Public Health Association
AUSTRALIA

The Public Health Crisis Budget

Strategic Directions / Pre-Budget Submission for the 2022-23 Commonwealth Budget

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Contents

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

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.

Preface

The impact of public health policy decisions on the present economic situation

Public health and the vitality of an economy have always been intimately connected, as has been made starkly apparent since the emergence in November 2021 of the current Omicron variant. The situation – as is appears in January 2022 – presents three crises:

- A *health crisis* of rapidly spreading infectious disease, bringing with it very abrupt increases in rates of morbidity, hospitalisation, and mortality.
- A multi-faceted *crisis of economic vitality*, as employers and businesses make their own emergency decisions to minimise virus transmission, deal with workforce absenteeism, cope with reduced consumer demand, and deal with logistics supply-line failures, while employees face job insecurity and loss, and experience reduced access to healthcare.
- A *psychological crisis of confidence*, including diminished confidence in government leadership as well as diminished confidence in people and businesses to make near-term plans.

The situation has also seen two dramatic impacts on health care systems in Australia:

- Most practically, there is a massive impact on the performance of our primary, secondary, and tertiary health care systems, as well as disability and aged care services, straining their capability to assists not only people afflicted with COVID-SARS conditions, but to provide care for a myriad other health conditions. Staff across these sectors are working under extreme pressure, and many people with illness experience reduced access to both urgent and preventive care.
- Regarding crisis management capability, there is also serious risk that diminished robustness of data capture of the situation will undermine the capability of governments to make rapid, informed decisions in response to infection spread.

Whilst the Omicron variant of COVID-19 has presented a challenge worldwide, there are clearly drivers of this Australian outbreak arising from specific public policy choices:

- The decisions, particularly of the NSW government and to various extents other jurisdiction governments, supported by the Commonwealth Government, to drive a holiday period 'opening up' of the retail, hospitality, tourism and other sectors. After the significance of the Omicron variant became clear in early December, those policy settings should have been reconsidered.
- Consequent upon the Omicron surge, the overwhelming of COVID-19 testing capabilities, and the related failure to plan for and resource an alternative rapid-antigen test (RAT) testing capability.
- The general in most jurisdictions, from October onward but more seriously in December, of public health safety requirements, with a related decline in effective leadership messaging urging the community to take safe individual actions, regarding basic protective measures including mask wearing, physical distancing, and managing transmission risk at social encounters.

The outcome is the broad public confusion and loss of confidence we are witnessing in January 2022.

By the time Budget deliberations are finalised, this situation may have improved – or worsened. We cannot emphasise enough that the state of the national economy, and the Budget, will always be affected by public health policy choices, programme resourcing, and effective delivery of programs such as testing, tracing, isolation and quarantine (TTIQ), clear evidence-based public messaging, and long-term recovery planning.

Our key submission is therefore that never again should there be a failure to understand that ***public health policy IS economic policy***.

Summary of recommendations

The 2022-23 Budget should incorporate the measures outlined below.

General economic and social policy

1. Broad economic policies and projections should be based on a fundamental premise that a healthy population is essential for a healthy and vital economy, with respect to both –
    - the short- and medium-term management of the pandemic, including recovery, and
    - the ongoing management of all preventable diseases, injuries and other impacts on health
2. Broad economic policies should recognise the need to reduce inequality and inequity in Australia, taking into account the social and commercial determinants of health.

COVID pandemic response

The Budget should ensure that social and health equity through our national response to the pandemic by:

3. strengthening Australia's social security system by increasing the adequacy of payment levels, improving access for people requiring support, and removing unproductive compliance policies for job seekers, and
4. providing adequate COVID-19 testing (RAT) to all Australians free of charge, on the basis that testing is a collective public health necessity, not a private consumer good.

Preventive health policy

5. The Budget should commence action on the Government's policy direction, announced in the National Preventive Health Strategy (2021), that 5% of Commonwealth, state and territory health expenditure (in aggregate) should be directed to preventive health investments by the year 2030.
6. The Budget should establish a Preventive Health Future Fund for the Commonwealth.
7. The Budget should urgently address the need for an expanded public health workforce for Australia, taking into account education, training, permanent resourcing and retention issues.
8. The Budget should establish a Centre for Disease Control and Prevention for Australia
9. The Budget should continue the pattern of recent years of increasing investment, directed to the Aboriginal Community-Controlled Health Organisations (ACCHO), towards better Aboriginal and Torres Strait Islander Health, towards achieving the agreed Closing the Gap targets, with the wider goal of adequately addressing ongoing systemic disadvantage through investment in appropriate housing, education and employment programs.
10. The Budget should make major investments in emissions reduction strategies, including a transition to reduced fossil fuel use across transport, industry and energy sectors, with a particular focus on ending fossil fuel subsidies and tax breaks, and growing the renewable energy sector.
11. The Budget should embrace revenue policies relating to alcohol, tobacco, and sugar-sweetened beverages, simultaneously achieving public health goals while generating revenue to offset resourcing for other public health investments (see the *Revenue Proposals* section).
12. The Budget should include specific investments in a range of measures to address key preventable chronic diseases (see the *Investment Proposals* section).

Introduction

Every Budget sets a national strategic direction. In 2022, strategy-makers for the Government should recognise that the future of the Australian economy as a whole will depend more than ever on building a society with strong population health.

Australia's strategic position – and its resulting budgetary position – are at a potential tipping point. The economic and wider social impacts of COVID have been highly dramatic, as have their fiscal impacts on government budgets across the nation. In order to build back healthier, government strategy now needs to recognise that the way in which we manage the population's health is a major driver of our economic wellbeing.

Population health in all its manifestations – but primarily in respect of the major determinants of chronic disease and their impacts on economic productivity – should therefore be a major strategic theme in the coming 2022-23 Budget.

Australia's Budget position is obviously under great strain, with the pandemic presenting the Government with both extraordinary expenditures as well as very significant reductions in revenue. The *2021-22 Mid-Year Economic and Fiscal Outlook* statement (December 2021) forecasts Budget deficits unprecedented in our peacetime history of $99 billion for 2022-23, $84B for 2023-24, and $57B for 2024-25.[1]

From a longer-term perspective, the Treasury's *Intergenerational Report* projections, updated in 2021 to take account of pandemic factors, foresees that "*the Australian economy is projected to grow at a slower pace over the next 40 years than it has over the past 40 years ... Slower population growth is the main reason for the expected slowdown*" (p.viii). However, "*Health and aged care are projected to be the fastest growing areas of spending over the next 40 years. Growth in these areas reflects pressures from the ageing of the population as well as non-demographic factors such as technology, changing consumer preferences and rising incomes*" (p.89).[2]

The Government is therefore under extreme pressure to identify financial initiatives which will enhance the productivity of the workforce, improve the health of the population, and increase revenue. This Submission offers proposals for achieving all of those aims.

The economics of investment in *public health* – which is not to be confused with the far greater public financial expense of *health treatment services* – offers the Government opportunities to reduce expenditure over the long-term, by means of modest investments in key areas of population health in the short term. Essentially, as we show later in this Submission, the return on investments in public health is positive, and in many cases powerfully so.

In addition, public health provides some significant opportunities to increase revenue as a by-product of specific health policies.

Launching decisive public health policy measures through the 2022-23 Budget offer the prospect of significant gains for the community in health, social, economic and environmental wellbeing – all of which should be strongly prioritised by the Government.

Budget directions

The economic significance of the population's health

The economic case for public health investment is simple and powerful: prevention (or minimisation) of disease in the community saves governments – and the private economy – very significant costs in financial and labour resources.

The economic cost of the rate of prevalence of major diseases is so great that significant shifts upward – or downward – in such rates present major economic and financial challenges (or opportunities) that governments should consider.

Similarly, investments to build disaster resilience and prepare for extreme weather events such as heatwaves and bushfires not only save lives and livelihoods, they would also avoid $380 billion in worsening economic costs from climate change over the next 30 years.[3]

The benefits of having stopped something from happening are often difficult to perceive. However, the pandemic has provided a tragically clear demonstration of the economic impact of disease. In rebuilding out of the pandemic response, we must learn from experience and focus greater resources towards public health.

According to the Productivity Commission, on average, Australians live 13.2% of their lives in ill health – one of the highest proportions of any OECD nation, exceeded only by people in Turkey and the United States.[4] National economic and fiscal policy must be framed to address this major economic and social challenge.

Years spent in ill health present two major forms of economic loss: the opportunity cost of lost productivity during working years, and the direct cost (often increasingly expensive) of treatment and care. The reality is that we will inevitably expend resources on 'health'. Our choice lies in whether we decide to spend efficiently on *preventing* disease and maintaining wellbeing, or more expensively and less efficiently on *treating* illness once it manifests.

The degree of wellbeing and health – or alternatively, the extent of disease – across the population is also a major driver of its economic vitality, to say nothing of the social importance of wellbeing. Further, population health significantly influences the inflow and outflow of government revenue and expenditure.

Many studies have demonstrated the economic significance of disease burdens in our population. A 2019 study of the economic cost of preventable disease found that "*estimates of the annual productivity loss that could be attributed to individual risk factors were between $840 million and $14.9 billion for obesity; up to $10.5 billion due to tobacco; between $1.1 billion and $6.8 billion for excess alcohol consumption; up to $15.6 billion due to physical inactivity and $561 million for individual dietary risk factors*."[5]

The OECD's *Heavy Burden of Obesity: The Economics of Prevention* report (2019), examined 52 developed member nations.[6] This study calculated the economic impact of overweight and obesity, which is one of modern society's most common forms of ill-health, and a driver of several major disease conditions. The report put the estimated economic cost to Australia at an astonishing 3.1% of GDP, including lowered labour market outputs equivalent to the productive output of 371,000 full-time workers, as well as an average reduction in lifespan by 2.7 years per person.

