Public Health Association
AUSTRALIA

# Public Health Association of Australia submission on the Queensland Government's health response to COVID-19

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**3 July 2020**

# Contents

Public Health Association
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 our Board, National Office, State and Territory Branches, Special Interest Groups and members.

**We believe** that health is a human right, a vital resource for everyday life, and a 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.

**Our mission** as the leading national organisation for public health representation, policy and advocacy, is to promote better health outcomes through increased knowledge, better access and equity, evidence informed policy and effective population-based practice in public health. Members of the Association are committed to better health outcomes based on these principles.

**Our vision** is for a healthy population, a healthy nation and a healthy world, with all people living in an equitable society underpinned by a well-functioning ecosystem and a healthy environment, improving and promoting health and wellbeing for all.

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

# Introduction

PHAA welcomes the opportunity to provide input to the Health, Communities, Disability Services and Domestic and Family Violence Prevention Committee's Inquiry into the Queensland Government's health response to COVID-19.The pandemic has seen unprecedented global responses, with health, social and economic impacts which will continue to become apparent and be felt for some months and possibly years to come. It is important to understand the local impacts within Australia, and within Queensland, as the experience has been far from homogenous across the country.

This submission is focussed on the following: Health economic evaluation; Impacts on health care more broadly; Remote Indigenous communities and: Prioritisation of activities. It draws upon the recent PHAA submission to the Federal Senate Inquiry on Australia's response to COVID-19 (1) (see appendix 1 & 2).

# PHAA Response to the Inquiry Terms of Reference

## Health economic evaluation

**1. Current reports on the health economic impact**

We are starting to understand the effects of COVID-19 to Queensland's health economy. Reports of the various impacts to the Queensland health system and patients are starting to flow in. These suggest there are both positive and negative effects.

On the positive side, the following are identified:

- ***Prevention has worked*** – Queensland continues to have very low numbers of coronavirus cases, intensive care unit patients and deaths. Queensland has largely avoided high numbers of coronavirus infections as a result of Queensland Government policies and public education initiatives within the collective National response.
- ***Telehealth has increased within primary care and hospitals*** - Increased investment in IT systems in Queensland Health facilities to provide large scale telehealth services in addition to Federal government introduced Medicare item numbers for general practitioner, allied health, specialist virtual delivery of healthcare. With more than 7 million telehealth consultations nationally since COVID-19, the use of technology to support health care from a distance has been a crucial part of our response (2, 3).
- ***Testing capacity has increased*** - Increased investment in equipment and staff to scale-up PCR testing for coronavirus cases.
- ***Community services*** – were ramped up via the Care Army to support the elderly and vulnerable citizens in their homes providing care and help with groceries and medical purchases, and encouraging the elderly to not move around in the community (4).
- ***Queensland Health COVID-19 planning –*** the Queensland government, especially Queensland Health and the hospitals, did an excellent job in preparing for a massive influx of patients. Significant resources were mobilised to support ongoing care of patients and preparedness for the pandemic, communications were prepared and new emergency protocols for potential COVID-19 patients were quickly installed (5, 6).

On the negative side however, there are concerns about the following:

- ***Delayed care of non-COVID patients*** particularly those with chronic and complex care with high service needs, pain services, rehabilitation care. This partly is from cancelled services and community fear of attending appointments (7). Examples include suspended regular health checks and screenings, colonoscopies and cancer diagnoses and treatments, people with chest pain not presenting to hospitals, and substantially lower (30-40%) Emergency Department attendances (8). Questions remain about the potential health losses among people with non-covid conditions. What are the missed treatment opportunities? Queensland Health, Health and Wellbeing Queensland, and the Primary Health Networks should ensure sufficient promotion and resources are devoted to non-COVID related health services.
- ***Potentially worsened health outcomes*** for those in the general community, and potentially those in the health care sector. What are the effects of isolation and lockdown on the quality of life of people who are now struggling with anxiety, depression, and uncertainty? How has the lockdown affected vulnerable populations such as those with pre-existing mental health problems and those with disabilities? A lot of elderly people will be scared, confused and isolated and there needs to be engagement and assessment of needs for this part of the community. Those in residential care will have different experiences and needs to those living in the community. Some people in the community were previously isolated and this would have been exacerbated in the past 4 months. The impacts on the health care sector also should be considered. Despite the small number of COVID-19 patients in Queensland hospitals there was a lot of stress among hospital staff in the build-up which should be recognised and responded to. Are there any lingering mental health concerns and what support measures are needed?
- ***Potentially worsened health behaviours*** – there are indications that alcohol consumption has increased, and opportunities for physical activity may have been reduced; impact on diet quality is not known (2) (see appendix 2 page 4-5).
- ***Challenges to primary care delivery*** – communication support for primary care services was challenging and hastily organised, and there were reports of PPE shortages occurring early in the pandemic (9). Despite telehealth MBS items being quickly implemented, there may be issues around quality of care, which should be clarified. For example, have there been increases in script writing over holistic patient care, or a lack of coordinated team-based care, which is often required for complex conditions.

## 2. Moving forward to ensure an efficient, patient-centred healthcare system

To better understand these issues, the Queensland Government should commission a comprehensive health economic evaluation of the Queensland Government's health response of COVID-19 and quantify the public health implications. Specifically, an evaluation of the costs and benefits to the health sector of the policy response will identify ways the policy response can be optimised (in the event of future similar outbreaks) and to identify public health policy options going forward.

***Why is this necessary?***

- It will provide a transparent account of the costs, cost-savings, health benefits and harms of the Queensland Government response and test alternative strategies that may have produced enhanced health outcomes
- It will inform policy and planning decisions to maximise population health, prevent disease, promote wellness and keep Queenslanders out of hospital.

***Who would do this assessment?***

A collaborative effort would be necessary to complete an evaluation in a timely manner. This would include Queensland Health staff, applied health economics and health services researchers working with clinicians, communities, and public health professionals. Health economic researchers are highly skilled at decision-analytic modelling and simulation and readily access clinical networks. Access to high-quality data from Queensland Health datasets will be necessary for this work.

***What outcomes would there be?***

This critical evaluation will:

- highlight major weaknesses in the health system and recommend cost-effective resource allocation
- address important questions such as: What health needs and healthcare utilisation have been deferred, and what will be the consequences of that in the post-COVID world? How have morbidity and mortality from non-COVID infectious diseases (and from non-infectious causes) been affected by isolation and lockdowns?
- address the implications for the health, health behaviours and quality of life of those for whom this period of enforced isolation has disrupted the delivery of essential services
- identify the behavioural responses to the crisis and how to strike the right balance between encouraging and compelling individuals to behave in a manner consistent with collective interests.

## Impacts on health care more broadly

Due to the detection of COVID-19 cases in Queensland as early as January 2020, the Queensland state government was proactive and initiated an early public health emergency response and early expanded testing regimes. However, as stated in the PHAA submission to the Senate Inquiry on COVID-19 (PHAA 2020 p. 23):

> *…the development and roll-out of community COVID-19 testing services was not clearly articulated, and whilst it was pleasing to have the 'pneumonia/chest' clinics developed, the mechanism for access to these remains unclear.*

The state of Queensland has a large and dispersed regional population which represents challenges for health care access at the best of times. During the recent periods of physical distancing as a result of COVID-19 the extent of social isolation of vulnerable populations was felt widely in Queensland. Looking forward, efforts should be made to maintain telehealth resources (as suggested above) to enable dispersed populations to maintain and initiate engagement with routine health and wellbeing checks including cancer screening and non-communicable disease support.

With regard to the management of PPE consideration should be given to the safe and sustainable disposal of PPE products going forward, including the investigation of the biodegradability of PPE.

## Remote Indigenous communities

The following is taken from the recent PHAA submission to the Senate Inquiry on COVID-19 (PHAA 2020 p. 24-25), also relevant to the Queensland context (see attached appendix 1) (1):

> *Aboriginal and Torres Strait Islander peoples Aboriginal and Torres Strait Islander peoples are at increased risk of severe disease from infections such as COVID-19, particularly those over the age of 50. In recognition of this, a number of specific mechanisms have been put in place to reduce the incidence of COVID-19 among Aboriginal and Torres Strait Islander people.*

*The Aboriginal Community Controlled Health Organisations (ACCHO) sector advocated for travel restrictions limiting access to remote communities was instituted to prevent infections in these communities. Such travel restrictions were subsequently actioned by relevant governments.*

*PHAA commends the Government on convening the Aboriginal and Torres Strait Islander Advisory Group on COVID-19, co-chaired by the National Aboriginal Community Controlled Health Organisation (NACCHO) and the Department of Health, to develop and deliver a National Management Plan.*

*This has led to significant leadership, engagement and work from the Aboriginal and Torres Strait Islander health sector with all governments. This includes 10% of GP Respiratory Clinics and testing sites being run from ACCHOs, to facilitate culturally safe access.*

*The genuine partnership approach has led to good outcomes for Aboriginal and Torres Strait Islander communities so far, with few cases of COVID-19. While breakdowns of official figures are difficult to find, anecdotally, Indigenous people are under-represented, perhaps accounting for as little as less than 1% of cases. This is an extraordinary and positive outcome, for a population group identified as highly vulnerable.*

*The coordinated, strategic approach from the ACCHO sector as early as February, well before COVID-19 was called a pandemic, has had many aspects which have contributed to the success. A number of resources, such as COVID-19 specific on-line modules for Aboriginal and Torres Strait Islander health worker training, have been provided through NACCHOs and the Australian National University. Culturally appropriate messaging was also quickly developed and distributed, using the existing strong connections to communities, well before the Commonwealth messaging was produced. Additionally, the Aboriginal Health and Medical Research Council of NSW, a jurisdictional affiliate of NACCHO, developed a Pandemic Toolkit specifically for ACCHOs in NSW. The focus of ACCHOs at jurisdictional and national level on public health is likely to have given them a strong starting point for responding to this crisis. A full evaluation to identify learnings is needed to fully understand this. The increased pressure on Indigenous organisations is notable, in particular the NACCHO and jurisdictional affiliates, and ACCHOs. Of note, the majority of remote communities do not have reliable access to internet resources, so that when available to them, these resources have been critical.*

*Government should:*

- *Increase ongoing support and funding to NACCHO and ACCHOs in recognition of the increased burden on Indigenous organisations in coping with health-related emergencies, reducing the government load and delivering appropriate information to Indigenous communities.*
- *Ensure Aboriginal and Torres Strait Islander representation in advisory bodies to Federal and State governments.*
- *Provide funding for the evaluation of the response within Indigenous communities to identify lessons for future pandemic response*

## Training and role of public health professionals

The following is taken from the recent PHAA submission to the Senate Inquiry on COVID-19 (PHAA 2020 p. 7-8), also relevant to the Queensland context (see attached appendix 1) (1):

*An adequately skilled and qualified workforce is needed to protect public health. This workforce was called on to underpin Australia's COVID-19 response – not only frontline clinicians, nurses and other allied health, but epidemiologists and other public health professionals also.*

*Federal investment in public health education has been reduced over the last decade, particularly with the loss of Public Health Education and Research Program (PHERP) funding. The Federal Government invested in a set of Foundation Competencies for Master of Public Health Graduates in Australia (10) however not all Australian public health degrees are based on these. The lack of accreditation seen in other degrees complicates this issue, reducing oversight.*

*The Government could increase public health knowledge requirements by requiring public health staff to have relevant public health qualifications and experience. For medical doctors, they should be public health medicine specialists, and other public health professionals should have qualifications in their particular fields. This is currently not the case consistently. Also, public health department surge capacity for an outbreak such as COVID-19 should be built on people with public health training. The value of public health expertise as a speciality must be enhanced.*

*Only a minority of state and territory Departments of Health run ongoing dedicated public health training programs. Training opportunities for medical and non-medical public health specialists are not consistently offered and run. More such programs in all state and territories, as well as Commonwealth level, are essential to ensure adequacy of future public health workforce.*

*The global and regional nature of public health is also directly relevant to public health education. Australia provides a significant amount of public health education and training for our region. The impact on international student numbers and the longer-term impacts of the reduction in international students is yet be seen, but it is likely that, over time, capacity to offer full public health degree programs and supervise students adequately will decrease as student numbers in courses decrease.*

*Interruption to this will have ramifications for our biosecurity with a reduction in public health education and expertise in our region. Australia benefits from strong public health training for those in less-developed countries (especially our neighbours) in terms of social justice but also our own country's vulnerability, as well as revenues accrued from training international postgraduate public health students.*

*Government should:*

- *Increase the number of public health training programs*
- *Ensure all public health staff, both employed and in surge capacity, should be formally trained in public health, rather than just a health-related discipline.*
- *Support expansion of higher degree training in public health, including international students*

## Prioritisation of activities

As detailed in the PHAA submission to the Senate Inquiry on COVID-19. The PHAA suggests:

- *Sustained increased funding for public health at Federal and State and Territory levels.*
- *Support training and capacity building for the public health workforce.*

*• Establish an Australian independent designated public agency to provide scientific advice and education, and coordination assistance on communicable disease control, including all diseases of public health importance.*

*• The real living wage provided through JobSeeker must be retained to allow recipients to focus on attaining new jobs as the recovery progresses, instead of being plunged into poverty requiring a full time focus on basic survival needs.*

*• Services must be provided in recognition of the likely longer-term impacts of the pandemic.*

*• A healthy recovery is essential, recognising the links between human, economic and planetary health.*

*• Strong action on climate change, led by scientific advice, is required to address underlying vulnerabilities to pandemics including deforestation (making pandemics more likely to occur), and air pollution (making people more vulnerable to the effects of coronavirus).* (PHAA 2020 p. 27) (see attached appendix 1) (1).

