



WESTERN AUSTRALIA

09 November 2021

The Principal Research Officer
Education and Health Standing Committee
Parliament House
4 Harvest Terrace
WEST PERTH WA 6005

By email to: laehsc@parliament.wa.gov.au

Dear Sir/Madam,

PARLIAMENTARY INQUIRY INTO THE RESPONSE OF WESTERN AUSTRALIAN SCHOOLS TO CLIMATE CHANGE

The Australian Medical Association (WA) (AMA (WA)) welcomes the opportunity to make a submission to the Parliamentary Inquiry into the response of Western Australian schools to climate change. Please find our submission below.

In line with the weight of leading international health organisations and health journals from around the world,¹ the AMA recognises climate change as a public health emergency, with clear scientific evidence indicating severe health impacts for our patients and communities now and into the future.²

In September 2021, the AMA, Doctors for the Environment (DEA) and 10 medical colleges leads presented an open letter to the Prime Minister Scott Morrison, calling for meaningful action on climate change within the next decade.³ The AMA (WA) is committed to working with government and allied organisations to mitigate ongoing emissions, and adapting to protect the community's health and wellbeing in the face of climate change. In August 2021, we hosted a Climate Change and Health Summit with the Minister for Health, the Department of Health, health service providers (HSPs) and medical colleges to facilitate information sharing and collective goalsetting in order to achieve net zero emissions by 2050.

In our view, all public bodies, including public schools, have a role to play in reducing Australia's carbon footprint and adapting as swiftly as possible to the effects of climate change. The AMA (WA) Foundation runs the Dr YES program, an educational program delivered by medical student to high schools across metropolitan and rural WA.⁴ We strongly believe in educating the next generation to appreciate and understand factors associated with good mental and physical health.

¹ Jacqui Wise, 'Climate crisis: Over 200 health journals urge world leaders to tackle "catastrophic harm"' (2021) *British Medical Journal*, 374; World Health Organisation, 'Climate change and health' (Webpage, 1 February 2018), accessed online 27 October 2021 <<https://www.who.int/news-room/fact-sheets/detail/climate-change-and-health>>.

² AMA, 'Climate change is a health emergency', <<https://www.ama.com.au/media/climate-change-health-emergency>>.

³ AMA, 'Doctors sign open letter calling for meaningful action on climate change', <<https://www.ama.com.au/articles/doctors-sign-open-letter-calling-meaningful-action-climate-change>>.

⁴ Dr YES youth education sessions, 'Welcome to Dr YES', (Webpage) <<https://dryes.com.au/>>.

Scientific evidence tells us that climate change will impact health directly, through injury and mortality from increased frequency and severity of extreme weather events and the effects of increased temperature and extreme heat; and indirectly, through transmission of vector-borne disease, food and water insecurity, impacts on air quality, and through impacts on social determinants of health. Increased mean temperatures and extreme climatic events such as heat waves are likely to impact on the health of children in schools, including their ability to participate in physical activity.⁵

The impacts of climate change will not be uniformly experienced, with youth recognized as one of the highly vulnerable groups. Other vulnerable populations include First Nations people, people with lower socio-economic status, people with a disability, and people with pre-existing medical or mental health conditions.⁶ Those living in remote or rural areas will also be at higher risk, adding further to existing health and social inequity experienced in these populations.

The co-benefits of climate action in schools

There are well documented health co-benefits of action on climate change in schools. Some examples include:

Decreased exposure to sun, heat, and extreme weather

- High temperatures pose extra risk to youth and the elderly, increasing risk of adverse events of youth exposed to extreme heat on campuses
- The potential effects of climate change on the incidence of skin cancer are currently being researched. Several studies examining the development of skin cancers in environments of increased ambient temperatures suggest an increased rate of skin cancer development with warmer environmental temperatures.⁷ It is imperative that schools ensure staff and students are protected from increased exposure now and into the future. Schools need to be appropriately resourced to ensure their staff and students are protected from increasing temperatures and from sun damage.

Improved air quality

- Exposure to high levels of particulate pollution increases respiratory disease, allergy, and asthma in children. There is also evidence to suggest that heat itself increases atmospheric dust and other pollutants that can trigger asthma and allergy.⁸
- Air pollution has links to decreased academic performance.⁹

⁵ Paquito Bernard, Guillaume Chevance, Celia Kingsbury et al, 'Climate change, physical activity and sport: A systematic review' (2021) 51 *Sports Medicine*, 1041.