The November 2020 *Report of the Productivity Commission inquiry into Mental Health* gave an estimate of the economic cost (measured in 2018-19) of mental illness in Australia (comprising direct expenditure on mental healthcare and support services, lower economic participation, and cost of replacing the support provided by carers) at up to $70 billion per annum.[7]

These costs clearly form some of the largest economic and financial burdens facing Australia's governments. They are drivers of continual pressure on national and state/territory governments to make our health systems (or more accurately, our *illness treatment* systems) more financially 'sustainable'. However, the concept of fiscal sustainability should be understood not merely as an excuse for government expenditure constraint, but rather as making a case for a holistic approach to ensuring that higher socio-economic policy goals can be delivered in a manner which can be reliably maintained over many years. In fact, too much *constraint* on investing in disease prevention is can be financially counter-productive in the long term, by increasing the extent of chronic disease and other illness and injury in the population.

In addition to the growing *scale* of problems of disease, their *spread* is becoming more socially uneven. Australia faces a steadily growing problem of economic inequality and inequity, including specifically inequity of health status and outcomes. While this is true of the population as a whole, the greatest challenges to wellbeing in Australia are witnessed in the conditions faced by Aboriginal and Torres Strait Islander people, Australians of lower socio-economic status and resources, and rural and regional Australians. Socio-economic determinants such as housing, education, justice issues, and cultural security also powerfully affect equality in Australia.

Inequality also has a compounding effect, perpetuating and worsening conditions for those least well off. Socio-economic disadvantage results in persistent inability to take healthy actions, resulting in poorer health outcomes and inability to access services to deal with illness perpetuating a vicious cycle of ill health and poverty.[8]

Public health investment has very strong benefit-cost value. A decade ago, the *Assessing Cost Effectiveness (ACE) in Prevention Study* (University of Queensland School of Public Health) provided a comprehensive analysis of the comparative cost-effectiveness of preventive intervention options addressing the non-communicable disease burden in Australia, with a specific focus on Indigenous Australians.[9] The study evaluated the cost-effectiveness of 150 preventive health interventions, addressing areas such as mental health, diabetes, tobacco use, alcohol use, nutrition, body weight, physical activity, blood pressure, blood cholesterol and bone mineral density.

Across these areas of preventive intervention, the ACE study identified 23 'dominant' program interventions that both improve health and achieve net cost savings, as well as over 50 further interventions in 'very cost-effective' and 'cost-effective' categories. The study remains a policy road-map for Australian Government budgetary investments in preventive health.

More recently, a report on *The Health of Queenslanders 2020* found that:

> "*There is growing evidence that public health interventions are cost-effective with up to 75% of UK public health interventions from 2005 to 2018 meeting this criterion.*[10] *It was estimated that a $1 investment in public health generated $14 in return,*[11] *in addition to the return of the original investment, back to the wider health and social economy*."[12]

The evidence therefore clearly supports the case for public health investment having a powerfully positive impact on Budget outcomes into the future.

A national approach to preventive health investment

Australia has one of the lowest rates of preventive health spending (as a proportion of all health spending) of any OECD nation. Investment in preventive health has been less than 2% of health expenditure for at least the past 10 years, and stood at only 1.5% in 2018-19 and in 2019-20.[13] Much stronger performances by Canada, New Zealand and the United Kingdom – nations with comparable health systems to Australia's in many ways – are around 5% of total health spending.[14] (Needless to say, this comparison precedes the recent pandemic-related communicable disease control expenditures.)

Higher preventive health spending is sound long-term financial management. It means reduced disease – and with that reduced health system cost pressure on governments, especially with respect to long-term chronic disease – in future years and decades.

PHAA has therefore advocated for a standard that 5% of government budget expenditures on health should be directed to prevention at both Commonwealth and state/territory levels. The Western Australian Government announced a policy to reach this point by the year 2029.[15] And crucially, the Commonwealth has now adopted this target (for the year 2030) through the recently-released National Preventive Health Strategy (NHPS).

The NPHS sets goals for a healthier Australia, including a strong investment target:

> "***Investment in prevention is increased***. *Health expenditure is currently spent primarily on the treatment of illness and disease. Investment in prevention needs to be enhanced in order to achieve a better balance between treatment and prevention in Australia, as outlined in Australia's Long Term National Health Plan. Underpinned by: Investment in preventive health will rise to be 5% of total health expenditure across Commonwealth, state and territory governments by 2030*."[16]

However, it is important to note that any strategy is only as good as its implementation, and in this case, the NPHS refers to its goals being pursued through a 'Blueprint for Action' (NPHS, p72), dealing with the implementation and monitoring of progress in terms laid out in the strategy's Appendix (pp 73-76).

The NPHS is a 10-year strategy, and it would be absurd for no action to implement it to commence until the second or third year of the decade; action should start immediately, in 2022. The Strategy itself notes that the Government will not wait for the finalisation of the 'Blueprint' to start implementation:

> "*A key focus of this Strategy is the need to mobilise the prevention system to ensure an enduring system into the future and it is important this commences in the first year of this Strategy. Therefore, parallel to the development of the Blueprint for Action, the implementation of the immediate priorities outlined in this Strategy will commence*." (p 72)

The 2022-23 Budget will be judged against this implementation commitment.

One obvious way to advance this policy direction is to use a 'future fund' approach. A 'Preventive Health Future Fund' would store and release funding for preventive health programs, campaigns, early detection, and other practical investments. Such a fund would resemble the system by which funding for health and medical research is already provided for by the Government through the Medical Research Future Fund (MRFF). A fund model work to support the investment goal of 5% of health spending.

The Government has already announced an intention to pursue such a policy, through the NPHS, as the following extract outlines:

> "*The most effective preventive health efforts in Australia have come from evidence-based approaches that have received sustained investment and commitment by governments, the health*

sector and the community. Enhanced governance structures are required to create a more resilient prevention system.[17] *This includes:*

- *an independent, expert-led mechanism that will advise the Australian Government, through an equity lens, on current, emerging and future priorities in prevention, and*
- *a governance mechanism within government, and across relevant portfolios, that have an influence on the health and wellbeing of Australians.*

These mechanisms need to be underpinned by long-term and sustainable funding.

*"**It is time that funding and governance is ring-fenced for prevention. We need strong, independent institutions and financing and a decision-making mechanism**."*

Australia needs to be able to assess, prioritise and direct action towards the best possible initiatives to have the greatest impact on health and ensure the best use of resources. This mechanism would: provide independent, expert-led, evidence-based assessment of the effectiveness and efficiency of preventive health programs; provide guidance on investment and implementation; enable monitoring of existing and emerging health issues; and enable cross-sectoral collaboration, including shared-decision making with Aboriginal and Torres Strait Islander people.

*"**A long-term and sustainable funding mechanism will be critical to success**."*

There is a need to significantly enhance investment in prevention in order to achieve a better balance between treatment and prevention. A long-term, sustainable funding mechanism is essential to achieving the aims of this Strategy, including that investment in prevention is increased (Aim 4). It should be recognised that investment in the avoidance of illness is an investment in the avoidance of future treatment costs. The independent, expert-led governance mechanism would provide advice to Government on how the fund can be used to implement affordable, feasible and cost-effective prevention action."[18]

One source of revenue to support a prevention fund would be proceeds from the national excise taxation of tobacco, alcohol, and sugar sweetened beverages. Even a modest portion of the existing levels of tobacco taxation, which at present raises around $13 billion pa in federal revenue, would quickly and effectively establish a fund.[19] Increases additional to the current tax settings could also be directed to the fund.

An evidence-based mechanism to oversee such a fund would be needed. An expert body styled after the Pharmaceutical Benefits Advisory Committee (PBAC) and the Medicare Benefits Advisory Committee (MBAC) could be established to oversee the fund's investment directions in an evidence-based manner to maximise disease prevention outcomes, with a focus on the highest needs populations.

Realising this vision would require cooperative work between the Commonwealth and the states and territories. The National Preventive Health Strategy looks to achieve exactly such a collective, all-governments outcome. As mentioned above, policy alignment on public health directions is currently very strong. The role of the states and territories in delivering programs funded through a fund mechanism would be straightforward, with the Commonwealth Department of Health playing a role of coordination, standard-setting, and outcome monitoring. Treasury would have a role to play in measuring and reporting on investment outcomes in each jurisdiction, taking into account funding flows from the Commonwealth as the primary collector of revenue in the overall Australian fiscal system.

The importance of preventing chronic illness

Investing in chronic illness prevention and control, through affordable, cost–effective, high-impact policies and legislative measures will deliver the greatest possible health impact in reducing illness, disability, and premature death. Chronic diseases such as cancer, diabetes, heart disease, chronic respiratory diseases and cardiovascular disease have a major impact on health and wellbeing and are responsible for around 89% of deaths every year.[20] These diseases and the major risk factors that contribute to them (tobacco use, alcohol use, unhealthy diet and lack of physical activity) also have significant negative consequences on economic productivity and financial stability for individual, households and society, as a whole.