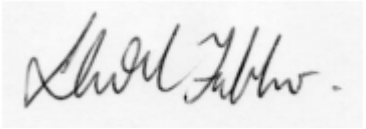
# Conclusion

PHAA congratulates the Queensland State government and Queensland Health, specifically, on its sound response to COVID-19. We are particularly keen that the following points are highlighted:

- The need for support and training for the public health workforce.
- The need for an evaluation of the costs and benefits to the health sector of the policy response in order to identify ways the policy response can be optimised (in the event of future similar outbreaks) and to identify public health policy options going forward.
- The need to maintain telehealth resources to ensure that Queensland's dispersed population can maintain and initiate engagement with routine health and wellbeing checks including cancer screening and non-communicable disease support.
- Ensure Aboriginal and Torres Strait Islander representation in advisory bodies to State governments.
- Provide funding for the evaluation of the response within Indigenous communities to identify lessons for future pandemic response.

The PHAA appreciates the opportunity to make this submission.

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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July 3 2020

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# Public Health Association of Australia submission on COVID-19

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# Contents

# 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 to the Inquiry into COVID-19. Public health practice is about '*Protecting Health, Saving Lives – Millions at a Time*'.[1] Public health is built on prevention activities, rather than health care and its focus on treating illness. Optimal health is about more than just not being unwell, but about the ways in which whole populations behave and interact and stay healthy. Public health responses during a pandemic are therefore critical to the maintenance of health in large populations.

The initial response to the pandemic has been on reducing the immediate health and economic impact, based on information available at the time. This included a portfolio of action across all 11 public health intervention types – public policy development, legislation and regulation, resource allocation, engineering and technical interventions, incentives, service development and delivery, education, communication, collaboration and partnership building, community and organisational development and advocacy.

The response and efforts of community members; health, community and service workers; the national advisory group and governments generally in Australia should be recognised and celebrated. This has demonstrated the extraordinary capacity of the community to deal with a significant health threat.

Compared with international rates, Australia has maintained low population and case fatality rates, and has contributed only a very small number of cases and deaths to the international burden of disease. Whilst in part this may be due to being geographically remote (unlike European countries), the efforts made by Australia's public health advisors and the ministers who operationalised their advice is to be acknowledged. Distancing has clearly worked so far – some of the best evidence being the huge reduction in influenza and other seasonal communicable diseases cases this year. However, we must be mindful that this is far from over. Globally, the virus is spreading faster now than early on in the pandemic, and there are many conditions under which Australia would encounter a second wave.

Prior to this pandemic, we are aware that major outbreak exercises had been conducted and response plans formulated and updated as a result. We know that this had made Australia as prepared for an outbreak as other countries (such as the UK and the USA), the major difference being that when the outbreak happened, the plans were activated. This is very much to Australia's credit. PHAA has recognised this through our special PHAA President's Award for Members of the Australian Health Protection Principal Committee (AHPPC) on 12 May 2020.[2]

However, Australia's relative success has come at the expense of other public health activity as every available public health professional was pulled into the pandemic response. This reflects the capacity constraints brought about by years of inadequate investment in public health and preventing illness. Sustained increases in funding are needed to support building capacity and skilled public health workforces at Federal and State and Territory levels.

PHAA supports the efforts and response of the World Health Organization (WHO) within its limited remit and resources.[3] We note that the WHO has produced a COVID-19 Strategic Preparedness and Response Plan Monitoring and Evaluation Framework, which may inform the current Senate Inquiry.[4] We note the importance of health expert input to this Senate Inquiry. Economic and social recovery from this world health crisis will depend on securing, protecting and improving population health.

As we move from this initial phase into the recovery phase, broader public health impacts of the pandemic, and the response to it, must be considered and given a higher priority than was possible initially. This submission provides an overview of some of these issues, highlighting examples of existing health issues and inequities being exacerbated, unforeseen consequences of the response, and forecasting longer-term impacts.

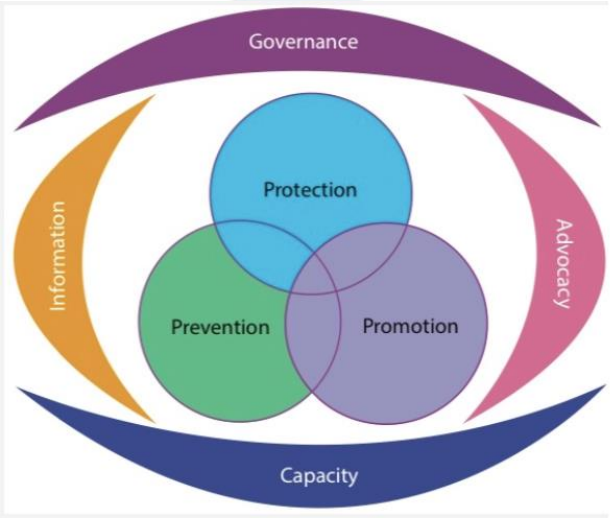
# Context

Public health responses during a pandemic are critical to the maintenance of health in large populations. There are a number of tools we have to assist us in this, briefly described here.

## Assessing the response through the WFPHA lens

The World Federation of Public Health Associations (WFPHA) has developed a Charter, endorsed by the World Health Association. A helpful lens through which to examine public health activities, all Charter elements were relevant to Australia's response to COVID-19, although some elements were better activated than others. Core prevention-protection-promotion elements were activated quickly using pre-existing mechanisms including standard public health surveillance notification and contact tracing, public education and more. Our laboratories and notification systems performed well.

1. **The WHO-endorsed WFPHA Charter for the Public's Health**




Internationally, the World Health Organization (WHO) and Johns Hopkins University provided excellent and timely international information, and Australia utilised these sources at all stages. National and local information was updated in a timely way. Australian public health legislation was activated to good effect; nationally, public health unit capacity was upgraded; and advocacy for many constraining aspects of emergency management was disseminated effectively.

## Sustainable Development Goals (SDGs)

The United Nations Sustainable Development agenda is the shared blueprint for peace and prosperity for people and the planet, now and into the future.[5] The 17 Sustainable Development Goals SDGs are an urgent call for action by all countries as part of the global partnership. They recognise the linkages between ending poverty, improving health and education, reducing inequality, protecting the environment, and encouraging economic growth.

Most SDGs, each of which has several target indicators, are relevant to the issue of COVID-19 and the response, particularly those relating to:

- No. 1: No poverty
- No 2: Zero hunger
- No 3: Good health and well-being
- No 4: Quality education
- No 5: Gender equality
- No 8: Decent work and economic growth
- No 10: Reduced inequalities
- No 15: Life on land
- No 16: Peace, justice and strong institutions

From a broad and immediate public health response perspective, the response to the pandemic cannot be de-linked from the SDGs. Food security, income protection, and secure housing are directly relevant as determinants of health: this pandemic has generated some major negative changes for many people in the areas of income and work, food security, gender and safety issues, and has highlighted and exacerbated many inequities. Contracting COVID-10 has had negative health consequences for some Australians, and the effects of separation from other people has generated mental health consequences for many.

On the other side, there are also a number of positive outcomes that have been reported as a result of the lockdown and distancing measures taken by countries. For example, there has been a measurable reduction in many health conditions, in particular other communicable and infectious diseases (especially influenza and influenza-like illness), reductions in road traffic accidents, and other countries have reported a reduction in cardiac events directly linked to a reduction in air pollution which might be repeated in Australia.

## Training and role of public health professionals

An adequately skilled and qualified workforce is needed to protect public health. This workforce was called on to underpin Australia's COVID-19 response – not only frontline clinicians, nurses and other allied health, but epidemiologists and other public health professionals also.

Federal investment in public health education has been reduced over the last decade, particularly with the loss of Public Health Education and Research Program (PHERP) funding. The Federal Government invested in a set of Foundation Competencies for Master of Public Health Graduates in Australia,[6] however not all Australian public health degrees are based on these. The lack of accreditation seen in other degrees complicates this issue, reducing oversight.

The Government could increase public health knowledge requirements by requiring public health staff to have relevant public health qualifications and experience. For medical doctors, they should be public health medicine specialists, and other public health professionals should have qualifications in their particular fields. This is currently not the case consistently. Also, public health department surge capacity for an outbreak such as COVID-19 should be built on people with public health training. The value of public health expertise as a speciality must be enhanced.

Only a minority of state and territory Departments of Health run ongoing dedicated public health training programs. Training opportunities for medical and non-medical public health specialists are not consistently offered and run. More such programs in all state and territories, as well as Commonwealth level, are essential to ensure adequacy of future public health workforce.

The global and regional nature of public health is also directly relevant to public health education. Australia provides a significant amount of public health education and training for our region. The impact on international student numbers and the longer-term impacts of the reduction in international students is yet be seen, but it is likely that, over time, capacity to offer full public health degree programs and supervise students adequately will decrease as student numbers in courses decrease.

Interruption to this will have ramifications for our biosecurity with a reduction in public health education and expertise in our region. Australia benefits from strong public health training for those in less-developed countries (especially our neighbours) in terms of social justice but also our own country's vulnerability, as well as revenues accrued from training international postgraduate public health students.

Government should:

- Increase the number of public health training programs
- Ensure all public health staff, both employed and in surge capacity, should be formally trained in public health, rather than just a health-related discipline.
- Support expansion of higher degree training in public health, including international students.

## Equity

The systemic, unfair and avoidable health and social impacts experienced from policy responses (in this case to COVID-19) provides the moral basis for health equity. Equity is about pre-empting harms to society from policy decisions before they eventuate, just as much as identifying particular vulnerable communities and providing assistance.

National and international COVID-19 policy responses highlight the multiple connections within and between societies that have had a profound and ongoing impact on social wellbeing and vulnerability for groups at all levels of society.

With around one-third of people in Australia reporting that their household finances have worsened due to COVID-19,[7] the impacts are broad, but not universal. An extensive list of some potentially affected population groups includes workers in, and suppliers to: food and groceries, transport, waste management, overseas students, delivery drivers, emergency services, self-employed people such as people working in the arts, all workers in healthcare institutions and those who provide care for the elderly.

People with pre-existing inequities who are likely to be further significantly adversely affected are also numerous, including homeless people, chronically unwell people, elderly and infirm people, socially isolated, low income and less educated people, culturally and linguistically diverse communities, asylum seekers and others with no social protections.

Government should:

- Undertake better identification and coordination of services to vulnerable groups for all emergencies
- Ensure more equitable income support for all groups, including those self-employed, and in recent casual employment
- Ensure ongoing coordinated investment in equitable public welfare supports and other structural determinants to protect and promote public welfare services

## One Health

COVID-19 demonstrates that human and animal health are interdependent, closely linked to the health of the ecosystems, and that a One Health approach recognising these links, is paramount to prevent future pandemics.

The new COVID-19 is caused by a SARS-CoV-2 molecularly similar to the coronavirus found in bats. Given the initially infected cases in Wuhan and their association with the live-animal markets, it is very likely that the virus has been transmitted from animals and subsequently adapted to human-to-human transmission. Several years ago researchers in China discovered many coronaviruses in bats[8] but the sharing of data between sectors and necessary interventions to prevent transmission of these viruses to humans did not happen. Such interventions are not simple, but at the very least there should have been a closure of 'wet markets' as well as reductions in deforestation and urban and farmland incursions into natural areas.

The new coronavirus is similar to the SARS-1 virus that caused the 2003 epidemic and the Middle East Respiratory Syndrome (MERS) virus first detected in 2012 that infects camels before transmitting to humans.[9] The linkages of these zoonotic diseases with the wildlife trade has led to the closure of wildlife trade in China.

