infrastructure assessment, health warning communication, and workforce management and training. This work could be conducted between jurisdictional representatives working on adaptation, the National Health Emergency Management Standing Committee and health promotion/communication experts. Production of *Climate*

*Change Adaptation Plan*s could be mandated in the Australian Council of Healthcare standards, and a performance measure in the National Healthcare Agreement.

Factors to protect the health system from climate change

The *Change Adaptation Plan*s would need to account for two overarching types of climate impacts: *acute* and *incremental* (such as steadily hotter days).

Acute challenges in the health system to consider:

- Damage to facilities during weather events, including loss of power, flooding and fire.[14]
- Increase in acute presentation due to heatwaves, smoke, or injuries from floods/cyclones.[9,29]
- Health workforce ability to meet demand, workers ability to access facilities and populations, preventing workforce mental ill-health.[14]
- Supply chain disruption medicines, gases, personal protective equipment, tools etc.[30]
- Health workforce exposed to extreme heat during heatwaves, e.g., Ambulance workers when responding to emergencies.

Incremental challenges in the health system to consider:

- Increase in health system burden due to increased number of infectious diseases.[9,31]
- Increase in health system burden of non-communicable diseases like mental ill-health,[19] (asthma, cardiac stress, and high blood pressure (decreased air quality, overheating and stress).[9,29]
- Transportation of patients via public transport requiring shaded or inside bus/train/taxi shelters for people to wait due to increased number of hot days.

Recommendation: Australian Council of Healthcare standards should mandate all health services to create *Change Adaptation Plan*s.
Recommendation: Include requirements for the development and implementation of *Change Adaptation Plan*s in the National Healthcare Agreement.
Recommendation: Consider and plan for potential risks to every part of the health system: public, private, clinic, laboratory, hospital, specialty facility, transport, supply chain, vaccination, workforce, and others.

Community Health

Who is the community at risk from climate change

Everyone in Australia will be impacted by the health effects of climate change. Each community will have their own unique challenges and strengths. With rural and remote communities currently at the forefront of climate change,[32] and the First Nations population having a particularly profound connection between their health and wellbeing and the land they and their ancestors have been/are custodians of.[33] Such unique challenges need to be considered during the National Health Vulnerability and Adaptation Assessment and National Health Adaptation Plan processes.

Consider urban, coastal, rural, regional, remote, highlands and high countries, children and babies, elderly persons, culturally and linguistically diverse populations, people who work outdoors, levels of health literacy pregnant women and persons, low-socioeconomic persons, people with pre-existing health conditions, people with disabilities, First Nations peoples, people whose livelihood depends on the land; the variety of unique challenges are endless.

Recommendation: When actioning the National Health and Climate Strategy, the National Health Vulnerability and Adaptation Assessment and National Health Adaptation Plan, ensure diverse representation when seeking adaptation advice.

How to protect the community's health from climate change

PHAA believes that this Strategy is necessary to provide direction on emissions reduction and adaptation, standardise emissions and health impact measurements and set goals for commonwealth and jurisdictions to achieve. PHAA supports the Australian Government working with states and territories to create timelines and potential criteria for the National Health Vulnerability and Adaptation Assessment and National Health Adaptation Plan.

However, local governments and non-governmental organisations will be essential in providing accurate vulnerability assessments for the people who live in the locality and in producing achievable and relevant adaptation planning.

Local government should be supported during assessment, planning and implementation. By financial assistance and/or with personnel, like adaptation planners (some states already have people working in such a position), environmental health workers, universities and non-profit organisations.

Local governments are best positioned to ensure that the community they represent are properly included in the entire adaptation process. Local level could also allow more accurate representation of community input, like hearing ideas from children and young peoples, who aren't often part of submission making, yet will be most impacted by climate change. Further adhering to principle one of this Strategy, learning from First Nations work in co-design could be particularly instrumental at local level.

Recommendation: Set deadlines for when local governments should complete vulnerability assessments and adaption plans. These should be completed using contextually adapted co-design methods with support from State government and/or health disaster response representatives/organisations.
Recommendation: During design, increase number of avenues for children and young people to contribute towards a climate change vulnerability assessment and adaptation plan.