The present pandemic will also trigger significant additional health problems, both directly from COVID infection but also from the indirect impact of many delayed preventive treatments for other forms of disease, including the often-unseen impact of chronic diseases. Diabetes, heart disease and hypertension, cancer, lung diseases, and obesity all significantly worsen the effects of COVID-19, increasing the risk of serious illness or death.[21]

The National Preventive Health Strategy indicates that it will be followed by an implementation plan for program initiatives, with a 10-year timeframe. The roll-out of public health measures should begin immediately through the 2022-23 Budget, with commitments to programs including:

- Cessation and reduction of tobacco use
- Reduction of alcohol consumption, especially for those consuming alcohol at risky levels
- Reduction of sugar-added beverage consumption
- Reduction of junk food consumption
- Promotion of healthy diets and dietary patterns
- Reduction of harm associated with gambling
- Better maternal and childhood health.

Cost estimates of chronic disease in Australia continue to mount. As noted above, estimates of the annual productivity loss that could be attributed to individual risk factors relating to obesity, tobacco, alcohol, physical inactivity and dietary risks totalled in aggregate up to $47 billion.[22]

2022-23 Budget measures should also address strategies and approaches used by the private sector to promote products and choices that are detrimental to health.

In 2020, the WHO-UNICEF-*Lancet* Commission on Child Health noted that commercial marketing of products that are harmful to children is one of the most underappreciated risks to their health and wellbeing. It concluded that industry self-regulation does not work, and the existing global frameworks are not sufficient. Industries selling unhealthy products are highly active in trying to shape individual behaviours towards the consumption of these unhealthy but often highly profitable products.[23] All too often, such marketing practices do not affirm individual freedom of choice, but instead seek deliberately to manipulate and undermine real personal choice. Arguments about commercial 'freedom' are often simply justifications for unhealthy product suppliers to manipulate consumers and dominate marketplaces.

A far stronger and more comprehensive approach to regulation is required to protect children from the marketing of tobacco, alcohol, formula milk, sugar-sweetened beverages, gambling, and potentially damaging social media, and the inappropriate use of their personal data.[24]

Sustained programs to help people make healthy consumption choices have proven effective in many domains in the past. Effective and sustained social marketing campaigns and related programs have helped people to achieve reductions in harmful consumption habits (tobacco, alcohol, sugar-added beverages, junk food, etc), and increase healthy activities (physical activity and promoting healthy eating).

Climate change and the population's health

The connections between climate and health, and the importance of systemic changes in Australia to recognise and address them, have been highlighted repeatedly. Examples of recent reports include the *Lancet Countdown report* (2021)[25], the *MJA-Lancet Countdown report* (2021)[26], the *Report of the WA Climate Health Inquiry* (December 2020)[27], and the *Climate and Health – Preparing for the Next Disaster* report by the Grattan Institute (December 2020)[28]. These reports make clear that health impacts are happening now and accelerating. Australia has not been doing enough, and we are running out of time to turn the tide.

The 2015 Paris Agreement seeks to limit global warming to well below 2°C, and ideally to 1.5°C (IPCC, 2021).[23] The Government has joined in this international policy commitment both at Paris and at the recent COP26 meeting in Glasgow. Yet the situation had by 2020 reached an estimated average increase compared to mid-20th century levels, according to different reports, of between 1.0°C [29] and 1.7°C [30] globally.

The impacts of climate change on the health of Australians are enormously significant,[31] and include:

- 22% increase in exposure to fire in the past 15 years
- across Australia, more days over 39°C in 2019 than in the rest of the period since 1960 combined
- more intense heatwaves resulting in excess ambulance demand, hospital admissions, and mortality, with heatwave-related deaths in Australia's cities predicted to more than double in the next 40 years[32]
- changing patterns of infectious disease
- rising food insecurity
- the impacts on mental health will continue to increase and unfold as time goes on
- health costs associated with mortality due to air pollution are estimated at $5.3 billion per year globally, and are estimated to cause around 5000 deaths in Australia annually, or about 4% of annual deaths.[33]

Despite the clear evidence of impacts in the reports cited above, climate policy at Commonwealth level continues to defy the science. Australia is the only OECD nation to have worsened the carbon intensity of our energy supplies over the last three decades, and we are now 36% worse than the global average.[34]

The Government's current position also defies economic logic. The costs of emissions reduction are far less than the damages of inaction, with a recent study by the University of Melbourne estimating that developing a clean Australian economy would bring a net benefit of $16.2 billion.[35] The health benefits from meeting Australia's climate goals would more than make up for the costs.[36]

The longer we delay serious action, the harder the position will be to rectify. From the present moment, the global emissions reduction effort required to meet the Paris Agreement target is a reduction of 7.6% annually. If we wait another 5 years, this will rise to 15.4% annually, and the impacts are making the task all the more difficult. The emissions from the 2019-20 fires in NSW and Victoria alone were more than equivalent to a year's worth of Australia's annual emissions, and has had an estimated $20 billion impact on the Australian economy.[37]

The recommendations from the Climate Health WA Inquiry and the Grattan Institute report (cited above) centre around the need for governance and system structures which recognise the links between climate change and health, and leadership at a national level to complement the work being done predominately in the states and territories so far.

As for the framing of a coherent policy response to these challenges, PHAA support the recommendations of the Climate and Health Alliance (CAHA) to –

- develop a National Strategy on climate, health and well-being for Australia
- conduct a national climate and health consultation
- establish an AHPPC subcommittee on climate and health
- establish a Sustainable Development Unit in the Commonwealth Department of Health
- develop a national roadmap for the health sector towards net zero emissions by 2035.

We therefore urge the Government to move decisively to address these challenges in the 2022-23 Budget, and in its broader policy-making.

A national approach to a public health workforce

Australia's existing public health workforce is highly educated, committed and effective in the tasks it is set. However, for many years it has been insufficient in size to address all the population health challenges facing the nation. The COVID pandemic has exposed this situation, not only in terms of communicable disease response capability, but in the inevitable diversion of public health-trained officials away from other population health concerns. It is strategically urgent that Australia take a coordinated approach to addressing this capacity gap.

In 2017 the Government recieved the *Joint External Evaluation of Australia's compliance with the International Health Regulations* (JEE).[38] Australia's official response, the *National Action Plan for Health Security*, addressed the issue of our public health workforce, identifying three priority actions:

- "*Use existing data sources, including relevant accreditation schemes, to define the public health workforce in order to conduct forward planning, recruitment of appropriate categories of staff (including toxicology and radiation specialists) and development of future credentialing schemes.*
- *Work with states and territories to ensure sustainable mechanisms for epidemiologists and other public health professionals at state, territory and local level.*
- *Develop a long-term strategy that uses current and new channels to increase the international experience of the public health workforce*."

In June 2020 PHAA, the Australasian Epidemiological Association and the Council of Academic Public Health Institutions Australasia (CAPHIA) jointly provided the Commonwealth Department of Health with a proposal highlighting the attraction, education, training, and capability resourcing issues, drawing on the Action Plan and other proposals.

On 26 June 2020 the nation's nine governments, acting as the National Cabinet, published a commitment to:

- establish a national training program for surge workforce
- prioritise enhancing the public health physician workforce capacity
- consider options for developing a formal public health workforce training program.

In late 2020 National Cabinet tasked the Australian Chief Scientist Professor Alan Finkel to conduct an urgent review of the capability of governments to undertake the essential tasks of tracking and tracing the COVID outbreaks. The resulting *Report of the National Contact Tracing Review* (November 2020)[39] identified the need to integrate a response to tracking and tracing capability with the state of the overall public health workforce. Specifically, the report concluded that the workforce issues could not be successfully addressed by a capability limited by a 'surge' response approach.

As recently as December 2021 the Government stated a policy commitment to this matter in the National Preventive Health Strategy:

> *"**More than ever we need a sustainable public health workforce in Australia – COVID has highlighted this**."*
>
> *COVID-19 has highlighted the importance of the public health workforce in Australia. The workforce is integral to the management of current and possible future communicable disease outbreaks, and to address the heavy burden of chronic conditions in Australia. Future public health workforce planning is vital, as is increasing the capacity and capability of the overall health workforce, including boosting their confidence in using digital health technologies to deliver health care safely, in order to be effective in prevention and public health emergencies. Strengthening the workforce requires support for digital health training and investment in digital infrastructure."* [40]

However, during the subsequent rounds of Commonwealth, state and territory budgets released through 2020 and 2021, no government announced specific measures to act on these commitments. Decisive Commonwealth budgetary leadership is clearly needed.

We recommend that the existing NSW Public Health Officer Training Programme should be appropriately adapted to the jurisdictional circumstances (it should be considered in addition to existing programs (for example, the Specialist Training Program), and not a substitute). This will assist with Australia's urgent public health workforce needs, as well as become an important source of future expert senior officers in public health leadership positions, for all Australian jurisdictions.

We estimate that funding of around $50M per annum will be needed to make the substantial difference Australia needs to achieve an adequate future public health workforce.

Aboriginal and Torres Strait Islander health

Major efforts have been undertaken in recent decades to improve Aboriginal and Torres Strait Islander people's health and wellbeing. Life expectancy has increased notably, with encouraging reductions in mortality rates from chronic diseases. Correspondingly, between 2012 and 2017, Aboriginal and Torres Strait Islander life expectancy at birth rose by over 2 years.