With 3 out of every 4 emerging and re-emerging infectious diseases originating from animals especially wildlife[10, 11] like those traded in live-animal markets, the Australian Government should:

- Urgently adopt a One Health approach to disease surveillance (risk-based) including establishing a National Wildlife Disease Surveillance system in Australia[12]
- Assess the wildlife trade and increase regulations associated with this trade[13]
- Strengthen veterinary services within Australia and regionally to enable appropriate epidemiological investigations of disease outbreaks
- Limit deforestation and urban expansion into natural areas in Australia
- Ensure the Australian Centre for Disease Preparedness[14] is up-graded to enable high quality diagnosis of diseases and to support neighbouring countries in laboratory capacity building for zoonotic disease diagnosis
- Collaborate with One Health surveillance and lab capacity building programs like the PREDICT project[15]
- Support COVID-19 One Health Research Coalition[16]
- Incorporate One Health approaches in medical and animal health curriculum and all emergency disease preparedness and response plans
- Review legislation associated with pandemics to ensure necessary regulations are in place to ensure information sharing and interventions across sectors

# Response

## Coordination between Governments

The Australian Government's response to the pandemic has, overall, shown solid leadership, with decisive action taken in establishing the National Cabinet early. This has encouraged cooperation and coordination between Governments at Commonwealth and State and Territory levels. An Australian National Audit Office review of the Commonwealth Department of Health's Coordination of Communicable Disease Emergencies in 2017 noted that state and territory governments are primarily responsible for managing communicable disease emergencies with the Commonwealth becoming involved when a national response is required, and in a primary role of coordination.[17]

Existing emergency response and disaster response plans in place meant that the necessity for a whole-of government approach to a national public health crisis was clear.[18] Taskforces, information hubs and policy statements across the spectrum of policy portfolios in Government demonstrate the wide-ranging nature of the response from Governments.[19]

Government response was based on 4 elements designed to flatten the curve and increase the capacity to respond; and based upon National Cabinet commitment to honour and act on medical advice:

- domestic and international border control
- equipment and testing capabilities
- contact tracing
- distancing

While there have been some issues with the coordination between levels of Government, at times leading to confusion from conflicting advice, some differences were not only to be expected but were warranted, as in a country as large as Australia, there have been effectively multiple epidemics occurring in different places simultaneously. Variations in responses are required accordingly, and do not necessarily signify a diminishing of coordination and cooperation in national response.

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| The mechanism established to achieve coordination through the National Cabinet is sound, and PHAA supports a model which achieves cooperation and coordination on other significant national issues. |

## Communication issues

Communication in a time of crisis is always complex. Even more so when the crisis is rare, global and evolving quickly. There will be elements of uncertainty, and mistakes will inevitably be made. Lessons can be learned from this experience to make improvements for the next event. From COVID-19 so far, there are two areas relating to communication from which lessons may arise – planning and consistency.

The Australian Health Sector Response Plan included strong provisions for communication. Putting these into practice in real time has highlighted issues and areas for improvement. Mechanisms for consultation are limited, and the Plan has not been implemented in its entirety. The lack of consultation with various stakeholders demonstrates the need for a stronger set of mechanisms for consultation to be established pre-pandemic, rehearsed and refined. Policies adopted in the crisis phase and thereafter lack evidence of consultation, such as via stakeholder reference groups.

The clear exception to this has been the consultation with Aboriginal and Torres Strait Islander communities, where the communication and engagement has been much stronger, with positive results.

Information dissemination to the public has come from multiple official sources, with a Federal response from the Prime Minister with medical information provided by Professor Paul Kelly on public health and epidemiology and Professor Brendan Murphy on medical and logistical issues, followed by various State and Territory level leaders and chief health officers. There is definitely a logic to this, as people ask both "What is Australia doing about this?" and "How does it affect me? ". Managing differences in advice from these various sources is the challenge, to ensure it is not disjointed and confusing.

Improved coordination of messages within Australia would have been helpful. It may have been better to have one national Australian information source and set of rules, with allowances for different circumstances, especially in the early stages as everyone was trying to understand and adjust to the rapidly evolving situation. Clear explanations of variations in response and restrictions may have eased concerns and confusion, and increased confidence in the overall response.

The prepared plans made escalating outbreak response rapid and easy to follow for authorities. In terms of communication, in the future it would be helpful for general information about planning exercises to be circulated as minor news items, so that the general public knows that emergency response is something that has been thought about and is ready to activate if needed, not a reflex reaction to evolving events.

The importance of crisis communication is highlighted here. Communication and behaviour change are central components of pandemic management.

Government should:

- Provide urgent funding for research in communication and behavioural insights into aspects of public health management, to inform and improve future communications.
- Ensure coordinated national communication strategy and information, with clear and logical explanations for differences where they exist.

## Firearms

The PHAA strongly supported early action, particularly by the Governments in Western Australia, Queensland and Victoria, in closing gun shops and firearm dealerships as part of the distancing restrictions. With reports that sales of firearms had spiked in the beginning stages of the pandemic, the moves to clearly delineate licenced weapon dealers as non-essential services was welcomed by the public health community.

## Alcohol

There is emerging evidence that the fear, uncertainty, economic pressures and social isolation during COVID-19, have contributed to increased risky alcohol use. Alcohol marketing has flourished during the past couple of months, with some advertising specifically encouraging alcohol consumption in response to COVID-19 restrictions.

This has flowed through to an increase in alcohol-related harms including an increase in family violence incidents overall and incidents involving alcohol, and an increase in demand for general mental health service and alcohol specific treatment and support services.

As initial restrictions on movement ease, and the economic implications play out, the harms from alcohol use, especially among at-risk populations, are likely to become more prevalent.

For details, please see appendix.

Governments should:

- Place limits on predatory alcohol marketing
- Invest in prevention and educating the public to reduce risky drinking
- Support alcohol and other drug treatment services
- Work with State and Territories to place curbs on alcohol availability, especially late at night, and online sales and deliveries
- Make data available in a timely manner to allow for monitoring and rapid policy responses to keep the community safe, and
- Ensure that Government messaging supports people to reduce their drinking.

### Racism

The high levels of reported racism, particularly towards people with a South East Asian background, has been very disturbing. Policing of distancing restrictions has been uneven. This has not only occurred because of the pandemic, but reflects underlying elements of racism already in existence.[20] It is really important we understand this better and ensure we find ways in Australia to make our values such as respecting people explicit. An analysis of infringement notices given during distancing restrictions will be important to examine any racial discrepancies in policing.[20]

Government should fund an analysis of infringement notices given during distancing restrictions to identify trends and discrepancies in policing.

# Recovery

### Australian CDC

The establishment of an Australian version of a centre for disease control (CDC) or its equivalent has been sought by public health experts for many years, but long resisted by Australian Governments. This would be one way for a more coordinated approach to supporting national approaches to communicable diseases control and environmental health issues, and pulling together the emerging evidence as pandemics unfold.

The COVID-19 crisis has renewed calls for this type of designated public agency to provide scientific advice on communicable disease control. Australia is the only country in the Organisation for Economic Co-operation and Development (OECD) without such an agency.[21] The apparent success of Australia in minimising the number of cases and deaths from COVID-19 may be interpreted by some as evidence that we have no need for a CDC. However, there are many factors which worked in our favour in controlling COVID-19, including our geography and the dominance of travel-related cases as opposed to community transmissions. While the Australian Health Protection Principal Committee (AHPPC) mechanism was pre-existing and able to be utilised quickly, our response would have benefitted from having a centralised agency to support and advise the AHPPC.

A CDC is able to provide:

- a source of technical leadership and coordination
- proficient communication of technical information and direction to the public and healthcare providers
- training and mentoring to support workforce development
- independent, expert-led investigation of emerging health issues
- ongoing analysis and interpretation of national data
- Engagement and co-ordination with like agencies in the Asia Pacific region and internationally
- Scenario planning relating to future possible pandemics
- development of new surveillance methods
- routine review of international findings
- evaluation of policy and program impact
- assist with the provision of surge capacity to the public health and other workforces.[21]

An independent agency to provide advice and education to the public about COVID-19 (in this instance), and to coordinate relevant health advice to the public would assist with protecting against inconsistent information and misinformation.

In 2018, the Australian Government released its response to the 2013 House of Representatives Standing Committee on Health and Ageing report: *Diseases have no Borders: Report on the Inquiry into Health Issues across International Borders*. Following the COVID-19 crisis, the Government may wish to review some of the responses to recommendations in that report. Recommendations regarding workforce development (13), and an audit of agency roles and responsibilities (14) were noted rather than supported. Significantly, a recommendation for an independent review to assess the case for establishing a CDC in Australia was not agreed, citing the development of the National Communicable Disease Framework to improve coordination and integrated response "without changing the responsibilities of government".[22]

The Office of Health Protection was established in 2005 within the federal Department of Health as an alternative but less well-resourced approach, and it too has had to endure significant resourcing constraints and loss of specific expertise in public health.[17] This can in turn impact upon the quality and adequacy of support to other key national advisory groups and networks such as CDNA or enHealth (the cross-jurisdictional Environmental Health Committee that also reports to AHPPC). Nevertheless, calls for an Australian CDC continue.[23, 24]

PHAA recommends the Government establish an Australian independent designated public agency to provide scientific advice and education, and coordination assistance on communicable disease control, including all diseases of public health importance.

## Advisory bodies to Government

The PHAA commends the Government on the establishment of the National Cabinet for key decision making during the COVID pandemic. While not perfect, the cooperation and coordination between the Federal and State and Territory Governments has been key to Australia's successful response to date. The bipartisanship that National Cabinet involves is welcome. The bipartisanship and decision making based on science rather than politics is strongly commended. We hope to see a continuation of this on other issues into the future in Australia.

The PHAA is aware of two main sources of advice to Government and the National Cabinet regarding the COVID-19 response: one for health and the other for business.

The Australian Health Protection Principal Committee (AHPPC) "is the key decision-making committee for health emergencies and is comprised of all state and territory Chief Health Officers and Chaired by the Australian Chief Medical Officer."[25] Also on the AHPPC, is the chair of the Communicable Diseases Network Australia (CDNA), which is the key advisory body regarding communicable disease control across jurisdictions in Australia. Members of the CDNA (state and territory and Australian Government representatives, plus a representative from the Public Health Laboratory Network of Australia) have significant expertise in diagnosis, notification systems, monitoring, epidemiology and evidence-informed implementation of public health responses.

This network has operated very well under immense pressure due to the many roles members also carry within their jurisdictions. Resourcing of basic public health infrastructure has not been maintained across most jurisdictions, leaving shortfalls in capacity to respond as well as to carry out basic induction and training of the necessary additional staff to undertake work such as contact tracing as the COVID-19 pandemic became apparent.

The Government has also established on 25th March 2020 the National COVID-19 Coordination Commission. However, there are serious questions about this Commission which was appointed without any consultation and is right now considering project proposals. What was the selection process for the membership? What are the declarations of conflicts of interest and how are those conflicts being addressed? What are the processes by which a proposal is put before the Commission? What are the guidelines they are operating under to make recommendations on particular project proposals? What accountability and transparency measures are in place for the important tasks of this Commission? What will be the impacts on our recovery from COVID-19 of this opaque and unilateral decision?

According to the Commission's website it aims to "coordinate advice to the Australian Government on actions to anticipate and mitigate the economic and social impacts of the global COVID-19 pandemic…The Commission is advising the Prime Minister on all non-health aspects of the pandemic response". PHAA has concerns that this Commission, as currently established, will not be able to achieve this aim, and is not focused across all aspects implied in the ambitious aim to begin with.

A quote from the Chair, Mr Neville Power, listed on the website says the Commission is to "help minimise and mitigate the impact of COVID-19 on jobs and businesses, and to facilitate the fastest possible recovery of lives and livelihoods once the virus has passed".[26] This provides a clear and concise focus on the economic impacts, but does not adequately reflect or reference the social impacts which will be substantial.

Another indication that the focus is clearly on economic rather than the social impacts is the membership of the Commission. The members include former CEOs and senior executives of Fortescue Metals, Smorgens Steel Group, Telstra, IBM, Toll Holdings, EnergyAustralia, Shell, BHP Billiton, Dow Chemical Company, DowDuPont, and the Australian Council of Trade Unions. While this creates a particular economic focus, there do not appear to be any members whose experience and expertise suggest a community and social focus.

The make-up of the Commission does not appear constituted to allow it to fulfil its designated purpose. The members lack apparent experience and expertise in a broad range of non-economic issues upon which the Government will need advice. The issues raised in this submission are an example of these types of issues, for which a clear channel of advice of Government is severely lacking. The current Commission is an inappropriate vehicle for that advice.

PHAA strongly recommends that:

- the stated purpose and terms of reference of the existing Commission are amended to reduce the focus to economic issues, and to provide clear and transparent processes and guidelines.
- a reduced emphasis on fossil fuels and a greater emphasis on economic stimulus that reflects the urgent need for action in relation to the climate crisis. This will require additional members with that expertise and interest.
- another Commission be established to provide advice on non-economic issues. This new Commission should be comprised of members with a diverse range of backgrounds in social policy and programs, to provide advice on impacts on particular sectors of society, and how to "build back better".