Factors to protect the community's health from climate change

As mentioned previously, Health in All Policies can be easily applied to adaptation strategies. PHAA highlights the below considerations to be addressed to protect the health and safety of all Australians. It should be noted the breadth of sectors that DoHAC will need to communicate with to ensure adaptation protects people's health. Our recommendations as to cross-sectoral communication are under Objective 4.

Challenges for community health to consider:

- Food insecurity due to supply chain disruption (production, transport, processing),[34,35] or inability to safely walk or catch public transport to grocery stores due to excess heat.
- Disrupted access to clean and safe water due to drought, flooding or cyclone damage.[36]
- High temperatures in classrooms and during lunch breaks.[37]
- Plans for continuing education after a disaster impacts school facilities, staff and students.[37]
- Availability of mental health and wellbeing resources during and after climate events.[38,39]
- Town planning adjustments for walkability, shade, urban heat island effect, drought resistant plants, cooling centres, indoor facilities for some sports, etc.

- Better public warning systems for hot days, heat waves, asthma storms, water safety, flood, fire.
- How to encourage safe recreational and health focused physical activity during hotter/wetter days.
- Adapt housing standards to ensure houses are not being built in flood/fire zones and reinforcing those that are already built, or excess rain.[40]
- Health promotion tools which educate on health risks and provide instruction without inciting fear.
- Ecological methods of mitigation, like regenerating mangrove ecosystems to minimise sea surge.[41]
- Health promotion campaigns around health protection on key issues, like heat stress, smoke in the air, flooding and community resilience.
- Evacuation of people who may not have access to a car (e.g., people with low incomes, children, people with disabilities or the elderly)

Recommendation: Apply a health in all policies approach and consider broad impacts on health. The Strategy should lay out a plan of relevant sectors and key actions that will protect health.

Q.19 Should the Australian government develop a National Health Vulnerability and Adaptation Assessment and National Health Adaptation Plan? Yes.
b) How should their development draw on work already undertaken, for example at the state and territory level, or internationally?

There are many examples of local, state and international governments completing work on this. DoHAC should seek to converse with relevant government representatives who action their jurisdictions' adaptation strategy. Useful examples include:

- City of Melbourne [Climate Change Adaptation Strategy Refresh 2017](#)
- Queensland [Human Health and Wellbeing Climate Change Adaptation Plan](#)
- Queensland [Climate Risk Strategy 2021-2026](#)
- Western Australia [Health impacts of climate change: Adaptation strategies for western Australia](#)
- South Australia [State Public Health Plan 2019-2024](#)
- Canada [HealthADAPT](#)
- United Kingdom [Climate and health: applying All Our Health](#)
- Quadripartite [One Health Joint Plan of Action (2022-2026)](#)

Recommendation: Review current adaptation plans and consult with relevant stakeholders and community members.

c) What are the key areas where a national approach will support local/jurisdictional vulnerability assessment and adaptation planning?

A national approach would provide guidance in terms of goal setting for outcomes, benchmarking of when outcomes need to be delivered and standardising types of measurement and support. The support would be beneficial for local governments, as not all have the capacity to conduct assessment and planning. Personnel from appropriate national or state bodies, or public health/ environmental protection officers would be required, as well as financial investment. Noting that the cost of preparing is often minimal compared to healthcare costs and disaster costs.[42]

Recommendation: Provide Commonwealth and State financial and personnel support to local government.

Objective 4: Health in All Policies

Q.22 What are the key areas in which a Health in All Policies approach might assist in addressing the health and wellbeing impacts of climate change and reducing emissions?

What is Health in All Policies?

PHAA is very supportive of the Health in All Policies approach. The DoHAC should be a leader in climate mitigation and adaptation, so should have a plan with how to engage with other sectors.

HiAP is a mechanism to promote and achieve better health and wellbeing through all sectors that impact the health of the community.[43] In action, HiAP would mean that when policy makers in other sectors are creating policy, they are required to consult with a public health representative. Ideally, this eventuates in policy that is co-beneficial for multiple sectors. Simply put, its health getting a seat at the table.