Nonetheless, it is vital that effort to maintain the increase in life expectancy is reinforced, as the gap in overall life expectancy between Aboriginal and Torres Strait Islander people and other Australians remains largely unchanged. It is unacceptable that, according to the 2019 Closing the Gap report, "*the target to close the gap in life expectancy by 2031 is not on track*",[41] and it is widely believed that the target cannot be achieved within the present Closing the Gap timeframe. It is urgent that the underlying social, economic, commercial and cultural determinants of the gap are addressed. This must involve deliberate, coordinated and long-term commitments, developed and delivered with and by Aboriginal and Torres Strait Islander people.

Recent Commonwealth, state and territory Budgets have made substantial investments in Aboriginal and Torres Strait Islander peoples' health, including mental health, and this is very welcome. However, serious health care challenges remain for Aboriginal and Torres Strait Islander people. Rheumatic heart disease, syphilis and otitis media continue to cause massive public health concern. Alarmingly, mortality from cancer is in fact rising, and the 'gap' in cancer mortality compared with the general population is growing. Rates of suicide remain far too high, particularly for young Aboriginal and Torres Strait Islander people.

The health conditions of young Aboriginal and Torres Strait Islander people should be a key focus. Aboriginal and Torres Strait Islander people have a younger age profile than the general population, with a

median age of 23 compared with 38 (as at the 2016 Census). Over 60% of Aboriginal and Torres Strait Islander Australians are aged under 30.

There are existing programs working to prevent disease in very young Aboriginal and Torres Strait Islander people between 5 and 8 years old. However, there is a lack of targeted attention to people from the adolescent years through to around age 25. This broad age group is formative of many lifelong health problems. Illnesses related to chronic disease risk factors (smoking, alcohol, sugar-sweetened beverages and junk food) resulting in diabetes, cardiovascular disease, oral health problems, as well as mental health problems, often have their genesis in this neglected period of adolescence and young adulthood. Specifically, there is evidence of a link between hearing loss in childhood and subsequent incarceration of Aboriginal people.

We note that the current *National Aboriginal and Torres Strait Islander Health Plan*, refreshed as recently as December 2021, has not in fact been adequately funded to achieve its outputs.[42] We recognise and welcome various initiatives in recent Commonwealth, state and territory budgets. However further work will continually be needed, and indeed no Budget in the near- or medium-term will be able to ignore the need for further initiatives to Closing the Gap. To give broad direction to such needs, the COAG Joint Council on Closing the Gap have set out priorities to accelerate improvements in life outcomes of Aboriginal and Torres Strait Islander peoples by:

- "*developing and strengthening structures to ensure the full involvement of Aboriginal and Torres Strait Islander peoples in shared decision making at the national, state and local or regional level and embedding their ownership, responsibility and expertise towards Closing the Gap;*
- *building the formal Aboriginal and Torres Strait Islander community-controlled services sector to deliver closing the gap services and programs in agreed priority areas; and*
- *ensuring all mainstream government agencies and institutions undertake systemic and structural transformation to contribute to Closing the Gap*".[43]

PHAA urges the Government to adopt substantive and durable commitments aligned with the priorities identified by the National Health Leadership Forum (NHLF), the national representative body for Aboriginal and Torres Strait Islander peak organisations advocating for Indigenous health and wellbeing, which include:

- "*Promote self-determination across national institutions, through Constitutional reform and the recommendations that arose from the Uluru Statement from the Heart*
- *Close the gap in life expectancy and the disproportionate burden of disease that impacts Aboriginal and Torres Strait Islander people, through system-wide investment approach for the Implementation Plan for the National Aboriginal and Torres Strait Islander Health Plan, with COAG Health Council*
- *Prioritise and escalate actions under the National Aboriginal and Torres Strait Islander Health Workforce Plan – to address the massive shortfall in this workforce across all professions and levels, and is essential to improve Aboriginal and Torres Strait Islander health and wellbeing*
- *Acknowledge the adverse impact of racism on the health and wellbeing of Aboriginal and Torres Strait Islander people, and aspects of the health system that prevent people from accessing and receiving the health care they require – and to work with the NHLF and other Aboriginal and Torres Strait Islander health experts in embedding co-design and co-decision making processes to embed culturally safe and responsive health practices and systems*."

In regard to workforce development, ACCHOs should be preferred training settings for public health workforce (and be supported to provide this), complementing the extensive existing public health expertise in the ACCHO sector, and recognising that public health training is an important career pathway for AHWs/AHPs and others in ACCHOs

Noting the vital need for Aboriginal and Torres Strait Islander people to lead health and other initiatives central to their own health, PHAA supports the funding of programs that are initiated and run by Aboriginal and Torres Strait Islander organisations such as the National Aboriginal Community Controlled Health Organisation (NACCHO), state and territory NACCHO affiliates, and NACCHO member services. The Budget should continue to ensure health funding for Aboriginal and Torres Strait Islander communities is directed to the ACCHO sector, with the goal of adequately addressing ongoing systemic disadvantage through investment in appropriate housing, education and employment programs.

Finally, it should be noted that health is underpinned by a capacity for self-determination, for which reason PHAA strongly supports adoption of the recommendations of the 2017 Uluru Statement from the Heart.

Policy Alignment

Alignment with existing Government policy directions

This year's Budget preparations come just weeks after the Government has launched its National Preventive Health Strategy, a key component of the Government's *Long-Term National Health Plan* (2019).[44] The NPHS lays out plans for significant new policies and an evidence-based investment with a direction-setting 'mechanism'. Crucially, the Commonwealth has adopted as a policy goal the target of investing 5% of national health expenditure towards disease prevention (with the remaining 95% continuing to be consumed by illness treatment costs) by the year 2030. This is a historic policy decision.

The Government's position, as announced in NPHS, is that the 5% goal is an aggregate target between the Commonwealth, state and territory governments. Given the centralised nature of the major Australian revenue taxes, and the consequent downward disbursement of funds to be expended through state and territory governments, it is sensible that this target be an aggregate one, not one set separately (and differently) by different governments. But to achieve this objective, a direction must be emphatically set through the Commonwealth Budget's investment choices.

Also essential will be an enhanced approach to measuring and reporting such investment, drawing on the definitions and comparative analysis capability of the Australian Institute of Health and Welfare (AIHW).

In addition, Government commitments announced through the National Cabinet process during 2020 clearly identified the need for an expanded Australian public health workforce. Work is currently underway involving all governments to reform the landscape of that workforce, in terms of attraction, education and training, career structure, and long-term commitment to expanded workforces. This workforce planning needs to cover not only communicable disease management, but the whole interrelated effort of chronic disease management and minimisation.

The Commonwealth has made a public commitment to these strategic directions, as have the states and territories. The coming Commonwealth Budget has a major role to play in resourcing this vital national strategic effort.

Alignment with other strategic advice to the Government

There is strong collegiality on a range of public health principles and strategic directions. PHAA's voice has been supported by a wide range of other non-government organisations, including the Cancer Council, Obesity Policy Coalition, Heart Foundation, Australian Medical Association, the Foundation for Alcohol Education and Research (FARE), and the National Aboriginal Community Controlled Health Organisation, as well as welfare organisations such as the Australian Council of Social Service (ACOSS), climate organisations such as the Climate and Health Alliance (CAHA), and others.

Australian and international research also supports our directions and proposals. A decade ago the work of the ACE Prevention study demonstrated that many disease prevention initiatives have strong benefit-cost outcomes.[45] The World Health Organization (WHO) *Tackling Non-Communicable Diseases: Best Buys* report (2017) has provided governments with a benefit-cost assessed smorgasbord of public health investments, all with positive economic returns.[46] And even more recently the WHO's *Saving lives, spending less: the case for investing in noncommunicable diseases* report (December 2021) provides estimated returns on investment of a range of disease prevention measures.[47]

Indeed, the Government has accepted this advice at a strategic policy level. The Government's National Health Strategy of 2018-19 confirmed a direction to improve the health of all Australians. The National Preventive Health Strategy (December 2021) has likewise set a clear direction for the nation.

Nor have state and territory governments lacked for policy commitment, as well as good alignment with the Commonwealth and among each other. These include the *Victorian Public Health and Wellbeing Plan 2019–2023* (2019),[48] the strong prevention direction in the *State Public Health Plan for Western Australia 2019 - 2024* (2019),[49] the *Final Report of the Climate Health WA Inquiry* (2020),[50] and the *South Australian Health and Wellbeing Strategy 2020 - 2025* (2020),[51] and Queensland's *The Health of Queenslanders 2020* statement.

This broad alignment of directional commitments indicates that the Commonwealth has an opportunity for collegiate action in this policy space, with minimal political or jurisdictional impediments.

Revenue proposals

The human toll of chronic diseases in Australia includes cardiovascular diseases, cancer, diabetes and chronic respiratory diseases – all of which are the leading causes of death and disability in Australia.[52] Furthermore, they carry a huge cost that extends beyond health to undermine quality of life, education, workforce productivity, and economic prosperity.

As one part of a response to these health challenges, we recommend that the Government consider the introduction and expansion of health levies (as excise taxes and pricing policies on harmful products which are detrimental to health) that both improve public health, and also generate revenue to help fund investments in public health programs.

The multiple aims of health levies include: to raise awareness about unhealthy products, to reduce the consumption of unhealthy products, to reduce the associated negative health burdens and to create new revenue streams for public health investment. There is clear evidence that health levies are effective and efficient in reducing consumption of the relevant products.

Health levies on products that have a negative public health impact, such as tobacco, alcohol and sugar-sweetened beverages have multiple policy merits.[53] Health taxes are a high-return investment which save lives and prevent disease, while advancing health equity, averting healthcare expenditure, increase workforce participation, and boost revenue for the general budget.