## Responsive, inclusive, participatory and transparent decision making

While we applaud the use of the National Cabinet in the early phase of the pandemic, now that we have moved beyond that to a phase for rebuilding the social and economic sectors, it is important that, in accord with the SDG 16, the community is involved in policy and planning decision making:

- 16.6 – Develop effective, accountable and transparent institutions at all levels
- 16.7 – Ensure responsive, inclusive, participatory and representative decision-making at all levels

This needs to occur at two levels. Parliament as the core government body in Australian representative democracy needs to be fully carrying out its policy making, debate and decision-making functions, and its oversight of the executive branch of government at this crucial time. There is no technological reason that parliament and its committees cannot be sitting while permitting distancing.

Secondly, given the dramatic changes that have occurred, the community also needs to be brought into the policy making processes using tried and tested participatory and deliberative means as is being done in other countries. Planning for Australia's future requires a whole of government with community involvement approach.

We are concerned at the extensive use of delegated legislation and the specific exclusion of parliamentary review of a high proportion of that legislation. Excluding parliamentary review is particularly non-democratic.

Government should:

- Recall Federal Parliament and State and Territory Parliaments
- Wind back the use of delegated regulation and ensure that any use of clauses that remove Parliament's capacity to amend or reject this legislation is limited and justified
- Include the community in planning and policy discussion about recovery from COVID-19

## Casual workers

As restrictions ease and Australians return to workplaces, maintaining extensive testing and isolation of actual and suspected cases is essential to avoid a second wave. Staying home when sick is one of the core messages promoted to the public to reduce the spread of this coronavirus. However, workers will often attend when they have only mild symptoms, and the risk of attending whilst sick increases in workers who have little or no access to paid sick leave.

The WHO reported that in 2009, when economic crisis and the H1N1 pandemic occurred simultaneously, an alarming number of employees without the possibility of taking paid sick leave attended work while sick. This allowed H1N1 to spread throughout their workplaces, causing the infection of some 7 million co-workers.[27]

In Australia approximately 35% (more than 3.6 million) workers have no access to sick leave.[28, 29]

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| Government should: introduce a national paid pandemic leave scheme allowing 10 days over 12 months |

## Human rights

With the disproportionate impacts on particular population groups,[30] and the immense burden of COVID-19 placing increased pressure on already stretched health systems, there are significant risks to human rights through the response and recovery phases of the pandemic. Disadvantaged people are at increased risk of infection and death, and less access to health care, and there is evidence of wealthy countries stockpiling and attempts at profiting from the crisis.[31]

A global statement signed by organisations representing over 5 million public health professionals, scientists, academics, health-care professionals, and advocates, including the World Federation of Public Health Associations. This statement proposes a Global Health Equity Task Force within the WHO, and calls for coordinated global action of governments working closely with civil society organisations.

The Government should advocate for a Global Health Task Force within the WHO to:[32]

- Provide countries with the financial and expert resources required for a response that is maximally effective and protective of vulnerable populations
- Suspend debts of lower-income countries and increase debt relief
- Maximise supply and share health resources globally, equitably and based on need
- Distribute therapies and vaccines equitably, based on need
- Remove export controls, reform sanctions and revise travel restrictions that hinder the global COVID-19 response
- Protect people who lack protection from own governments

## Climate change

A healthy recovery is one that recognises that human, economic and planetary health are closely connected: when all three are healthy, all three are strong. As the pandemic has shown, when human health is compromised, the economy suffers. Climate change will magnify the risks from other infectious diseases, making outbreaks more frequent, less predictable and harder to deal with. The ongoing destruction of animal habitats increases transmission pathways with other animals and humans, increasing the risk of pandemics.[16] Air pollution accounts for 7 million premature deaths each year, and leaves people with weakened respiratory and circulatory systems, increasing vulnerability to pandemics such as COVID-19.

The response to the COVID-19 pandemic has shown that the Australian Government is capable of decisive and strong action, underpinned by a respect for scientific evidence, in a bipartisan way. This approach to one health crisis of the virus, must now extend to the other global health crisis – climate change.

For details please see Appendix.

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| The Government should ensure that recovery policies and economic stimulus are designed to ensure a healthy recovery with co-benefits to health, the environment and the economy, emphasising decarbonisation towards net zero emissions. |

## Access to medicines, vaccines, tests and medical devices

Patents and other intellectual property protections can present barriers to procuring medicines, vaccines, diagnostic tests and medical devices. In a public health emergency like COVID-19, these barriers can lead to shortages of life-saving products.

Examples of this for patents have already been seen, and Australian legislation includes important safeguards to prevent shortages of medical supplies. We also need to use international mechanisms to ensure that Australia can import drugs manufactured elsewhere when there is insufficient capacity to produce them locally, and support global mechanisms such as the WHO's COVID-19 Technology Access Pool to ensure affordable access on a global scale.

The COVID-19 pandemic necessitates a fundamental re-think of the types of rules that are negotiated in trade agreements, including those that can encourage monopolies and reduce affordable access to all forms of medical supplies, and put at risk the lives of people in every country of the world.

For details, please see appendix.

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| The Australian Government should:<br>• prepare to use the compulsory licensing and/or Crown use provisions in the Commonwealth Patents Act to over-ride patents where this is necessary to prevent shortages of critical products during COVID-19<br>• amend the compulsory licensing provisions in the Patents Act to remove (or suspend for the duration of the pandemic) the requirement to negotiate with the patent owner prior to issuance of a compulsory license<br>• revoke an earlier decision at the World Trade Organization to declare itself an "ineligible importing member" of drugs produced under compulsory license in other countries<br>• commit to ensuring the open sharing of intellectual property, knowledge and data that will enable timely and affordable access for people of all countries to medical products to combat COVID-19, and endorse the WHO's COVID-19 Technology Access Pool<br>• use enforceable provisions in funding arrangements to ensure that publicly-funded research outcomes are affordable and accessible to all on a global scale<br>• utilise safeguards to facilitate access in the TRIPS Agreement, as confirmed by the Doha Declaration on the TRIPS Agreement, and support other countries' rights to use these flexibilities<br>• reconsider the rules negotiated in trade agreements which can encourage monopolies and reduce affordable access to medical supplies |

# Impacts on population groups and health issues

## Criminal justice system

Prisoners represent some of the most vulnerable populations, including significant over-representation of Aboriginal and Torres Strait Islander people, those from low socio-economic backgrounds, people experiencing homelessness in the community, those with mental illness, and people with disabilities. As reflected in the distancing and quarantine measures in place in the community, the virus spreads quickly in closed spaces making overcrowded prisons an ideal place for disease transmission. Allowing the virus to spread in prisons would dramatically increase the epidemic curve.

With distancing and increased hygiene practices difficult or impossible in some prison contexts, because of shared facilities and restrictions on availability of some products such as alcohol-containing hand sanitiser, prevention within prisons is more problematic than in the community.

For details, please see appendix.

The Government should:

- Take immediate action to reduce the number of people in places of detention: ensure that prison is used only as an option of last resort, with specific efforts to reduce the use of remand, and to facilitate early release wherever possible.
- Prohibit the use of solitary confinement as a method of isolation and quarantine.
- Ensure that National Preventive Mechanisms and other inspections under the Optional Protocol to the Prevention of Torture (OPCAT) are facilitated to ensure no reduction in oversight.

## Refugees and asylum seekers

Many of the obstacles to the recommended distancing and hygiene practices for prisoners, apply also to refugees and asylum seekers in immigration detention. Access to healthcare is often limited, with crowded conditions and shared sanitation facilities. These people are already detained unreasonably and unconscionably. For those living in detention facilities in Nauru and Papua New Guinea, there is an additional burden of being detained in countries with poor health systems. With 1,440 people in detention facilities in Australia,[33] and another 388 in offshore detention on Nauru and Papua New Guinea,[34] there are high risks without appropriate infection control.

Asylum seekers and refugees have minimal or no access to Medicare, and may not be able to access appropriate information and health services because of poor health literacy, lack of interpreters, fear of arrest and costs. These concerns are also relevant for those on bridging visas, or temporary visa holders including migrant workers and international students.

Government should ensure that everyone in Australia, including asylum seekers, refugees, those on bridging visas, and temporary visa holders including migrant workers and international students, has access to testing and related treatment through the provision of access to Medicare.

## Mental health

COVID-19 protection measures of distancing, closures and quarantine are having significant mental health effects. COVID-19 disproportionately impacts those people who are already vulnerable; the current social and economic impact is unlike anything the world or Australia has seen since the Great Depression. It is essential that we not underestimate the importance of preventative mental health strategies, and working over the long-term with Australians *without* an existing mental health condition, whose world has been turned upside down by the emergence of one or more of the major life events described.

The COVID-19 pandemic may worsen existing mental health problems and lead to more cases among children and adolescents. Access to crisis services has already increased.

A key issue in effectively responding to the wide-ranging mental health issues currently impacting, and likely to impact, Australians in the future, is promoting and maintaining help-seeking behaviours from the general public.[35, 36] There is an increased need for accessible services to redress stigma and enable and enhance access to mental health care in a variety of clinical, non-clinical and peer-based spaces.

Factors with the potential to positively impact mental health are technology advances, availability of support systems, access to health resources, media messaging, government support, and sense of global community.[37]

For details, please see appendix.

Consistent with WHO recommendations, Government should prioritise:

- Promotion of access to mental health services – including awareness campaigns, public health messaging and risk communication, and continuation of telehealth Medicare item numbers.
- Strengthening mental health service capacity – including psychological aspects of hospitalisation, increased planning and capacity for community based and alternative service provision and increased use of technology-based services.
- Increased investment in primary prevention and promotion of mental health and wellbeing using a whole of society approach that seeks to address the social, economic and environmental determinants of health – including resilience, connectedness and social and economic support.

## Family violence

Increased rates of reporting of family violence incidents have been noted around the world, including in Australia,[38] with increased frequency and severity of incidents, and violence in relationships for the first time. This was expected because of research and evidence that family violence can become more frequent and severe during periods of emergency. For many people, public health and community containment measures introduced to reduce the spread of COVID-19 such as physical distancing and self-isolation, as well as increased financial insecurity and reduced ability to leave relationship, may increase their risk of family violence.[39] With fewer opportunities to leave the home, people experiencing family violence have lost access to social support, information and advice, both formal and informal.[38] Changed and reduced interactions with professionals with mandatory reporting responsibilities such as teachers and doctors, will have reduced opportunities to notice signs of concern and risk.

## Longer term impacts on young people

Within the shared and collective experience of COVID-19, there have been stark differences among the generations. While many young people contracted the virus, they were more likely to have few and less serious symptoms, whereas older people were more likely to experience severe illness or death. The response measures, however, played out in an opposite way. Younger people were more likely to be among the millions of workers who lost their employment and income, whereas older people were more likely to be in more secure employment or retired.

While this is clearly a gross generalisation, there is some sound basis to the notion that younger people have suffered the most from the response, to prevent older people suffering most from the virus. This may be a perfectly acceptable and rational decision for a society to make. However, the existing and underlying conditions of that society are relevant.

The disproportionate impacts of the response to COVID-19 on young people have exacerbated existing economic insecurities and intergenerational wealth disparities, lack of affordable housing options, and anxieties about a lack of political leadership and action on issues of importance to young people such as climate change and job security.[40] The COVID-19 experience has severely and disproportionately affected social determinants of health for young people.

A consideration of which professions and workers were considered essential during this pandemic response, and the renumeration of those people compared with others considered non-essential, should lead us to question who we value in society and why.

For details please see appendix.

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| The Government should ensure that economic stimulus packages ensure that intergenerational wealth disparities are addressed through removing tax incentives and concessions predominately benefitting older, wealthier people. |

## Infant Feeding

The importance of breastfeeding is well known for the short term and long-term health of the baby and the mother. In the time of a pandemic the protection, promotion and support of breastfeeding is even more crucial than in pandemic free times. Breastfeeding is a human right and helps to reduce morbidity, mortality, ensures proper growth and development, and protects women and their children.[41] To date, breastfeeding has not been well recognised as a practice that provides resilience in all types of emergencies, including pandemics, but there is now ample international guidance supporting appropriate planning and preparedness at the national level.[42]

The development of policies and clinical guidelines regarding infants in infectious disease outbreaks is challenging, and must weigh the risks of disease transmission against the importance that breastfeeding plays in supporting infant and maternal physical and mental health. It was concerning that in the early stages of the pandemic, little coordinated, authoritative advice was available, leading to many hospitals writing their own guidelines with a lack of expert input.

For details please see Appendix.