We encourage the NHCS to create an expanded list of the various relevant non-health sectors as part of the implementation strategy. However, for immediate action, PHAA supports the three areas outlined in the NHCS. We also encourage town planning policy to be a priority and that equity is part of decision making.

Recommendation: Incorporate HiAP throughout other objectives and make it an enabler/principle.
Recommendation: Consider creating a map of where other sectors interact with the health sector and derive co-beneficial climate and health actions from there, as well as from intersectoral consultation.
Recommendation: Review the below examples of how to incorporate healthy policy into other sectors. Each example is co-beneficial to health and the relevant sector, but also can reduce emissions.

Transport

There are two public health concerns with fossil fuel powered vehicles: air pollution which is hazardous to human health,[44] and emissions which contribute to climate change.[45] Also, the extensive reliance on private motor vehicles is a major contributor to the lack of physical activity in Australia.[46]

Creating a national [low emissions active transport policy](#) would improve environmental and health outcomes.[44,46] Key actions included in a national policy could include:
- Quality and safe infrastructure for walking and cycling (safe, connected cycle and walkways)
- Workplace facilities for bike storage and showering, and provision of weather proof cycle parking
- Improved availability of green space
- Encourage active and public transport options (subsidies and tax rebates for people and businesses that support active transport and public transport, phasing out diesel vehicles for electric vehicles).

Food, Agriculture and Trade

Australian food and nutrition policy should support producers to provide consumers with access to food that is nutritious and promotes ecological sustainability. Sustainable diets protect the climate, ecosystems and biodiversity whilst also ensuring nutritious food reliability for human health.[47] Food production (type and amount of food), processing, availability, waste are critical parts of emission reduction policy.

Two complementary approaches are required to foster ecologically sustainable production and consumption of food. The first is to change consumer demand for a more sustainable food supply. The second is to work with primary producers, the food industry and government to lead changes in the food system to make its processes and outputs ecologically sustainable and socially equitable.[48]

Policy actions which co-benefit human and environmental health and reduce emissions include:
- Development of National Nutrition Strategy addressing the entire food system to reduce emissions, increase resilience and provide sustainable, reliable sources of nutritious food.
- National Nutrition Strategy should include a focus on rural and remote First Nations food security, with particular care and consideration applied to cultural dietary practices.
- Promotion of a diet in keeping with the Food Climate Research Network evidence-based characteristics of a healthy and sustainable diet. This diet should be accessible to all Australians.

Housing

Right to housing is a human right.[40] However, houses must be built in safe locations, must be reinforced if they are vulnerable, energy efficient (for affordability and emissions reduction) and fitted with health promoting installations, like proper ventilation to prevent mould during persistent rains. Similarly, building homes must have sustainability and emissions reductions targets as a standard.

Policy actions with environment and health co-benefits include:
- Establish energy efficiency standards for all buildings (including hospitals, schools, and social housing) to be thermally efficient, renewably powered and climate resilient.
- Ensure health and community services have access to data and information to develop their understanding of the likely impacts and associated costs of climate change on social determinants of health (e.g. gender, cultural and socio-economic status, rurality, housing, employment, food security, built environment).
- Encouraging interdisciplinary research to identify relationships between human health and urban design, energy, housing, food, and water security, transport and other sectors and strategies to respond.

Town planning

Climate disasters and incremental climate change are having/will have a range of effects on how and where people live. For instance, urban heat island may decrease physical activity for urban dwellers and people in coastal communities may have growing anxiety about storm surge.

Risk and emission reduction tools used in town planning that have co-health benefits ensuring that the built environment can withstand a range of natural disasters, preservation of natural ecosystems to protect communities and promoting ecological measures for adaptation.[49]

Examples of co-beneficial town planning and health policy actions include:
- Cool roofs, planting trees, installing shades, creating cooling centres.[50]
- Improving public transport services for people in outer suburbs, regions and rural people.
- Creating and/or expanding car free pedestrian and cyclist only zones.[51]
- Creating safer regulations for buildings constructed in risk prone areas.

Q.23 What are the most effective ways to facilitate collaboration and partnerships between stakeholders to maximise the synergies between climate policy and public health policy? What are some successful examples of collaboration in this area?