The combined revenue captured by the measures proposed below over the 4-year Budget period 2022-2026 is estimated to be around $4.2 and $4.6 billion per annum, totalling over $17.4 billion over 4 years.

Tobacco

Tobacco use was the leading health risk factor for both males and females and contributed the most to fatalities, with almost 20,500 attributable deaths (13% of all deaths) in 2018.[54] The social cost for tobacco use has been estimated at $136.9 billion.[55]

Evidence shows that significantly increasing tobacco excise taxes and prices is the single most effective and cost-effective measure for reducing tobacco use.[56] Higher tobacco prices also reduce smoking initiation among young people and so help stop them from first becoming addicted.

We recommend that the Government consider the equalisation of excise and customs duties on ‘roll your own’ tobacco products to equalise the tax applied to this form of tobacco with ordinary manufactured cigarettes. Cancer Council Australia estimates that this harmonisation would provide increased revenue of approximately $160m in 2022-23, increasing to $440m by 2025-26.

In addition, we recommend a 12.5% increase in tobacco excise, with the strong proviso that such an increase should be built on top of the harmonisation reform – not done in isolation – and that the proceeds of such an increase should be dedicated to investments in tobacco harm reduction measures (see the *Investment proposals* section of this submission).

If both revenue measures took effect from 1 July 2022, we estimate an increase in annual net revenue starting at around $965, declining in line with estimate reductions in consumption.

Tobacco excise measures

Revenue ($m)	2022-23	2023-24	2024-25	2025-26	total
Equalisation of excise and customs on 'roll your own' tobacco products [57]	160.0	250.0	350.0	440.0	1,200.0
12.5% increase in tobacco excise and customs duties (PHAA estimates)	805.0	425.0	146.0	138.0	1,239.0
Total	**965.0**	**675.0**	**496.0**	**578.0**	**2,439.0**

Alcohol

Alcohol is responsible for a substantial burden of death, disease and injury in Australia affecting not only drinkers but also children, families and the broader community. The social costs of alcohol misuse in Australia has been estimated to be $14.4 billion.[58] The highest costs are associated with productivity losses (42.1%), traffic crashes (25.5%) and the criminal justice system (20.6%).[59]

Alcohol is responsible for 4.5% of the burden of disease in Australia (AIHW, 2018), and plays a role in more than 200 different chronic health problems including, cancers, diabetes, nutrition-related conditions, cirrhosis, and being overweight and obesity.[60, 61, 62] There is evidence that mid to high levels of drinking substantially increases cardiovascular diseases.[63]

Harm from alcohol is preventable, and reducing the amount of alcohol consumed will reduce health and social harms in the Australian community. The costs of alcohol-related harms are significant and far exceed government revenue from alcohol taxation.[64]

However, Australia's current approach to alcohol taxation is flawed, and does not adequately recognise the extent of harms that result from alcohol consumption.[65] Alcohol is currently more affordable than it has been in the past three decades. There is strong evidence to demonstrate that the lower the real price of alcohol, the higher the levels of consumption, and therefore higher levels of alcohol-related harm.[66]

An increase in excise on alcoholic beverages is a proven measure to reduce alcohol use, while also providing the Government with revenue to offset the economic costs of alcohol use.[67] The evidence is strong that alcohol price signalling through taxation is the policy response with the largest impact on alcohol consumption and consequently on alcohol-related harm.

The Government's last comprehensive review of Australia's tax system, the Henry Review in 2008-10, identified alcohol taxation as an appropriate measure for improving social outcomes because of the high costs imposed by excessive alcohol consumption.[68]

We recommend that the Government shift to a system of volumetric taxation – that is, an excise levied on the alcohol content per volume of the product.[69] Taxing wine and cider the same as beer and lifting the rate by around 5¢ for a glass of beer would raise an estimated $2.9 billion starting from 2022-23.[70]

Alcohol excise reform – volumetric equalisation

Revenue ($m)	2022-23	2023-24	2024-25	2025-26	total
Volumetric equalisation of alcohol excises	2,900.0	2,987.0	3,076.0	3,168.0	12,133.0

It has been estimated that reform of the alcohol tax system reduce alcohol consumption by more than 9.4%, saving in excess of $2.7 billion in future annual health expenditure.[71]

We also note that the Government's National Alcohol Strategy calls for spending more of the alcohol tax revenue on preventive health activities and AOD treatment.

Sugar-sweetened beverages

(Note: 'Sugar-sweetened beverages' can be defined as any non-alcoholic beverage containing added sugar. These include sugar-sweetened soft drinks, flavoured mineral waters, fortified waters, energy and electrolyte drinks. Milk-based products, and 100% fruit and/or vegetable juice or non-sugar sweetened drinks and cordials are generally not regarded as 'sugar-sweetened beverages'.)

One of Australia's most serious health problems is that around 14 million Australians are overweight or obese. 67% of Australian adults and 25% of children are overweight, while 31% of adults and 8% of children are obese. [72, 73] The prevalence of obesity in Australia is expected to continue to increase, such that 33% of the projected adult population will be obese by 2025.[74] Obesity is a major risk factor for chronic and preventable conditions including type 2 diabetes, heart disease, hypertension, stroke, gall bladder disease, osteoarthritis, sleep apnoea and respiratory problems, mental health disorders and some cancers.

The costs of obesity are high. People living with obesity have medical costs that are approximately 30% greater than 'healthy weight' people.[75] In respect of public costs, the Australian Medical Association (AMA) has estimated that if no action is taken to stem the obesity crisis, by 2025 the government budgets will bear a further $29.5 billion (over four years) in direct costs of healthcare for people with obesity.[76]

While there are multiple causes of obesity, over-consumption of sugar is a major contributor. Over one-third of Australian adults and almost half of children consume sugar-sweetened beverages at least once a week. Adolescents and young adults are the highest consumers of sugar-sweetened beverages. Sugar-sweetened beverages are suitable for a health levy because for several reasons[77], including:

- They are a well-defined product category
- They provide minimal or no nutritional benefit
- Consumption has been associated with excess weight gain, dental decay leading to dental caries and other chronic diseases – all of which are high in prevalence in Australia[78]
- Consumption of sugar-sweetened beverages is high in Australia, particularly among adolescents, young adults, Aboriginal and Torres Strait Islander people and low-income groups[79]
- Growing evidence demonstrating positive fiscal and health impacts of taxing sugary beverages[80]
- Authoritative health organisations recommend limiting sugar-sweetened beverage consumption.[81]

The objectives of a health levy on sugar-sweetened beverages include:

- To increase the price of sugar-sweetened beverages, and through such price signalling reduce the purchase and consumption of these products
- To provide an incentive for manufacturers to reformulate to lower the added sugar content of their products, improving the food supply for all (if the sugar-sweetened beverages levy is designed to be directly tied to the amount of 'free' or added sugar contained in the beverage)
- To increase consumer awareness of the need to reduce consumption of added sugar in their diet, and that regular consumption of sugar-sweetened beverages is contrary to a healthy diet
- To generate revenue to reinvest back into population nutrition and health.

Many countries have adopted a health levy on sugary drinks, and research shows that these levies can be influential in improving diets across the population by encouraging companies to reformulate their products. Evidence from Mexico has found that its tax has reduced the amount of SSBs bought, with a 37% reduction in the total volume of SSBs purchased two years after the introduction of the tax in 2014.[82] In the UK, analysis shows that producers have reduced the sugar in their drinks to minimise the tax they pay, with a 43.7% reduction in the total sugar content per 100ml between 2015 and 2019 for the drinks subject

to the levy.[83] The Obesity Policy Coalition, of which PHAA is a member, presents consolidated evidence from the experience of other countries at the Obesity Evidence Hub site.[84]

There is good evidence that similar outcomes could be achieved in Australia. A 2016 modelling study estimated that a 20% health levy on sugary drinks could result in a 12.6% decline in consumption of sugary drinks and an overall decline in obesity of 2.7% in men and 1.2% in women. It was estimated that 1,600 Australians would have avoided death from obesity-driven causes in 25 years if a levy were introduced.[85]

In 2021 the AMA estimated that the rise in annual revenue from levies on sugary beverages could be between $749 million to $814 million.[86] We understand that the most recent estimates by AMA, taking into account anticipated reductions in consumption, are slightly more conservative, and are used in the table below.[87]

There is strong support for a levy among the Australian public. Research into the attitudes of young Australians aged 18-30 found that 74% of participants supported a levy on sugary beverages if the revenue was used to subsidise healthy foods.[88] Opinion polling has identified that most Australians supporting a health levy on sugary beverages.[89]

We therefore recommend that the Government consider a minimum 20% health levy on sugar-sweetened beverages. The revenue estimates shown below have been developed by AMA, and project the policy achieving its health goals through a steady decline in revenue as the policy has the effect of reducing sugar consumption.

Sugar-sweetened beverages levy

Revenue ($m)	2022-23	2023-24	2024-25	2025-26	total
Sugar-sweetened beverages excise	738.0	723.0	696.0	677.0	2,835.0

Summary of revenue measures

Revenue ($m)	2022-23	2023-24	2024-25	2025-26	total
Equalisation of excise and customs duties on 'roll your own' tobacco products	160.0	250.0	350.0	440.0	1,200.0
12.5% increase in tobacco excise and customs duties	805.0	425.0	146.0	138.0	1,239.0
Volumetric equalisation of alcohol excises	2,900.0	2,987.0	3,076.0	3,168.0	12,133.0
Sugar-sweetened beverages excise	738.0	723.0	696.0	677.0	2,835.0
TOTAL	**4,603.0**	**4,385.0**	**4,268.0**	**4,423.0**	**17,407.0**

Investment proposals

Managing the COVID-19 pandemic

The demands of managing the pandemic are changing rapidly, and it may be that current emergency issues have changed by the time the 2022-23 Budget goes into effect. However, we record here some broad principles which should underly the economic management and response to the near-term, and also ongoing, needs of the Australian community.