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| The Government should:<br>• Promote breastfeeding with clear and expert guidance<br>• Ensure strong messaging that breastfeeding provides food security so it is important not to prematurely wean during an emergency<br>• Ensure messaging is available about re-lactation and where to seek advice and support |

## Children's Health, Wellbeing and Education

During the recent introduction of social measures to curb the spread of Coronavirus (COVID-19), families were encouraged to stay home, to work from home as much as possible, and to keep children at home. This has had far-reaching impacts for children, recognised and acknowledged by Prime Minister Scott Morrison, particularly in relation to the disruption to secondary, primary and early education. Furthermore, the notion those at most risk of contracting COVID-19 are adults and those managing chronic and comorbid health conditions precluded children from attracting high level attention to address their health and wellbeing needs during virus containment periods.

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| Planning to address the health and education needs of children during the rollout of a National pandemic emergency response should be reviewed as a priority area in this Inquiry. |

## Early Childhood Education and Care

The early childhood education and care (ECEC) sector provides essential services to families in preparation for children entering primary school, and to support health objectives including development of lifelong nutrition and physical activity habits.

The challenges highlighted throughout the current emergency suggest significant vulnerabilities for the ECEC sector for both children and staff. In response, the Government declared free ECEC services to parents on a background of a funding gap between funding to the ECEC sector and Job Keeper eligibility for payments to support employees. This highlighted the vulnerability of the sector to deliver up-front equivalent Job Keeper payments with drastically reduced numbers of children in attendance.

Nutrition best practices and healthy food environments in ECEC settings were disrupted as cook-provided meals were replaced with lunchboxes from home, which evidence shows rarely meet National Nutrition Guidelines.[43]

By undertaking an orderly response and review of ECEC sector support in the wake of the COVID-19 phenomenon, ongoing stability for children's health, education and wellbeing will be ensured and demonstrate effective governmental actions in times of emergency.

For details please see appendix.

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| An inquiry into ECEC services who currently support 1.4 million children across Australia is warranted to determine the impact of multiple factors including poor food access, funding, staff wellbeing, sector resilience during this emergency. An immediate evaluation of disruption to children's learning and provision of services should be undertaken Nationally.<br>Government should plan for safe return to usual care and re-uptake of services, ensuring availability of places for working families and vulnerable families. State and Commonwealth co-ordination of sector support models should be orientated towards sector sustainability with transparent ongoing oversight and review as the lifting of containment restrictions continues. |

## People with disabilities

Many families of children or adults with disabilities rely very heavily on the care and NDIS systems to survive and to be able to participate themselves in communities or even work.[44, 45] Restrictions on these activities during the pandemic has meant that these families have had to take time from work to be able to care for their child/person as services have been withdrawn because of precautions resulting in even greater isolation and in some cases exposure to significant behavioural challenges without support.

Lack of access to technological solutions such as TeleHealth options, complex health and social needs, and co-morbidity have compounded difficulties for families during this time, and support the need for patient and family-centred services. The experience of families during the emerging reorientation of services responding to the COVID-19 pandemic highlights the importance of better design, less duplication and better clarity for families of children with disabilities. The involvement of consumers in planning and messaging changes is vital.

For details please see Appendix.

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| Government should support and act upon the principles outlined in the Statement of Concern,[46] and prioritise a review of impacts for people diagnosed with disability and their families and carers. |

## Food security

While the Government may feel confident that "Australia does not have a food security problem" from an agricultural and production perspective,[47] for individuals, it is a different story. Poorly and not routinely measured, Australian household food insecurity is relatively hidden. Before COVID-19, food insecurity affected over 4 million Australians, who did not have consistent access to sufficient, safe and nutritious food due to a lack of money or other resources.[48, 49] Among Australians living in entrenched disadvantage, over 80% experience household food insecurity.[50] The health consequences of this include malnutrition and diet-related chronic diseases such as obesity and diabetes, and mental illness, all exacerbating healthcare costs.

> *"The major risk to food security from the COVID-19 crisis is not empty supermarket shelves. It's the emerging social and economic crisis that will push greater number of people into poverty, so that they're unable to afford enough nutritious food".*[51]

Food charity schemes experienced and increase in demand and disruptions, affecting those who rely on them for food. Low and newly low income families may have to make compromises in an effort to stretch the household income for bills and unexpected costs, with food being the only flexible item. This would have further health implications as lack of nutritious food intake could then increase vulnerability to infection and viruses like COVID-19. Food insecurity is a robust predictor of health care utilisation and costs incurred by working-age adults, independent of other social determinants of health.[52]

The Australian Government has shown leadership in a living social wage, and is commended for this action. The challenge is to continue to see the longer-term benefits of this.

The past few months have also been the first time the fragility of the food system in Australia has been so severely tested. Some supply issues were seen, especially to regional and remote areas.

Government should:

- Ensure that economic stimulus packages and adjustments to the JobSeeker and JobKeeper payments do not increase food insecurity in Australia.
- Enact Australia's obligation Article 11 of the International Covenant on Economic, Social and Cultural Rights 1966, by specifically providing adequate social protection in the form of financial assistance payments indexed to the cost of living.
- Increase the resilience of our food systems.[53]

## Primary health care

The health care delivery sector has redesigned its processes and services during COVID-19 to maintain health services to people during distancing and isolation. Hospitals restructured wards and reorganised non-essential surgical lists to accommodate any surge in in-patient umbers due to SARS CoV-2 infections. Services which could not be delayed, such as emergency and obstetric deliveries, were thoughtfully restructured to enable continuity of services. The shortfall in adequate personal protective equipment (PPE) for all clinical and other staff in public settings is acknowledged, and, to our knowledge, has been addressed. The enormous amount of work to protect the people delivering and using these services is acknowledged.

However, the development and roll-out of community COVID-19 testing services was not clearly articulated, and whilst it was pleasing to have the 'pneumonia/chest' clinics developed, the mechanism for access to these remains unclear.

The importance of telehealth during the time of the pandemic has been recognised by the development of telehealth Medicare Benefit Scheme (MBS) item numbers which will remain in place until September 2020. Telehealth item numbers have been provided to general medical practitioners, psychiatrists, paediatricians, nurses, midwives, psychologists, speech pathologists, physiotherapists, occupational therapists, social workers, dieticians, and Aboriginal and Torres Strait Islander Health Practitioners,[54] and used by at least 1 in 6 Australians.[55]

While designed as a temporary measure, expansion of telehealth services has long been an aspiration of the health sector in Australia, particularly for regional and remote areas. However, the importance of having adequate and reliable internet links is of separate and parallel importance.

Government should:

- Make telehealth items permanent, along with adequate internet services
- Review surge capacity plans for unavoidable/emergency inpatient services and ensure their adaptability for use in future emergencies
- Upgrade PPE stockpiles for primary health and hospital services are maintained for future emergencies

## Sex workers

Prior to the coronavirus pandemic, sex workers faced systemic vulnerabilities due to criminalisation and policing of their work, social stigma and discrimination.[56] Despite systemic challenges, sex workers in Australia have a strong track record of spearheading successful public health programs in partnership with government, including their world-leading response to the HIV pandemic.[57, 58]

Confronted with the challenges of COVID-19, many sex workers implemented social distancing and other safety strategies even ahead of government mandates. Through the work of peer educators regularly interacting with a diversity of sex workers, sex worker organisations are informing and designing timely and context-appropriate public health interventions to support sex workers, their families and the wider community.[59, 60]

For details please see Appendix.

Government should include sex worker organisations in the planning and implementation of workplace reopening strategies, to avoid negative impacts to sex workers and the wider community and ensure that policies reflect real-world practicalities.

## Dental health

The dental sector has been significantly affected during the response to COVID-19, where restrictions to dental practice were in place based on the guidelines developed by the Australian Dental Association. Whether these restrictions were based on evidence or potential real risk is unclear. However, more consultation within the sector, and with the Australian Commission on Safety and Quality in Health Care may have been beneficial.

Recent advances in telehealth technology including the use of intra-oral cameras by community health personnel in remote clinics has demonstrated that telehealth may be successfully extended to some oral health services.

## Transport

The distancing restrictions and closures of businesses has resulted in some outcomes which we may wish to encourage into the future. One of these has been the decrease in traffic on our roads, and increase in walking and cycling around local communities. There are many benefits from this change – to the environment from decreased emissions, and to individuals from the physical and mental health benefits of exercise. The large scale move to working from home has demonstrated that in many more cases than we previously thought possible, we can significantly reduce the hours of each day we spend commuting.

As restrictions ease, and movement increases, people may understandably feel reticent to be on crowded public transport, and so a real risk is a significant increase in motor vehicle traffic as cars are seen to be a safer option. With appropriate leadership, we have the opportunity to encourage and facilitate active transport as a viable alternative, alongside an increase in public transport to minimise overcrowding.

Valuable leadership on this has already been shown in Australia, with the Government prioritising physical activity as an essential activity during distancing restrictions. Internationally, Governments have recognised the unique opportunity provided by the decreases in motor vehicle activity to repurpose space. Measures taken around the world have included reduced speed limits, widened footpaths, emergency cycle lanes, and streets closed to motor vehicles.

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|---|
| Now is the opportunity to create and improve active transport infrastructure, and improve public transport availability to reduce reliance on private motor vehicles. There have already been some projects such as this in Australia, and State and Territory Governments should prioritise these investments as part of the infrastructure projects in the recovery stimulus packages. |

## Aboriginal and Torres Strait Islander peoples

Aboriginal and Torres Strait Islander peoples are at increased risk of severe disease from infections such as COVID-19, particularly those over the age of 50. In recognition of this, a number of specific mechanisms have been put in place to reduce the incidence of COVID-19 among Aboriginal and Torres Strait Islander people.

The Aboriginal Community Controlled Health Organisations (ACCHO) sector advocated for travel restrictions limiting access to remote communities was instituted to prevent infections in these communities. Such travel restrictions were subsequently actioned by relevant governments.

PHAA commends the Government on convening the Aboriginal and Torres Strait Islander Advisory Group on COVID-19, co-chaired by the National Aboriginal Community Controlled Health Organisation (NACCHO) and the Department of Health, to develop and deliver a National Management Plan.[61]

This has led to significant leadership, engagement and work from the Aboriginal and Torres Strait Islander health sector with all governments. This includes 10% of GP Respiratory Clinics and testing sites being run from ACCHOs, to facilitate culturally safe access.

The genuine partnership approach has led to good outcomes for Aboriginal and Torres Strait Islander communities so far, with few cases of COVID-19. While breakdowns of official figures are difficult to find, anecdotally, Indigenous people are under-represented, perhaps accounting for as little as less than 1% of cases. This is an extraordinary and positive outcome, for a population group identified as highly vulnerable.

The coordinated, strategic approach from the ACCHO sector as early as February, well before COVID-19 was called a pandemic, has had many aspects which have contributed to the success. A number of resources, such as COVID-19 specific on-line modules for Aboriginal and Torres Strait Islander health worker training, have been provided through NACCHOs and the Australian National University.

Culturally appropriate messaging was also quickly developed and distributed, using the existing strong connections to communities, well before the Commonwealth messaging was produced. Additionally, the Aboriginal Health and Medical Research Council of NSW, a jurisdictional affiliate of NACCHO, developed a Pandemic Toolkit specifically for ACCHOs in NSW. The focus of ACCHOs at jurisdictional and national level on public health is likely to have given them a strong starting point for responding to this crisis. A full evaluation to identify learnings is needed to fully understand this.

The increased pressure on Indigenous organisations is notable, in particular the NACCHO and jurisdictional affiliates, and ACCHOs.

Of note, the majority of remote communities do not have reliable access to internet resources, so that when available to them, these resources have been critical.

Government should:

- Increase ongoing support and funding to NACCHO and ACCHOs in recognition of the increased burden on Indigenous organisations in coping with health-related emergencies, reducing the government load and delivering appropriate information to Indigenous communities.
- Ensure Aboriginal and Torres Strait Islander representation in advisory bodies to Federal and State governments.
- Provide funding for the evaluation of the response within Indigenous communities to identify lessons for future pandemic response

## Gambling

The gambling venues containing Australia's 194,000 electronic gaming machines have been closed during the restrictions arising from the COVID-19 pandemic. This has provided people with gambling problems and addictions an opportunity to reduce their gambling behaviours, with reports of positive benefits. There are a number of public health issues to address in considering the re-opening of these venues as distancing restrictions ease.

This obviously includes careful consideration and enforcement of modifications to the layout of premises, gaming machine spaces, cleaning of machines, and other operating practices. Many changes will be needed to reduce the risk of infection. These were not particularly healthy environments even before COVID-19 came along.

But there are wider public health issues to address, dealing with the personal impact of gambling, stress and mental health, and income loss and social inequalities that in turn drive other forms of ill health. Key to addressing these issues is awareness of the well-established relationship between social disadvantage and stress, and poor physical [62]and mental health outcomes.[63] Australia has one of the highest per capita concentrations of EGMs, and they are regressively located in suburban and regional areas with disadvantaged populations.[64]

Because of this, gambling imposes disproportionate harm on sectors of the community that can, generally, least afford to absorb it. This exacerbates existing socio-economic disadvantage and stress, leading to rapid deterioration in mental health. It is also likely that suicide rates could increase significantly as a result of the economic and other consequences of the pandemic.[65] Access to EGMs will exacerbate this.