Examples of Health in All Policies

PHAA welcomes the inclusion in the draft NHCS strategy of a HiAP approach. HiAP is also consistent with the idea of a wellbeing economy and the global drive to understand the wellbeing of populations as a foundation for economic success, policies which the current Government is also developing through the Treasurer's *Measuring What Matters* initiative. After all, healthy populations are able to contribute more economically.[5,52]

Countries/Jurisdictions using a Health in All Policies approach:
- Finland – Health in All Policies
- South Australia - Health in All Policies
- California, USA - Health in All Policies Task Force

HiAP has had difficulty being implemented in other countries/jurisdictions and there has not been sufficient research to present clear examples. The difficulty stems from lack of governance and lack of funding.

How Australia could achieve Health in All Policies

Good governance will be essential. Due to the breadth of sectors that climate and health cross, it would be appropriate for a national high level interdepartmental committee on climate change and health to be established. This committee should include jurisdictional health and emergency officials as well as representatives from different departments who may be involved in that department's climate initiatives. This committee would be supporting the Climate and Health Advisory Board.

The agenda for this committee could be informed by EnHealth, the ACDC and the Climate and Health Advisory Board. They should be responsible for creating annual progress reports for climate and health mitigation and adaptation strategies and targets. This committee could consider how to progress an agenda for action, which could include:

- Strengthening surveillance of mosquito borne disease
- Food safety and food security
- Energy and transport emissions and air quality
- Urban planning guidelines to address heat islands
- Guidance for community support and mental health services
- Appropriate housing design

Recommendation: Create an interdepartmental committee on climate change, staffed with varied specialities related to climate, but also health specialised staff, to support the Climate and Health Advisory Board. The committee should produce an annual progress report for the Climate and Health Advisory Board, the board should present this to the relevant ministers.
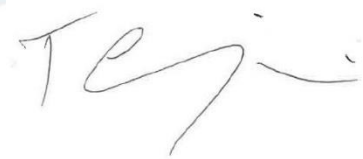
Conclusion

PHAA supports the broad directions of the National Health and Climate Strategy. However, we are keen to ensure the necessary changes are made in line with this submission. We are particularly keen that the following points are highlighted:

- A strong governance structure. Ideally, an Advisory Board on Health and Climate, supported by an interdepartmental committee on health and climate, a robust and diverse health workforce and the ACDC.
- Review First Nations research and current adaptation and mitigation practices, embed First Nations leadership at each stage and protect the intellectual property of First Nations people.
- Define a vision and reassess the current objectives.
- Broaden the scope of health and climate issues to measure further than emissions reduction.
- Create clear emission reduction targets for both the health system and sectors adjacent to health.
- Make adaptation about the health system and factors which affect community help. Create a timeline for adaptation with key performance indicators.
- Health in All Policies can be achieved through an interdepartmental committee on health and climate.

The PHAA appreciates the opportunity to make this submission and the opportunity to further impress upon the Department of Health and Aged Care just how critical it is to act now on mitigating and adapting to climate change for the sake of the Nation's health.

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

Adjunct Professor Terry Slevin
Chief Executive Officer
Public Health Association of Australia

24/07/2023

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Appendix 1

Governance

Recommendation: PHAA supports the placement of the NHCS within the remit of the ACDC.

Recommendation: The NHCS must take full advantage of the breadth of health specialities internally within the ACDC and externally.

Recommendation: An Advisory Board on Climate and Health should be established to oversee the implementation of the NHCS. The Board should report directly to the relevant Ministers.

Recommendation: The Advisory Board on Climate and Health must have public health, First Nations, clinical health, emergency response and climate officials as members.

Recommendation: Annual progress reports on implementation should be created by the intersectoral committee on climate and health and presented to the Advisory Board.

Recommendation: The NHCS requires a timeframe for implementation. The timeframe should include short, mid and long-term actions and measurable indictors.

Recommendation: Implementing the NHCS should form one of the ACDC's first priorities

Recommendation: Define the public health workforce.

Recommendation: Public health workforce training must be included in the ACDC.

Recommendation: The implementing body of the NHCS must assign health system and public health adaptive and mitigative responsibilities across the jurisdictions.