First, the Budget should ensure that social equity is front and centre through our national response to the pandemic. The social and economic determinants of health are powerful at all times, and they are exacerbated by the current disruption.

Specifically, the Budget should provide that social welfare support policies ensure that no Australian is left behind due to the economic and employment impacts of the pandemic. This should manifest in the maintenance of social welfare payments systems throughout the extraordinary impacts we are seeing on employment and the ability of the workforce to even attend employment.

Industrial relations and workplace safety policies should also continue to give priority to the emergency needs of pandemic control. Forcing workers to attend workplaces in circumstances where their health is at unreasonable risk is unethical, places unreasonable burdens on employers as well as employees, and may only result in propagating greater viral transmission, thereby increasing rates of community infection and further prolonging disruptions.

No person should be left behind without assistance due to the economic and employment impacts of the pandemic. PHAA supports proposals in this area by ACOSS, including calls to:

- Establish a minimum income floor in the income support system by lifting all income support payments to at least $69 a day – which is the same level as the pension and pension supplement.
- Ensure there are supplementary payments that meet specific needs, including lifting Commonwealth Rent Assistance by 50%, providing a Disability and Illness Supplement of at least $50 a week, and a Single Parent Supplement that recognises the costs of single parenthood.
- Abolish mandatory cashless debit and income management and set up a Social Security Commission to independently advise Parliament.
- Remove harsh and onerous unemployment payment compliance arrangements, including automated payment suspensions, excessive activity requirements, and a lack of discretion for employment service providers and Services Australia to withhold penalties, and replace with a strengths-based approach.

In the matter of personal responsibility for infection testing, PHAA's very clear position is that rapid antigen testing (RAT) kits are not a consumer good, they are a key tool in the health system for the protection not only of individuals but of the whole community. We need to encourage and resource free RAT testing to the greatest extent possible, to allow individuals to protect their own health, protect the health of others, and give public health agencies effective visibility into the prevalence of the virus in the community.

For these reasons, RAT kits ought to be provided as part of the health system. At the time of writing (January) we appreciate that serious supply line problems have been allowed to prevent the implementation of a comprehensive program of RAT testing. This situation needs to be rectified as fast as possible and RAT testing made an ongoing element of the national public health system.

We recall that the national strategy to manage the pandemic that emerged in 2020 was to be based on effective testing, tracing, isolation, and quarantining (TTIQ). The Government must take steps to ensure that each of these elements is functioning effectively. There is no economic logic in letting any of these necessities weaken, whether for policy reasons or resourcing limits; to do so will only prolong economic disruption as well as increase morbidity, hospitalisation, and mortality across Australia in the months and years ahead.

Create a framework to grow the national public health workforce

The pandemic has highlighted the state of public health infrastructure and the need to bolster the public health workforce capacity and systems, both nationally and at state and territory level. Building of the public health workforce is a clear and vital priority that must be urgently addressed.

A national Public Health Officer Training Program (PHOTP) can be immediately implemented by the Australian and state and territory governments. The existing NSW PHOTP should be appropriately adapted to the jurisdictional circumstances (it should be considered in addition to existing programs (for example, the Specialist Training Program), and not a substitute).

A program should be established to assess, recruit, train, retain and place both medically and non-medically trained staff to undertake a 3-year Full Time Equivalent training program (with an extension available to allow for a 12-month unpaid sabbatical) to create a pipeline of highly trained public health professionals. This will assist with Australia's urgent public health workforce needs, as well as become an important source of future expert senior officers in public health leadership positions, for all Australian jurisdictions.

We estimate that funding of around $50M per annum will be needed to make the substantial difference Australia needs to achieve an adequate future public health workforce.

There is existing machinery in place in some state and territory governments, providing an opportunity for the Government to play a co-ordinating/facilitating role. This may be via the Australian Health Protection Principal Committee (AHPPC) or other mechanisms.

Public Health Officer Training program for Australia

Expense ($m)	2022-23	2023-24	2024-25	2025-26	total
Department of Health	50.0	52.0	54.0	57.0	213.0

Strategic alignment: This proposal is related to commitments made by the Commonwealth, state and territory governments through National Cabinet in 2020, cited earlier in this submission. The initiative also helps implement directions stated in the National Preventive Health Strategy.

Reducing tobacco use and nicotine addiction

Implement the next National Tobacco Strategy (NTS)

Australia's national policies to this point have driven smoking prevalence in Australia to an all-time low, with statistics released in December 2018 showing that just under one in seven (13.8%) or 2.6 million adults were daily smokers in 2017-18.[90]

However, over the past decade investment in quit smoking campaigns has declined.[91] Smoking rates remain unacceptably high and – worryingly – rates of smoking decline have slowed in the last few years. Every year, over 18,000 Australians still die from their tobacco addiction,[92] and thousands more suffer from associated chronic diseases.

Smoking reduction campaigns have a very strong return on investment. The cost-effectiveness analysis of Australia's National Tobacco Campaign (NTC) found that the initial investment of $9 million yielded healthcare cost savings exceeding $740 million – an ROI value of more than an 80. Approximately 55,000 premature deaths were prevented.[93]

We propose Budget measures to provide $71 million per annum over four years for campaign and cessation programs to implement the next phase of the existing National Tobacco Strategy (NTS).

This investment would accelerate the decline in smoking in the population. It would specifically benefit Australians experiencing social and financial disadvantage, and therefore reduce the significant inequities caused by tobacco smoking. It will work to reduce the large and increasing Government health costs associated with treating preventable diseases in these groups and the broader community.

Investment can be allocated to the following initiatives:

- $46m per annum (based on advice from Cancer Council Australia) to reinstate, and maintain for the period of the NTS, a population-based National Tobacco Campaign, targeting adult tobacco users in all states and territories which is evidence-based in both creative development and audience exposure, and supported with rigorous developmental research and campaign evaluation. This aligns with proposals made by Cancer Council Australia and other leading tobacco control agencies.
- $10m per annum to create and fund a dedicated National Cessation Strategy within the NTS to facilitate a consistent, evidence-based national approach to smoking cessation service provision. This would include the development and dissemination of national clinical guidelines and program support to embed the treatment of tobacco dependence into health services, primary care, and community and social service organisations as part of routine care, and the provision of a national Quitline™ as a referral, training and behavioural support provider.
- $15m per annum to specific, targeted programs that will provide additional support to groups in the population experiencing the highest levels of disadvantage. This will primarily be done through partnerships with the public health and community service sectors to provide direct services to high needs populations.

National Tobacco Campaign

Expense ($m)	2022-23	2023-24	2024-25	2025-26	total
Department of Health	46.0	46.0	46.0	46.0	184.0

National Smoking Cessation Strategy

Expense ($m)	2022-23	2023-24	2024-25	2025-26	total
Department of Health	10.0	10.0	10.0	10.0	40.0

Targeted smoking reduction programs for groups experiencing the highest levels of disadvantage

Expense ($m)	2022-23	2023-24	2024-25	2025-26	total
Department of Health	25.0	15.0	15.0	15.0	60.0

Strategic alignment: These proposals support the Government's *National Tobacco Strategy 2020-2030,* and work towards achieving outcome targets established in the National Preventive Health Strategy including:

- Achieve a national daily smoking prevalence of less than 10% by 2025 and 5% or less for adults (≥18 years) by 2030
- Reduce the daily smoking rate among Aboriginal and Torres Strait Islander people (≥15 years) to 27% or less by 2030.

Promoting healthy weight and reducing obesity

National Obesity Prevention Strategy

PHAA supports the work of the Commonwealth and state and territory governments to finalise a National Obesity Prevention Strategy. This should be completed as soon as possible and should include a 10-year plan for investments toward specific population health goals, consistent with the recently released National Preventive Health Strategy.

The National Health Survey for 2017-18 reports that two-thirds (67.40%) of Australians are overweight or obese, and around one-quarter (24.9%) of children aged 5-17 are overweight or obese.[94]From a health perspective, these figures mean that a large proportion of the population is at heightened risk of chronic diseases including cardiovascular disease, type 2 diabetes and some cancers.[95] After tobacco use, the risk factors of overweight and obesity (8.4%) and poor diet (5.4%) are the highest contributors to Australia's burden of disease.[96]

Obesity may also have an adverse impact on Australians' experience of COVID-19. Studies have concluded that obesity is a risk factor for COVID-19 disease severity, with the World Obesity Federation stating that 'Systematic reviews and meta-analyses overwhelmingly show that obesity is associated both with a higher risk for intensive care unit (ICU) admission and poorer outcomes for COVID-19.'[97]

From an economic perspective, high rates of obesity and associated chronic disease cost the Government, as well as State and Territory governments, businesses and individuals, a significant amount. A significant part of these costs are direct healthcare costs. In a report released in 2021, the AMA estimated that

> "*…if no action is taken to stem the obesity crisis, by 2025 taxpayers will have footed a further $29.5 billion for the direct healthcare costs of obesity (over four years to 2024-25*)."[98]

As well as direct healthcare costs, obesity and associated chronic disease are also linked to indirect costs, such as loss of productivity and reduced workforce participation. An alarmingly high percentage of young adult Australians (46% of age 18-24 people)[99], a key demographic for Australia's workforce participation and economic productivity into the future, are above a healthy weight. As those Australians are at higher risk of chronic disease, this may have a significant effect on our workforce and create a large economic burden, in addition to affecting health outcomes, in years to come.