For details please see Appendix.

State and Territory Governments, advised by public health authorities, have a responsibility to be diligent in addressing the very real risks of both COVID-19 and other health and social harms that will result from the re-opening of electronic gaming venues.

## Alcohol and Other Drug Sector

People who use alcohol and other drugs often have poorer general health, increasing their risk to severe disease from infections like COVID-19. Similar to the increase in alcohol use, there has been a reported increase in use of other drugs in response to the stressors including homelessness, job loss, and domestic and family violence over the past few months.

Treatment services have reported an increase in the number of people seeking access to services, at the same time as capacity at those services has been reduced to comply with distancing rules.

The sector has responded with changes including increased use of telehealth, flexibility in opioid pharmacotherapy dispensing, and other workforce changes.

Government should:

- provide additional funding to treatment services to address ongoing need as the economic impacts of COVID continue
- continue telehealth for AOD services

# Conclusion

The response from Australia to the COVID-19 pandemic has in many ways been exemplary – unashamedly led by medical and scientific advice, bipartisan, cooperative and decisive. And we have relatively low incidence and fatality rates to show for it.

However, there are always lessons to be learned from the details, particularly in relation to communication, and the impacts of both the pandemic and the response on particular population groups. There has been evidence of significant increases in health-related investment due to COVID-19. However, there is no clear evidence or even active discussion of an increase in resourcing of public health expertise and capacity. Given this has been a public health crisis, which is yet to fully play out, and which many experts suggest will not be the last, this is not a sustainable situation.

As we move into the recovery phase, we must retain the sensible decision-making and think more holistically and long term than a simple snap back to business as usual:

- Sustained increased funding for public health at Federal and State and Territory levels.
- Support training and capacity building for the public health workforce.
- Establish an Australian independent designated public agency to provide scientific advice and education, and coordination assistance on communicable disease control, including all diseases of public health importance.
- The real living wage provided through JobSeeker must be retained to allow recipients to focus on attaining new jobs as the recovery progresses, instead of being plunged into poverty requiring a full time focus on basic survival needs.
- Services must be provided in recognition of the likely longer-term impacts of the pandemic.
- A healthy recovery is essential, recognising the links between human, economic and planetary health.
- Strong action on climate change, led by scientific advice, is required to address underlying vulnerabilities to pandemics including deforestation (making pandemics more likely to occur), and air pollution (making people more vulnerable to the effects of coronavirus).

The PHAA appreciates the opportunity to make this submission and the opportunity to contribute to a healthy recovery from COVID-19.

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

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12 June 2020

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Public Health Association
AUSTRALIA

# Public Health Association of Australia submission on COVID-19: Appendix to main submission

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12 June 2020

# Contents

# Introduction

This appendix to the PHAA submission provides further detail, primarily on the impacts on COVID-19 for particular population groups, and addresses specific issues for consideration in moving into the recovery phase. Material from the main submission is not repeated here, so this appendix should be read in conjunction with the main submission.

## Climate change

We know that the health consequences of climate change are real and severe.[1] Increasing levels of pollution impacting the quality of our air and water have been systematically increasing our vulnerability to disease for decades, just as deforestation and unabated climate change have been increasing a broad number of health risks to humans. Air pollution from traffic, pollution from inefficient energy use for cooking and heating, emissions from coal-fired power plants, and pollution from the burning of solid waste and agricultural practices, all combine to weaken the respiratory and circulatory systems. These harms account for 7 million worldwide premature deaths each year.

As one of the most exposed countries in the world, particularly to the effects of our biggest environmental killer – heat, Australia's policy responses on climate change to date have left us in an increasingly vulnerable position.[2]

COVID-19 has provided a rare glimpse of cleaner air in some of the most polluted cities and countries in the world. We have been shown what is possible, and fortunately, feasible policy options to pursue this path exist. We must take the opportunity we have been given, and economists around the world have shown that it would be not only the most environmentally responsible course of action, but would also be economically responsible.

With unprecedented fiscal stimulus packages, and the Australian Government advice being inappropriately dominated by the resources sector, there is a real and serious risk that the recovery from COVID-19 could take Australia further down the fossil fuel dependent path, and exacerbate climate change.

However, the recovery also presents an unprecedented opportunity to boost action against climate change through a recovery led by renewable energy and environmentally sustainable economic solutions.

There is emerging evidence that the pandemic is already leading to reductions in the deployment of renewable energy, and reduced investment in renewable energy research and development. We need to recognise this risk, and choose not to let it be Australia's path.[3] Stimulating the economy needs to be done urgently, and solar and wind farms can be constructed more rapidly than coal or natural gas facilities, making them ideal for short-term stimulus.[3]

A study from Oxford University surveyed over 200 central bank officials, finance ministry officials and other economic experts from G20 countries, and identified 5 recommended directions of policy action:

- clean physical infrastructure
- building efficiency retrofits
- investment in education and training
- natural capital investment for ecosystem resilience and regeneration
- clean research and development.[4]

Action in these policy domains would deliver large economic multipliers quickly, while also shifting the trajectory of our emissions towards net zero.

Groups representing over 10 million health professionals globally have come together to call for a healthy recovery which:

- looks after the most vulnerable people
- provides workers with access to well-paying jobs that do not exacerbate pollution or nature degradation
- prioritises pedestrians, cyclists and public transport over private motor vehicles in cities
- ensures that water and air is protected and clean.[5]

It has been estimated that decarbonisation would lead to global GDP gains of US$ 100 trillion by 2050, and in doing so quadruple the number of renewable energy jobs as part of net job gains in the energy sector, offsetting job declines in fossil fuel operations.[6]

Locally, similar reports and policy proposals for Australia have shown that a green recovery is an economically as well as environmentally sensible recovery.[7, 8] These reports confirm that gas is not an appropriate, environmentally or economically viable option to drive a recovery because of its high emissions and price volatility. Instead, we can and should replace fossil fuels and instead power Australia with renewable energy, use the opportunities provided by Australia's natural renewable resources to become a global zero emissions exporter of energy, products, minerals and services, and build resilience in our land and coasts.[7]

The Australia Institute has recommended that stimulus packages to come should:

- have high direct employment
- target those most impacted by the crisis
- provide useful projects with co-benefits
- target regional disadvantage.

The Institute's analysis of a range of policy options against these criteria found that while major projects such as addressing public housing stock, housing for the homeless, maintenance of public buildings, cancelling 'robodebts', electricity grid infrastructure for renewables, health messaging and mass tree plantings address most of these criteria, recently favoured policy options such as big business tax cuts, wages freezes and building coal fired power stations address few, if any of those criteria.[8]

## Alcohol

For many people the fear, uncertainty, economic pressures and social isolation brought by COVID-19 may contribute to an increased likelihood of alcohol being used at riskier levels and in riskier ways.

Recent information indicates that 14-40% of young Australians are drinking more alcohol since the COVID-19 restrictions started. Data collected by YouGov Galaxy on behalf of the Foundation for Alcohol Research and Education (FARE) found that of those people who are drinking more alcohol:

- 37% have been drinking daily
- 32% were concerned about their or someone in their household's drinking
- 29% were drinking on their own more often
- 32% were drinking to cope with anxiety and stress and
- 24% had started drinking and ended up drinking more than they thought they would.

A Hall and Partners' survey taken in April 2020 shows commonly reported reasons for drinking more during COVID-19 are boredom (53%), anxiety and stress (45%), being tempted due to more time at home (43%), to keep spirits up (39%) and loneliness (20%).[9]

Already there has been increased demand for services, including general mental health services and alcohol-specific support services. The National Alcohol and Other Drug (AOD) Hotline has seen a doubling in calls in early 2020 compared with early 2019. An online early intervention and support application has seen a 28.6% increase in member engagement and a 35.2% increase in new registrations.[9]

There has also been a reported growth in alcohol-fuelled harms. A Women's Safety NSW survey of frontline domestic and family violence specialist workers found that since COVID-19 restrictions were introduced, 47% reported an increase in their caseload and about half (51%) reported an increase in involvement of alcohol in family violence situations.

A sharp increase has been seen in online sales[10, 11] and increased engagement with alcohol advertising. A study from the Cancer Council WA and FARE revealed that over one hour on a Friday evening, one user was bombarded with an alcohol ad every 35 seconds, with nearly three quarters referencing the pandemic, and 16% encouraging people to use alcohol to cope, survive or feel better.[12]

It is important the Government messaging supports people to reduce their drinking during COVID-19. Some Government messaging, aimed at decreasing social isolation during distancing, may have inadvertently encouraged alcohol consumption.[13]

## Access to medicines, vaccines, tests and medical devices: trade and intellectual property issues

Rules negotiated under trade agreements, patents and other intellectual property protections can lead to shortages of life-saving products like medicines, vaccines, diagnostic tests and medical devices during a public health emergency.

We have already seen examples where patents have created obstacles to access. Hundreds of patents on N95 face masks held by a US company have resulted in critical shortages of this vital personal protective equipment needed by health workers.[14] One hundred and fifty civil society organisations including Médecins Sans Frontières recently called on Gilead Sciences, maker of the potential COVID-19 treatment remdesivir, to release the patents it holds on the drug in more than 70 countries.[15] In fact the company had recently applied for an extra period of exclusivity from the US Food and Drug Administration, and only dropped its application after a public outcry.

The Commonwealth *Patents Act* 1990[16] includes some important safeguards that enable patented inventions to be exploited without the consent of the patent owner. These are its *compulsory licensing* and *Crown use* provisions. Use of these provisions is permitted under the World Trade Organization's Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS),[17] and Australia should be prepared to use them to prevent shortages of medical supplies.

Under the Act, the Federal Court can order that a compulsory license be granted for a patented invention under certain conditions, meaning that a third party (e.g. generic medicines manufacturer) can produce copies of the patented invention without the permission of the patent owner. However, one of the conditions for issuing a compulsory license is that "the applicant has tried for a reasonable period, but without success, to obtain authority from the patentee to exploit the original invention on reasonable terms and conditions" (Section 133, Para 3(c)). This condition may slow down the process if negotiations with the patent owner take a long time. Canada has passed emergency legislation[18] to remove its requirement that negotiations with the patent owner take place before a license is issued during the COVID-19 pandemic. Australia should consider doing the same.

The *Patent Act's* Crown use provisions provide another mechanism allowing Federal, State and Territory governments, or a party authorised by a government to over-ride a patent in an emergency in order to provide a service primarily provided or funded by the Commonwealth or a State or Territory. These provisions may be faster and easier to use because they only require ministerial approval rather than an application to the Federal Court.

In addition to preparing to use the provisions in the Patents Act, the Australian Government should also ensure that we can import drugs manufactured under compulsory license in other countries, in cases where there is insufficient manufacturing capacity in Australia to produce them locally. To do this, Australia will need to revoke an earlier decision at the World Trade Organization to declare itself an "ineligible importing member".[19]

To ensure equitable access to COVID-19 medicines, vaccines and tests at a global level, and in line with the World Health Assembly COVID-19 Response resolution,[20] the Australian Government should:

- commit to ensuring the open sharing of intellectual property, knowledge and data that will enable timely and affordable access for people of all countries to medical products to combat COVD-19, and join 37 other countries in endorsing the WHO's COVID-19 Technology Access Pool;
- use enforceable provisions in funding arrangements to ensure that publicly-funded research outcomes are affordable and accessible to all on a global scale
- utilise safeguards to facilitate in the TRIPS Agreement, as confirmed by the Doha Declaration on the TRIPS Agreement, and support other countries' rights to use these flexibilities.

## Criminal justice system

People incarcerated in prisons and youth detention centres are in a number of higher health risk categories, with increased rates of chronic conditions including diabetes, cardiovascular disease and asthma.

The profile of the Australian prisoner population is also ageing. On 30th June 2019, there were almost 6,000 prisoners aged 50 years or older,[21] which is considered elderly because of the generally poor health of prisoners.

An outbreak of COVID-19 in prisons would have a substantial flow-on effect in the community. Prisons have significant number of people moving through them daily, including correctional staff, health workers, lawyers, educators, non-government support workers, and visitors. Many prisoners revolve in and out of the system regularly, with many of those entering prison being held on remand, and almost half of new admissions have been in prison in the previous 12 months.[22]

Healthcare in prisons is often overstretched, and security issues mean that ensuring all people living and working in prison have their health monitored closely and regularly enough, and then quickly isolating those who contract the virus, is logistically challenging. The kinds of self-isolation and increased hygiene practices available in the community are not practicable in prison, where large groups often share bathrooms, laundry and eating areas. Air circulation may be poor where prisoners do not have the option to open windows. Alcohol-containing hand sanitiser may not be available.