First Nations Leadership

Recommendation: Ensure that this section of the NHCS is developed, and to the extent possible written, by First Nations people.

Recommendation: Include a section around First Nations IP and benefit-sharing with community that acknowledges First Nations peoples, by design, as the owners of native plant/animal and land management practice IP.

Recommendation: Revisit the language used around First Nations health and wellbeing. The Lowitja Institute's *Climate Change and Aboriginal and Torres Strait Islander Health Discussion Paper* is useful for direction as to the unique climate change impacts for First Nations people.

Recommendation: Mitigation and adaptation need equal and urgent action. We should continue mitigating climate change and we need to be protected from the harms already occurring.

Recommendation: First Nations governance to consist of a convened group of First Nations peoples, including experts, and key sector representatives of First Nations health and wellbeing (e.g., NACCHO).

Recommendation: First Nations governance groups should be able to provide high-level guidance on the Strategy at key points in its development, implementation planning, implementation rollout and monitoring.

Recommendation: Review all First Nations led initiatives and projects already achieving mitigation and adaptation work. Then can provide feedback and endorsement on the findings and ensure the Strategy is community informed.

Recommendation: A First Nations governance group or review team should conduct case-studies with the First Nations individuals and groups acting on mitigation and adaptation.

Measurement

Recommendation: Measurement should not be limited to the greenhouse gas emissions of the health sector, but should include all health impacts from climate change.

Recommendation: Establish a capability to report on carbon emissions of the public *and* private health systems.

Mitigation

Recommendation: The Government should set national targets of a 75% reduction in greenhouse gas emissions below 2005 levels by 2030 and net zero greenhouse gas emissions by 2035,(27) in line with best-evidence from the Intergovernmental Panel on Climate Change.(28)

Recommendation: NHCS should clearly outline strategies for the health sector to support the reduction of emissions across all sectors.

Recommendation: Health system (and adjacent sectors) emissions target will need to be established along with strategies for communicating reduction targets, identifying carbon hotspots within and adjacent to the health system, prioritisation of mitigation actions, effective governance and accountability structures, appropriate resource allocation and policy development and set a common pathway for decarbonisation of the Australia's health and aged care system.

Recommendation: The Government should establish an applied research program for health institutions and organisations to develop mitigation measures along the model of the Australian Research Council Industry Partnership research grants.

Adaptation

Recommendation: Re-assess the NHCS objectives and use health in all policies as a mechanism for mitigation and adaptation.

Recommendation: Focus adaptation on both the protection of the health system and the protection of the community's health against the impacts of climate change.

Recommendation: Fully funded and implemented National Health Vulnerability and Adaptation Assessment and National Health Adaptation Plan less than 5 years after the National Health and Climate Strategy is finalised.

Recommendation: Australian Council of Healthcare standards should mandate all health services to create *Change Adaptation Plan*s.

Recommendation: Include requirements for the development and implementation of *Change Adaptation Plan*s in the National Healthcare Agreement.

Recommendation: Consider and plan for potential risks to every part of the health system: public, private, clinic, laboratory, hospital, specialty facility, transport, supply chain, vaccination, workforce, and others.

Recommendation: When actioning the National Health and Climate Strategy, the National Health Vulnerability and Adaptation Assessment and National Health Adaptation Plan, ensure diverse representation when seeking adaptation advice.

Recommendation: Set deadlines for when local governments should complete vulnerability assessments and adaption plans. These should be completed using contextually adapted co-design methods with support from State government and/or health disaster response representatives/organisations.

Recommendation: During design, increase number of avenues for children and young people to contribute towards a climate change vulnerability assessment and adaptation plan.

Recommendation: Apply a health in all policies approach and consider broad impacts on health. The Strategy should lay out a plan of relevant sectors and key actions that will protect health.

Recommendation: Review current adaptation plans and consult with relevant stakeholders and community members.

Recommendation: Provide Commonwealth and State financial and personnel support to local government.

Health in All policies

Recommendation: Create an interdepartmental committee on climate change, staffed with varied specialities related to climate, but also health specialised staff, to support the Climate and Health Advisory Board. The committee should produce an annual progress report for the Climate and Health Advisory Board, the board should present this to the relevant ministers.