Live Lighter

PHAA specifically calls for investment in a national Live Lighter program. Live Lighter is a proven healthy eating and physical activity campaign, with 6 years accumulated evidence of success in Western Australia.[100]

Evidence generated bt the Live Lighter Campaign in Western Australia suggests that a sound public investment would be made in a sustained and well-run social marketing campaign focusing on healthy eating and prompting physical activity. [101]

A measurable metric attributable to the Live Lighter campaign is a reduction in the consumption of sugar-sweetened beverages by adolescents in Western Australia has occurred at a faster rate than has been the case nationally in the period 2012 to 2018. Such campaigns not only prompt individual and group behavior on behaviors that reduce weight gain, but also are important in promoting healthy public policy relevance to obesity prevention.

Recent funding for the Live Lighter campaign in Western Australia has to date been around $3.5 million pa. The equivalent investment needed for a sustained and effective national campaign, allowing for some economies of scale, would therefore be around $30 million pa.

Live Lighter national campaign

Expense ($m)	2022-23	2023-24	2024-25	2025-26	total
Department of Health	20.0	40.0	40.0	40.0	140.0

Strategic alignment: These proposals work towards achieving outcome targets established in the National Preventive Health Strategy including:

- Halt the rise and reverse the trend in the prevalence of obesity in adults by 2030
- Reduce overweight and obesity in children and adolescents aged 2-17 years by at least 5% by 2030
- Adults and children (≥9 years) increase their vegetable consumption to an average 5 serves per day by 2030
- Reduce the proportion of children and adults' total energy intake from discretionary foods from >30% to <20% by 2030
- Reduce the average population sodium intake by at least 30% by 2030
- Increase the proportion of adults and children who are not exceeding the recommended intake of free sugars by 2030
  At least 50% of babies are exclusively breastfed until around 6 months of age by 2025

Reducing alcohol related harm

There is accumulating evidence, particularly in Australia, of successful social marketing campaigns in the area of alcohol consumption. The most sustained effort in this field is the Alcohol Think Again campaign undertaken in Western Australia.[102] In addition to evidence demonstrating change in drinking intentions, these campaigns also create an important vehicle to heighten the need for action on policies aimed at reducing alcohol related harm.[103]

An additional need for public communication in this sphere will come with the expectation of the completion of the revised alcohol drinking guidelines currently being led by the National Health and Medical Research Council. The guidelines, last published in 2009 have been revised and a draft is out for consultation, with outcome expected in financial year 2020-21. For the guidelines to have any impact in

reducing alcohol related harm there is a need to invest in a communication strategy that informs Australians as to the best health advice relating to the consumption of alcohol.[104]

Reducing Alcohol Related Harm Program

Expense ($m)	2022-23	2023-24	2024-25	2025-26	total
Department of Health	15.0	30.0	30.0	30.0	105.0

Strategic alignment: These proposals support the Government's *National Alcohol Strategy 2019–2028* and *National Drug Strategy 2017-2026*, and work towards achieving outcome targets established in the National Preventive Health Strategy including:

- At least a 10% reduction in harmful alcohol consumption by Australians (≥14 years) by 2025 and at least a 15% reduction by 2030
- Less than 10% of pregnant women aged 14 to 49 are consuming alcohol whilst pregnant by 2030
- Less than 10% of young people (14-17 year olds) are consuming alcohol by 2030
- At least a 15% decrease in the prevalence of recent illicit drug use (≥14 years) by 203.0

Establishing a National Centre for Disease Control and Prevention

For some years now, PHAA and other health sector organisations have been calling for the creation of a Centre for Disease Control (CDC) for Australia.
The current pandemic shows how crucial are the legislated powers and agreed roles of the states, and territories and the Commonwealth. The pandemic precipitated the formation of the 'National Cabinet'. The Australian Health Protection Principal Committee ('the Medical Expert Panel') and other existing committees, specifically the Australian Technical Advisory Group on Immunisation (ATAGI), have played important and visible advisory roles.

But the 'glue' and reporting lines binding the structure within broader governance and decision making is less visible, and needs more consideration and scrutiny. There has been a close and contested line between health experts (inside or outside government) and political decision makers.

An Australian national CDC would provide an appropriate institutional middle ground as a source of trusted expert advice.

In 2013, the House of Representatives Standing Committee on Health and Ageing produced a prescient report *Diseases have no borders – Report on the inquiry into health issues across international borders*.[105] This report asked "does Australia need a national centre for communicable disease control?", and recommended the commissioning of an independent review on potential roles, structures, models, locations, governance and staffing. 15 valuable recommendations were made about Australia's ability to respond to a widespread outbreak of infectious disease (other than influenza), the need for pandemic planning exercises, proposals to develop and produce vaccines, and a national communications strategy for consumers. All these recommendations from 2013 remain relevant.

The massive impacts of COVID-19 have very clearly demonstrated that we cannot make do with pre-pandemic institutional arrangements. National surveillance and response systems were not strong or fast enough to halt or control transmission. Major challenges in the national vaccination program roll-out and quarantine have been obvious, but there have also been delays in adopting best practice regarding masks and PPE, and updating ventilation standards. The community has not understood the difference in messaging between elimination and suppression, nor the reasons why states have taken different

approaches to lockdowns. This led to, confusion and frustration, given space for misinformation, and in some parts of the community resulted in outright mistrust.

The 2022-33 Budget should therefore establish and properly resource an Australian Centre for Disease Control and Prevention.

Such a Centre could operate as the central leading organisation, in partnership with existing government and non-government agencies: a 'Hub and Spoke' model. A new structure or agency would serve both Australia's public health interests, and those of our neighbours.

An important question is scope for such an agency. The US agency is titled the 'Centers for Disease Control *and Prevention*' (our emphasis). The Government has now released its National Preventive Health Strategy, with positive directions set for controlling many non-communicable diseases. The implementation of the noncommunicable disease aims of the NPHS could productively be made a core function of a new Australian CDC.

We have estimated that a significantly-scaled CDC would require funding of around $200 million pa. However, costings can only be tentative until the precise scope of the centre is agreed. For example, the Centre may in addition to its core services play a role in allocating funding for national public health workforce training and expansion. In addition, the CDC could also be the appropriate channel for major cost undertakings such as national vaccination programs.

Finally, there would be an additional advantage to accountability and investment measurement to be gained through such a national Centre having financial responsibility for as many public health investment programs as possible, so as to make clear exactly the scale of all population health investment initiatives undertaken through the Commonwealth Government's leadership and financial support.

Establish a National Centre for Disease Control and Prevention

Expense ($m)	2022-23	2023-24	2024-25	2025-26	total
Department of Health	75.0	200.0	210.0	220.0	705.0

Summary of investment measures

Expense ($m)	2022-23	2023-24	2024-25	2025-26	total
Public Health Officer Training program for Australia	50.0	52.0	54.0	57.0	213.0
National Tobacco Campaign	46.0	46.0	46.0	46.0	184.0
National Smoking Cessation Strategy	10.0	10.0	10.0	10.0	40.0
Targeted smoking reduction programs for groups experiencing the highest levels of disadvantage	25.0	15.0	15.0	15.0	60.0
Live Lighter national campaign	20.0	40.0	40.0	40.0	140.0
Reducing Alcohol Related Harm Program	15.0	30.0	30.0	30.0	105.0
Establish a National Centre for Disease Control and Prevention	75.0	200.0	210.0	220.0	705.0
TOTAL	**241.0**	**393.0**	**405.0**	**418.0**	**1,447.0**

Conclusion

This submission has set out the case for investment in preventive health to secure a healthy future for all Australians.

Every Budget represents a significant set of choices about whether such a future will be embraced, or not. PHAA believes that the 2022-23 Budget will be measured by whether it –

- begins implementing the National Preventive Health Strategy, in particular through program initiatives to address the major drivers of chronic disease, to drive the increase in preventive health investment towards the goal at least 5% of aggregate health expenditure by all governments
- establishes a Preventive Health Future Fund with an evidence-based governance mechanism
- establishes a National Centre for Disease Control and Prevention
- supports the development of a longer-term public health workforce strategy for the nation, including assistance to the state and territories in urgent public health workforce training
- acts to address climate change and its impacts on the population's health
- invests to achieve the agreed ambition and goals of the National Agreement on Closing the Gap regarding the health and wellbeing of Aboriginal and Torres Strait Islander people.

PHAA appreciates the opportunity to contribute to the work of the Treasury and the Government. Please do not hesitate to contact our National Office should you require additional information or have any queries in relation to this submission.

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January 2022

References

1 2021-22 Budget – Mid-Year Economic and Fiscal Outlook: https://budget.gov.au/2021-22/content/myefo/download/myefo-2021-22.pdf

2 2021 Intergenerational Report: https://treasury.gov.au/sites/default/files/2021-06/p2021_182464.pdf

3 Deloitte, Economic reality check – Adapting Australia for climate-resilient growth (January 2022): https://www2.deloitte.com/au/en/pages/economics/articles/economic-reality-check.html

4 Productivity Commission, Shifting the Dial: 5 year productivity review, 2017, supporting paper 4, Why a better health system matters, 11, at https://www.pc.gov.au/inquiries/completed/productivity-review/report

5 Crosland P, Ananthapavan J, Davison J, et al. The economic cost of preventable disease in Australia: a systematic review of estimates and methods. Australian and New Zealand Journal of Public Health 2019;43:484-495.