Decarceration, as is occurring elsewhere globally,[23] is a sensible emergency public health measure at this time to protect the health of prisoners, people working in prisons, and the wider community. While this has not been happening in Australia as a COVID response so far, alternative measures have included isolation for new prisoners, decreased time out of cells, and severe restrictions on visits. These measures may amount to prolonged periods of solitary confinement, resulting in unrest and mental ill-health.

There are reports that the Courts are taking the pandemic into consideration, including in the Government's duty of care to prisoners.[24] Responses such as increased availability of personal protective equipment and safe travel plans for newly released prisoners are welcome,[25] but the responses must include decreasing over-crowding and enabling distancing and hygiene recommendations to be put into practice without solitary confinement conditions.

Forensic mental health services providing treatment to persons on a forensic order who have experienced issues with the justice system and have been impacted by mental health issues are at considerably higher risk for COVID-19 symptoms. This is due to comorbidity of severe mental health diagnosis and its intersection with legal stressors for persons experiencing institutionalisation in forensic hospitals and mental health units within the prison system.[26]

## Mental health

Social and structural determinants of health (SDOH) influence the health and wellbeing of individuals, groups and communities. Key SDOH impacted by COVID-19 include socioeconomic position, social exclusion, social capital, employment and work, housing and residential environment (AIHW, 2016). Structural determinants include broader political and economic issues that impact on equity, justice and wellbeing. Undue pressure on one or more of these social determinants is known to have deleterious effects on an individual's mental health status.

Sub-optimal mental health is an established leading factor that can have adverse consequences on a wide range of biopsychosocial health outcomes (AIHW, 2016). Mental health can impact access to services and create a disjoint between the person in their environment; therefore, it is essential that accessible services redress stigma, enable and enhance access to mental health care in a variety of clinical, non-clinical and peer-based spaces.

Comparisons can be drawn from the Great Depression to the COVID-19 pandemic, but it is also clear that how individuals and systems interact and function in modern society is quite different. Therefore, our responses to the current pandemic must also be different. Despite social determinants impacting mental health the primary response for treatment continues to reflect a biomedical response that fails to address the trauma associated with distress, highlighting the need for sensitive and trauma informed services.

Some population groups have an increased risk of developing adverse psychosocial outcomes as a consequence of the COVID-19 pandemic and Government response. This includes those with a heightened risk of infection such as the elderly, people with compromised immune function, people with disability, health care providers and people with pre-existing medical, psychiatric or substance use problems.[27] As such, significant media coverage has been given to mental health issues due to COVID-19, including promotion campaigns to encourage the general public to reach out to friends, family and mental health professionals and services for support. Quite rightly, focused attention has been given to people with existing mental health conditions, due to estimated significant increases in suicidal and other high risk behaviours, such as drug use.[28]

Mental health risk is further amplified by the fear and uncertainty associated with the pandemic increasing anxiety and stress, which intensifies the symptoms of those with pre-existing psychiatric disorders.[29] In addition, the social isolation caused by the pandemic increases the time spent with family members and reduces access to normal support networks for those with pre-existing mental health conditions further increasing mental health risk.[30]

The COVID-19 pandemic may worsen existing mental health problems and lead to more cases among children and adolescents. Many young people are socially isolated, have had their education interrupted and are anxious about their future.[28] Further, schools play an important role in providing mental health support and counselling to students. This support is at risk with school closures, and so is the long-term health of students without access to this support.[31] In addition, with university campus closures and the move to online learning, university students are expected to have a range of mental health effects including: feelings of frustration and anxiety, loneliness and isolation, loss of access to on-campus counselling services, suffer mental health issues as a result of the disruption, and experience financial issues as a result of having to travel home or losing employment opportunities. To-date the Federal Government has not provided additional support specifically to universities to ensure affected students are adequately supported during the COVID-19 pandemic.

In response to the pandemic, the Federal Government announced $74 million dedicated to mental health services to support increased capacity and accessibility of care, including the delivery of mental health services via telehealth.[32] While this is a welcome decision, as evidence suggests that telemental health services are similarly effective as in-person services, uptake has historically been slow, and not all Australians have the technology or Internet services available to participate in this model of care.[31, 33] In addition, evidence has found that the effectiveness of telemental health commonly differs between people with depression, anxiety and PTSD.[34]

Despite these barriers, telemental health provides a welcomed opportunity for mental health care services to continue to be delivered while social distancing regulations are in place to ensure services continue to be available for the community.[34] Many clinicians and professional organisations including the WHO have expressed their support in increasing the availability of mental health care services throughout the pandemic, with support to sustain the expansion of telemental health services post-pandemic.[34-36]

Due to the scale of the pandemic, the influence of social and structural determinants upon health and wellbeing outcomes for individuals, groups and society, especially the onset and consequences of existential crises, must not be underestimated. The contemporary definition of an existential crisis refers to a state of psychological being that can engender a sense of meaningless, emptiness or purpose seeking.[37] Existential crises can broadly present as a:

- Crisis of freedom and responsibility
- Crisis of death and mortality
- Crisis of isolation and connectedness
- Crisis of meaning and meaningless
- Crisis of emotion, experiences, and embodiment

Existential crises often result in elevated psychological distress, anxiety and/or depression, and can inhibit everyday functioning. It is commonly triggered by major life events such as a job loss, relationship breakdown (especially divorce), death of a friend or relative, diagnosis of a serious illness and experiencing a traumatic situation. Australians are currently experiencing or witnessing multiple events such as these due to COVID-19. Consequently, it is essential that we not underestimate the importance of preventative mental health strategies, and working over the long-term with Australians *without* an existing mental health condition, whose world has been turned upside down by the emergence of one or more of the major life events described.

A caring and compassionate society that cares for others is the best approach to suicide prevention. Australian governments need to prioritise promotion of mental health understanding and service provision to that end.

Preliminary data released by the Australian Bureau of Statistics (2020) and other agencies, such as ACOSS (2020), who work on the frontline with regards to social determinants of health, points to an impending mental health crisis if we do not successfully engage both the general public (who would not ordinarily seek help) and health care professionals who would not ordinarily screen for or address SDOH or existential crisis symptomology. This is particularly important as new modelling has predicted a 30% increase in new cases of common mental disorders a year in Australia.[38]

We need to prioritise mental health promotion through a caring and compassionate society that cares for others – this is the best approach to suicide prevention. New modelling integrating economic and mental health data has shown that suicide will increase between 25 and 50 per cent if we fail to act.[39] Suicide is likely to become a more pressing concern as the pandemic spreads and has longer-term effects on the economy and in particular unemployment, reduced pay and economic recession. There is evidence that suggest these types of challenges have an established link with attempted suicide and increased psychological distress.[28]

Many of the general risk factors for increased suicidal behaviour and suicide are relevant during times of pandemic such as domestic violence, alcohol consumption, social isolation, entrapment, loneliness and access to means but also stigma towards individuals with COVID-19 and their families.[28] It is likely that suicide risk factors among individuals residing in rural areas will be exacerbated during the COVID-19 epidemic and suicide rates may subsequently increase.

Key challenges for those in rural areas are exacerbating interpersonal risk factors due to social distancing, ready access to firearms, and onset or exacerbation of mental health symptoms.[40] Suicide increases are not inevitable if national mitigation efforts are put in place. The mental health system, including support hotlines, evidence-based online interventions should be supported to respond to this expected increase.[28, 41]

Finally, given the need for a rapid and high-volume response, we need to ensure there is accurate modelling as well as transparency of model codes to guide health policies.[42]

The WHO recommend public policy solutions including:[43]

1. Apply a whole-of-society approach to promote, protect and care for mental health.
2. Ensure widespread availability of emergency mental health and psychosocial support.
3. Support recovery from COVID-19 by building mental health services for the future.

Consistent with these recommendations governments should prioritise:

1. Promotion of access to mental health services
    - Awareness campaigns around COVID-19 impact on distress and information/education on help seeking. Access to mental health services has reduced by people with a chronic mental health condition.
    - Effective public health messaging and risk communication to reduce uncertainty and anxiety about the health and economic risks.
    - Continue telehealth Medicare item numbers following COVID-19
2. Strengthen mental health service capacity.

    Mental health systems are at risk for losing capacity due to hospital spill over and clinic closure to promote social distancing. Innovative models to deliver mental health support to communities in the midst of a pandemic are needed to prevent a mental health crisis.[44] In addition, access to crisis services has increased (including kids helpline, 1800 respect and Men's Helpline. A comprehensive public health response to the pandemic must include:

- Attention to the psychological aspects of hospitalisation for patients, families, and staff affected by COVID-19
- Planning for emergency and acute psychiatric patient care if hospitals become overwhelmed with COVID-19 patients, and
- Innovations for providing mental health care in communities while social distancing is required and health system resources are strained.[44]
- Improved access to alternative mental health services such as peer run services, groups and therapeutic communities
- Improved access to digital technology mental health services, including telemental health. The shift to telehealth represents a major pivot of the sector, which would have longer-term benefits.
- Additional support to university to ensure they can counter the mental health impacts by ensuring curriculum planning and guidance sessions are available and providing telemental health services where required.[45]

3. Increase investment in primary prevention and promotion of mental health and wellbeing using a whole of society approach that seeks to address the social, economic and environmental determinants of health.
    - Increase community resilience to enable adaptation in times of uncertainty
    - Implement strategies to increase community connectedness
    - Implement strategies to increase social and economic support

## Longer term impacts on young people

Casual employment makes up about 25% of the Australian workforce, with 54% of these workers aged under 25. Young people are also more likely than older workers to have been with their casual employer for less than 12 months, rendering them ineligible for JobKeeper benefits.[46] Industries with the highest prevalence of casual workers, such as hospitality, retail and accommodation, were among the first and hardest hit by the distancing restrictions in response to the virus.

Grattan Institute analysis has found that those on lower-incomes are twice as likely as high-income earners to be out of work, and that young people and women are likely to be most affected because they are more likely to be employed in the occupations and industries most affected.[47] More than half of young people indicate that COVID-19 has affected their purchasing decisions – higher than any other age group.

Lost income flows through to impact other essential areas of life such as housing. The Australian Government has announced a moratorium on evictions due to tenants being unable to pay their rent because they have lost or reduced employment during COVID-19. While this is a sensible measure, further measures have been suggested including a moratorium on rent increases, direct financial assistance to tenants in hardship, and rent price controls.[48]

One of the measures the Government has taken in response to COVID-19 has been to allow early release of superannuation funds. This measure has been widely taken up by the public. By 25 May 2020, $10.6 billion had been taken from superannuation funds from 1.59 million applications.[49] There are reports that of these, almost 500,000 have been from young people, with those aged under 30 being the most likely to apply, despite a potential long-term reduction of $100,000 in their retirement.[50]

Simultaneously, Governments during this crisis have produced lists of 'essential workers'- health care workers, teachers, supermarket workers, delivery and garbage truck drivers, cleaners and service station attendants. Notably absent from such lists were highly paid occupations such as merchant bankers, stock brokers, hedge fund managers, sports stars and internet marketing influencers.

One of the lessons Australia should take from this experience is to consider who in our society we value in terms of financial reward and security, compared with who we value in terms of being essential to our society. There is currently a serious mismatch between those, and casual workers, many of whom are young people, are consistently on the wrong end of that mismatch in values.

## Infant Feeding

The World Health Organization states that Infant and Young Child Feeding emergency preparedness should be a priority for all nations. In 2010 the World Health Assembly urged member states, including Australia, to ensure that they had national emergency preparedness plans in line with the OG-IFE.[51] The 2019 Australian National Breastfeeding Strategy acknowledged this and included it in their priority areas for action. However, an audit of Australian National and State/territory emergency plans found that there was a dearth of planning dealing with the needs of infants and young children. This included in pandemic preparedness plans.[52]

The development of policies and clinical guidelines regarding infants in infectious disease outbreaks is challenging. For the general population, isolation of the uninfected from the infected, and the avoidance of sharing bodily fluids, are fundamental in preventing disease transmission and achieving good health outcomes. The situation of mothers and infants is different to that of other adults and older children, and necessitates a weighing of the risks of disease transmission against the importance that breastfeeding and maternal proximity plays in supporting infant and maternal physical and mental health. That infants and children cannot care of themselves, cannot employ risk mitigation strategies such as hand washing, avoiding touching the mouth etc and that they interact with others who may be vulnerable also makes things challenging.

It was concerning that in the early stages of the pandemic there was little if any, coordinated, authoritative communication from a national level to the state health departments regarding appropriate care and management of mothers and babies in the early post-natal period, or even from the health departments to the hospital health services. This meant that many hospitals were writing their own guidelines with lack of expert input. Unfortunately, in Australia, some hospital practices, not based on evidence, have contributed to the unnecessary separation of the mother and the baby after giving birth. Some state health departments and hospitals were turning to the Australian Breastfeeding Association (ABA) for guidance. Similarly, information regarding implications for early childhood centres was needed. Fortunately, ABA was very quick to create resources for both health professionals and families and kept this up to date with the information coming from the World Health Organization, UNICEF and RANZCOG.