⁶ Harvard TH Chan School of Public Health, 'Children's Health', <<https://www.hsph.harvard.edu/c-change/subtopics/climate-change-and-childrens-health/>>.

⁷ Jan van der Leun, Ruben Piacentini and Frank de Gruijl, 'Climate change and human skin cancer' (2008) 7(6) *Photochemical & Photobiological Sciences*, 730; Leslie Calapre, Elin Gray, Sandrine Kurdykowski et al, 'Heat-mediated reduction of apoptosis in UVB-damaged keratinocytes in vitro and in human skin ex vivo' (2016) 26(16) *BMC Dermatology*, 6; Leslie Calapre, Elin Gray and Mel Ziman, 'Heat stress: a risk factor for skin carcinogenesis' (2013) 337(1) *Cancer Letters*, 35.

⁸ Transform Our World, 'Clean Air for Schools', <www.transform-our-world.org/clean-air-for-schools/>.

⁹ Paul Mohai, Byoung-Suk Kweon, Sangyun Lee and Kerry Ard, 'Air pollution around schools is linked to poorer student health and academic performance' (2011) 30(5) *Health Affairs*, 852.

Decreased harm to mental health

- There is a high level of evidence showing the multiple impacts climate change will have on youth mental health. This includes direct and often long-lasting impacts of heat extremes, extreme weather events, through to the experience of 'eco-anxiety', and ecological grief.¹⁰

What more can be done to support schools to respond to climate change?

1. Better infrastructure planning and resourcing

The AMA (WA) understands that there are prohibitive planning regulations that prevent public schools from incorporating sufficient shade on school grounds. Schools are said to be based on 'off-the-plan' schemes with little-to-no flexibility based on existing natural shade, and the broader physical environment. In our view, this should be remedied through improved infrastructure planning and development, allowing for a flexible approach for schools across WA to build shade structures that allow for students to engage in physical activity in both wet and dry weather. In accordance with Cancer Council WA recommendations, shade should be the first defence in protecting students against sun damage. Hats, sunscreen, and protective clothing should only be relied upon where activities cannot be undertaken in the shade. Priority should be given to building hard shelter over play areas, and where students generally congregate. Hard shelters (roofing) should be favoured over shade sails, as they provide better UV protection and protect students from rain. The Cancer Council WA provides an open access handbook for evidence-based strategies for implementing shade, including in schools.¹¹

In September 2021, the Medical Journal of Australia (MJA) published its editorial '*Call for emergency action to limit global temperature increases, restore biodiversity, and protect health*'.¹² The article was authored by the editors of health journals worldwide, calling for *inter alia* greater attention to be given to restoring biodiversity and creating targets to prevent destruction of the natural world. The AMA (WA) urges the Committee to reconsider the natural environment in which schools are built and renovated, taking into account existing native vegetation, and opportunities for increasing climate-appropriate greenery to support biodiversity and provide shade for students.

2. Funding for sun protection

In contrast to most other Australian states and territories, the WA Department of Education does not mandate sun smart policies be written in each school, which can mean that the provision of sunscreen is left to the decision of individual principals. While provision of sunscreen by students themselves may be sufficient for well-resourced families, the AMA (WA) recommends that schools should be funded to provide sunscreen for all students to ensure no student is left behind.

¹⁰ Ibid.

¹¹ Cancer Council Western Australia. 2020. The shade handbook: A practical guide for shade development in Western Australia, Cancer Council Western Australia, Perth.

¹² Lukoye Atwoli et al, 'Call for emergency action to limit global temperature increases, restore biodiversity, and protect health' (2021) 398(10304) *The Lancet*, 939.

3. Workforce and Student Engagement

The AMA (WA) recommends that all schools provide accessible training for staff and senior students on sun safety. The Cancer Council WA currently provides education sessions on request to educate staff and students on the effect of UV radiation on health, and how to protect themselves and the broader school community from UV damage. The AMA (WA) recommends that this program be made mandatory at least once every year at all Government schools, and ideally across all schools in WA.

The impacts of climate change on health, including mental health, could be integrated into the school curriculum. Key issues that are important for young people to be aware of, and learn how to protect themselves from, include respiratory diseases, mosquito control, mental health impacts, and food security. Engaging students in broader conversations about climate change are vital to reducing greenhouse gas emissions now and into the future.

Elements of climate literacy, health equity, and climate justice could also be incorporated into programs to further enhance understanding assist in empowering and educating youth to assist in healthy adaptation to the mental health burden of facing the climate crisis.

Your Sincerely,

Dr Bennie Ng
CHIEF EXECUTIVE OFFICER