Motivated expert academics, volunteers and organisations like the ABA have exerted efforts and provided immediate support to ensure that correct, unbiased and evidence-based recommendations, clinical practices and messages for the health services, and families were disseminated to the largest possible audience. When a deadly virus is rampant the mother and baby relationship should be protected at all costs. Babies are safest when kept with their mother and breastfeeding supported.

As in all emergencies where food security is a concern, there needs to be messages explaining the importance of not weaning from breastfeeding at this time. Breastfeeding IS food security. There should also be widespread public messaging around the process of relactation and where to go to get support to do this. ABA noticed an increase in calls from mothers who were wanting to relactate to protect their baby from the virus and to ensure a supply of food in the situation of panic buying of formula.

Breastfeeding continues to be ignored as a practice that provides resilience in all types of emergencies, including pandemics.

## Early Childhood Education and Care

The challenges highlighted throughout the current emergency suggest significant vulnerabilities for the ECEC sector for both children and staff. Many centres closed down completely with children being kept at home. Cash flow in ECEC centres was a factor for some centres unable to make up-front wage payments for eligible Job Keeper employees.

Many workers in the ECEC setting are employed in casual and temporary contracts, and as widespread centre closures occurred, many workers in the sector were stood down and ineligible for Job Keeper wage support. The current plight of ECEC centres presents obvious challenges for families and ECEC providers when services are required to return to pre-COVID-19 availability as containment restrictions are relaxed.

Factors affecting family wellbeing that have attracted media attention have included employment and domestic violence reports. Other factors such as food security, directly impacted by family income, have received sporadic attention in the form of reports of higher levels of reliance on charitable meal provision. The early childhood education and care (ECEC) sector provides an established, regulated and funded support to optimise children's lifelong potential, across many facets including a healthy food environment.

An example of an undesirable outcome of COVID-19 restrictions has been the demise of cook-provided food for centre-based childcare. ECEC food services have potential to provide a protective mechanism for children from developing non-communicable diseases through promoting lifelong healthy eating and other healthy lifestyle habits. Most of our children attend centre-based childcare where they can receive up to two-thirds of their daily nutrition, provided by mostly cook-supported centres. In response to the containment measures required for COVID-19 containment, centres are replacing cook-provided services with lunchboxes provided by parents. Evidence from Australia and internationally is unanimous that food provided from home is not consistent with national dietary recommendations, and services can influence this.[53]

Systematic reviews show that nutrition best practices and healthy food environments are related to positive dietary outcomes in children attending ECEC settings, and that healthy eating habits learnt during this small developmental window, track into adulthood.[54] Healthy nutrition is supported by ECEC national accreditation requirements but is not legislated or formalised as policy. A small investment by Governments in ECEC settings as protected places for preventative health will have positive, long-term outcomes to children's health and wellbeing. Moreover, ECEC services support parents and their wellbeing by ensuring children receive healthy food that meets children's development needs while also developing long-term healthy food preferences and eating habits. Stress experienced by working parents with young children is associated with poorer family food choices and fewer family diets that meet national dietary guidelines.[55-57] Providing children with cooked meals and a healthy food environment while in care is associated with healthier nutrition at home, food security and less burden for already-stressed families.

Plans that include a safe return to usual care and re-uptake of services, ensuring availability of places for working families and vulnerable families should be part of the National COVID-19 response agenda and appropriately monitored. State and Commonwealth co-ordination of sector support models should be orientated towards sector sustainability with transparent ongoing oversight and review as the lifting of containment restrictions continues. By undertaking an orderly response and review of ECEC sector support in the wake of the COVID-19 phenomenon ongoing stability for children's health, education and wellbeing will be ensured and demonstrate effective governmental actions in times of emergency.

## People with disabilities

Mental health impacts have been identified as negative outcomes associated with containment measures in response to COVID-19 as families have had disrupted access to usual specialised clinical supports, participation in research studies and specialist education services. The emergence of the NDIS and challenges associated with the rollout and access has highlighted the tensions and often artificial distinctions between separate health and disability services, making it very confusing for many people to navigate. Therefore, understanding these issues for families will support better design, less duplication and better clarity for families of children with disabilities. This has never been more relevant than at times of crisis as experienced by families during the emerging reorientation of services responding to the COVID-19 pandemic.

A reliance upon TeleHealth options for delivering care has posed additional constraints as families and caregivers grapple with unfamiliar technology solutions, cancelled appointments, additional requirements to be flexible and to have access to up-to-date, often costly technology. Financial challenges have meant that access to phone and internet has also been limited for some therefore limiting connection with health and support services. As many caregivers managing those with a disability are identified as also having a disability, for many, this imposes compounded complexity with potential for additional economic, health and education implications.

In meeting the complex health needs of our patients and families, particularly those managing disability, there is potential for the provision of fragmented care that is system-centric, not patient or family-centred. In recent weeks, the emergence of a serious threat to our health service provision, in the form of the COVID-19 pandemic has prompted all service providers to rethink current systems, reorienting front line services to address consumer needs as evolving disaster management strategies have become necessary. Core values identified at the centre of health service providers highlight a commitment to patient and family-centred care. However, opportunities may exist for improvement in the way our services are delivered, in particular, the involvement of consumers in planning and messaging changes would be imperative.

Families managing a patient with a diagnosis of a disability often require a range of health and social services to meet the needs associated with the diagnosis.[58, 59] Compounding this issue, for many, the existence of co-morbid conditions and disability of the carer has the effect of complicating the requirements of individuals and their families managing disability.[58-61] It is estimated that 80% of people with a disability are likely to experience a mental health problem at some stage, and that they are extremely vulnerable at times when health and mental health services are relying on technology to deliver services.

The recent Statement of Concern[62] by experts in human rights, bioethics and disability outlines a framework of human rights principles for ethical decision-making for people with disability, which is consistent with the Convention on the Rights of Persons with Disabilities:[63]

1. health care should not be denied or limited to people with disability on the basis of impairment
2. people with disability should have access to health care, including emergency and critical health care, on the basis of equality with others and based on objective and non-discriminatory clinical criteria
3. health care should not be denied or limited because a person with disability requires reasonable accommodation or adjustment

4. health care should be provided on the basis of free and informed consent of the person with disability
5. health care should not be denied or limited based on quality of life judgements about the person with disability
6. ethical decision-making frameworks should be designed with close consultation and active involvement of people with disability and their representative organisations.

In the wake of the COVID-19 national disaster response, prioritising a review of impacts for people diagnosed with disability and their families and carers is urgently called for.

## Sex workers

The COVID-19 epidemic has both revealed and exacerbated vulnerabilities among different populations, and an obligation arises to specifically consult with vulnerable and marginalised populations to avoid epistemic injustice.[64, 65]

COVID-19 and the consequential business and travel restrictions in Australia have reduced work available, and impacted sex workers' workplace health and safety strategies. Scarlet Alliance, the national peak sex worker organisation in Australia, has identified wide ranging impacts of COVID-19 on sex workers which include housing, food and financial insecurity, barriers to access essential health care, as well as other impacts consequential to lost earnings.[66]

State based peer sex worker organisations in Australia have long-established networks of trust with sex workers, as well as a history of strong partnership with state and territory health departments. These have included the distribution and development of COVID-19 specific resources for sex workers in Chinese, Korean, Thai and Vietnamese, skills development programs for sex workers to adapt their businesses to provide online rather than in-person services, and information about accessing the government's JobSeeker and JobKeeper programs.[66, 67] A community funded emergency support fund for sex workers has been set up and by early May 2020 had raised and distributed to sex workers over $50,000 from more than 600 donations.[68]

Australian sex worker organisations call for the provision of crisis funding to Scarlet Alliance and state and territory member sex worker organisations, and removal of barriers to access income support, healthcare, prevention of workplace and housing evictions and other essential services.[66]

The involvement of sex worker organisations in the development of return to work timelines and health guidelines is critical[69] and New Zealand's government and industry discussions provide a consultative model for Australia to emulate.[70, 71]

## Gambling

Australia's 194,000 electronic gaming machines (EGMs) are mainly located in hotels and clubs, and in casinos. These venues also provide other forms of gambling, including Keno, wagering (often using terminals to place bets) and in casinos, table games. All these gambling venues have been closed during the restrictions arising from the COVID-19 pandemic.

State governments, heavily lobbied by the gambling industry and venue owners, are planning to reopen these venues. However, there are a number of public health issues to address to ensure reopening these will not endanger the health and wellbeing of those who use or work in these venues.

### *Transmission of infectious diseases*

As part of our comprehensive measures to prevent infectious diseases spreading, it is essential that gambling venues reopen only when all changes to physical layout and cleaning procedures are fully implemented, in accordance with the best advice from qualified public health experts, and with the approval of State and Commonwealth Chief Medical or Health Officers and their delegates.

This includes arrangements for physical distancing, calculation and effective enforcement of a maximum occupant capacity for each gambling room to be reopened, and cleaning procedures for EGMs or other equipment utilised for gambling activities (chips, cards, wagering terminals, terminals for keno or automated table games etc). It may also be desirable to impose 'session limits' on patrons to limit time spent in specific gambling rooms and thus reduce likelihood of transmission of pathogens.

The health and safety of staff is also of paramount concern, both for their own protection and to avoid the transmission of disease to others. All necessary measures should be taken to ensure this, including the supply and use of personal protective equipment where required. Again, such arrangements and procedures must be subject to approval by State and Commonwealth Chief Medical and Health Officers and their delegates.

### *Mental health issues*

There is a well-established association between the incidence of mental health conditions and the use of EGMs and other forms of gambling.[72] Habitual or addictive use of EGMs exacerbates existing mental health issues, and may also precipitate the onset of some mental health conditions. People with established habitual or addictive gambling behaviours have been constrained from using many forms of terrestrial gambling for some time. Some may have migrated to, or increased, online gambling activity.[73] However, it appears that this has not substituted for more than a fraction of terrestrial gambling activity. For example, there are reports that online gambling activity appears to have increased by about two-thirds[74] (equivalent to $2 billion per annum) compared with $15 billion per annum lost to electronic gaming machines.

As with other addictive products, some people with mental health issues utilise gambling as a means of 'self-medication',[75] as it appears to stimulate release of neurochemicals that provide temporary relief of some symptoms. However, the costs of gambling – particularly EMG gambling – are very high, and any relief is both short-lived and likely to exacerbate existing disorders.

It is important therefore, that when EGM and other gambling venues reopen, due consideration is given to the likelihood that a significant number of gamblers will be drawn to gamble in order to relieve symptoms of anxiety and stress. This may include some who have been 'casual' gamblers in the past.

There is also a strong likelihood that gamblers with mental health conditions who have modified their gambling behaviour during the COVID-19 restrictions will relapse in response to the availability of EMGS or other gambling, and to escape temporarily from the anxiety and stress of the current situation.

### *Disadvantage and stress*

EGM venues in particular are disproportionately located in areas of social disadvantage and stress.[76] These locations are highly lucrative for gambling operators, for reasons noted above. In some Australian jurisdictions, very large and highly lucrative EGM venues are located in the most disadvantaged suburbs and towns (e.g. Fairfield in Sydney or Dandenong in Melbourne).

The impact of the COVID-19 restrictions on the social distribution of disadvantage and income is not yet clear. It is unlikely to be evenly distributed across society,[77] and there is a likelihood that already disadvantaged workers (for example) will be further disadvantaged by the impact of job losses and business closures. The stress and heightened disadvantage of such impacts will induce a proportion of those affected to engage in risky behaviour, including gambling, in order to either (mistakenly) seek to improve their financial position, or to relieve stress and anxiety. People who have no or reduced income as a result of the loss of casual employment, for example, will be disproportionately affected.

The potential for gambling to greatly exacerbate disadvantage and stress in already disadvantaged communities is greatly heightened by this continuing situation.[78]

### *Family violence*

The relative density of EGMs in local areas is also a risk factor for family violence.[79] Access to EGM venues in the current economically difficult situation is only likely to lead to further increased rates of family violence.

### *State and Territory Government responsibilities*

Gambling harms many people. Most gambling revenue, for example, comes from people with significant or major gambling disorders.[80] There is a significant likelihood that reopening gambling venues will make the current difficult situation worse for many people. Most likely to be affected will be those already experiencing significant disadvantage, stress, and associated impaired health and wellbeing.

For these people, their dependents and friends, employers and neighbours,[81] existing impacts of the COVID-19 pandemic will be greatly heightened. This in turn will lead to increased rates of illness, suicide and significant detrimental impacts across affected communities.

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