6 https://www.oecd.org/health/health-systems/Heavy-burden-of-obesity-Policy-Brief-2019.pdf

7 Productivity Commission 2020, *Mental Health*, Report no. 95, Canberra, chapter 3, page 149; https://www.pc.gov.au/inquiries/completed/mental-health/report

8 2021 Close the Gap Report, Lowitja Institute: https://www.lowitja.org.au/page/services/resources/Cultural-and-social-determinants/culture-for-health-and-wellbeing/close-the-gap-report-2021

9 Assessing Cost Effectiveness (ACE) in Prevention Study - School of Public Health - University of Queensland: https://public-health.uq.edu.au/research/centres/past-centres/assessing-cost-effectiveness-ace-prevention-study

10 Owen L, Fischer A. The cost-effectiveness of public health interventions examined by the National Institute for Health and Care Excellence from 2005 to 2018. Public Health 2019;169:151-162.

11 Masters R, Anwar E, Collins B, et al. Return on investment of public health interventions: a systematic review. Journal of Epidemiology and Community Health 2017;71:827-834

12 Queensland Health. The health of Queenslanders 2020. Report of the Chief Health Officer Queensland. Queensland Government. Brisbane 2020

13 AIHW, Health Expenditure Australia 2019-20: https://www.aihw.gov.au/reports/health-welfare-expenditure/health-expenditure-australia-2019-20/contents/about

14 OECD Date, Health Spending: Melbourne Sustainable Society Institute: https://data.oecd.org/healthres/health-spending.htm

15 Sustainable Health Review (2019). Sustainable Health Review: Final Report to the Western Australian Government. Department of Health, Western Australia. Recommendation 1.

16 Commonwealth of Australia, Department of Health, National Preventive Health Strategy 2021-2030: https://www.health.gov.au/resources/publications/national-preventive-health-strategy-2021-2030, page 9

17 Wutzke S, Morrice E, Benton M, et al., 2017. What will it take to improve prevention of chronic diseases in Australia? A case study of two national approaches. Aust Health Rev. 41(2): p. 176-181.

18 Commonwealth of Australia, Department of Health, National Preventive Health Strategy 2021-2030: https://www.health.gov.au/resources/publications/national-preventive-health-strategy-2021-2030, page 36

19 Scollo, M., Bayly, M. (2019) 13.6 Revenue from tobacco taxes in Australia. In Scollo, MM & Winstanley, MH (editors). Tobacco in Australia: Facts and issues. Cancer Council Victoria.

20 World Health Organisation: https://www.who.int/nmh/countries/aus_en.pdf?ua=1

21 Council on Foreign Relations (2021) Noncommunicable Diseases Kill Slowly in Normal Times and quickly in COVID-19 times https://www.cfr.org/article/noncommunicablediseases-kill-slowly-normal-times-and-quickly-covid-19-times

22 Crosland P, Ananthapavan J, Davison J, et al. The economic cost of preventable disease in Australia: a systematic review of estimates and methods. Australian and New Zealand Journal of Public Health 2019;43:484-495.

23 For example, Cairns G, Angus K, Hastings G, Caraher M. Systematic reviews of the evidence on the nature, extent and effects of food marketing to children. A retrospective summary. Appetite. 2013;62:209-15

24 Clark, Helen, et al. "A future for the world's children? A WHO–UNICEF–Lancet Commission." The Lancet 395.10224 (2020): 605-658. Available from: https://www.thelancet.com/commissions/future-child

25 The 2020 report of The *Lancet* Countdown on health and climate change: responding to converging crises, Nick Watts et al: https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(20)32290-X/fulltext

26 The 2020 special report of the *MJA–Lancet* Countdown on health and climate change: lessons learnt from Australia's "Black Summer", Ying Zhang, Paul J Beggs, Alice McGushin, Hilary Bambrick, Stefan Trueck, Ivan C Hanigan, Geoffrey G Morgan, Helen L Berry, Martina K Linnenluecke, Fay H Johnston, Anthony G Capon and Nick Watts; Med J Aust 2020; 213 (11): 492.e2-492.e10, doi: 10.5694/mja2.50869 : https://www.mja.com.au/journal/2020/213/11/2020-special-report-mja-lancet-countdown-health-and-climate-change-lessons

27 Final Report of the Climate Health WA Inquiry, Tarun Weeramanthri: https://ww2.health.wa.gov.au/Improving-WA-Health/Climate-health-inquiry

28 Climate change and health: preparing for the next disaster, Grattan Institute 2020, Stephen Duckett, Will Mackey, Anika Stobart: https://grattan.edu.au/report/climate-change-and-health-preparing-for-the-next-disaster/

29 Statistica,com, Global Climate change – statistics and facts: https://www.statista.com/topics/1148/global-climate-change/#dossierKeyfigures

30 US National Oceanic and Atmospheric Administration, Climate.gov site, Climate Change: Global Temperature: https://www.climate.gov/news-features/understanding-climate/climate-change-global-temperature

31 Australian Academy of Science. The risks to Australia of a 3°C warmer world. (2021) 98p. Available from: https://www.science.org.au/supporting-science/science-policy-and-analysis/reports-and-publications/risks-australia-three-degrees-c-warmer-world

32 PWC (report for Commonwealth Government), Protecting human health and safety during severe and extreme heat events, A national framework (2011): http://www.pwc.com.au/industry/government/assets/ extreme-heat-events-nov11.pdf.

33 Global mortality from outdoor fine particle pollution generated by fossil fuel combustion: Results from GEOS-Chem, Karn Vohra et al, Environmental Research, vol 195, April 2021, 110754: https://www.sciencedirect.com/science/article/abs/pii/S0013935121000487

34 MJA-Lancet Countdown on health and climate change, 2020

35 Melbourne Sustainable Society Institute, Australia's Clean Economy Future: Costs and Benefits, 2021: https://sustainable.unimelb.edu.au/publications/australias-clean-economy

36 WHO, Health benefits far outweigh the costs of meeting climate change goals, 2018: https://www.who.int/news/item/05-12-2018-health-benefits-far-outweigh-the-costs-of-meeting-climate-change-goals

37 Impact of Australia's catastrophic 2019/20 bushfire season on communities and environment. Retrospective analysis and current trends, Alexander Fitov et al, Journal of Safety Science and Resilience, Volume 1, Issue 1, September 2020, Pages 44-56: https://www.sciencedirect.com/science/article/pii/S2666449620300098

38 https://www1.health.gov.au/internet/main/publishing.nsf/Content/ohp-biosec-JEE.htm

39 https://www.health.gov.au/resources/publications/national-contact-tracing-review

40 Commonwealth of Australia, Department of Health, National Preventive Health Strategy 2021-2030: https://www.health.gov.au/resources/publications/national-preventive-health-strategy-2021-2030, page 38

41 2019 Closing the Gap report, 122

42 Commonwealth of Australia, Department of Health, National Aboriginal and Torres Strait Islander Health Plan 2013-23: https://www.health.gov.au/resources/publications/national-aboriginal-and-torres-strait-islander-health-plan-2013-2023

43 COAG Joint Council on Closing the Gap: https://www.closingthegap.gov.au/joint-council-closing-gap

44 https://www.health.gov.au/resources/publications/australias-long-term-national-health-plan

45 https://public-health.uq.edu.au/files/571/ACE-Prevention_final_report.pdf

46 See the updated Appendix 3 of the WHO Global NCD Action Plan 2013-2020. http://apps.who.int/gb/ebwha/pdf_files/WHA70/A70_R11-en.pdf

47 World Health Organisation, 2021: Saving lives, spending less: the case for investing in noncommunicable diseases: https://www.who.int/publications/i/item/9789240041059

48 https://www2.health.vic.gov.au/about/publications/policiesandguidelines/victorian-public-health-wellbeing-plan-2019-2023

49 https://ww2.health.wa.gov.au/Articles/S_T/State-Public-Health-Plan

50 https://ww2.health.wa.gov.au/climate-health-wa-final-report

51 South Australian Health and Wellbeing Strategy 2020 – 2025: https://www.sahealth.sa.gov.au/wps/wcm/connect/public+content/sa+health+internet/about+us/about+sa+health/health+and+wellbeing+strategy+2020+2025/the+south+australian+health+and+wellbeing+strategy+2020+-+2025

52 AIHW, Australian Burden of Disease Study 2018: key findings, August 2021: https://www.aihw.gov.au/getmedia/d2a1886d-c673-44aa-9eb6-857e9696fd83/aihw-bod-30.pdf.aspx?inline=true

53 World Health Organisation, Health Taxes: https://www.who.int/health-topics/health-taxes#tab=tab_1

54 AIHW, Australian Burden of Disease Study 2018: key findings, https://www.aihw.gov.au/getmedia/d2a1886d-c673-44aa-9eb6-857e9696fd83/aihw-bod-30.pdf.aspx?inline=true

55 Identifying the Social Costs of Tobacco Use to Australia in 2015/16, National Drug Research Institute, Curtin University, May 2019, https://ndri.curtin.edu.au/NDRI/media/documents/publications/T273.pdf

56 WHO report on the global tobacco epidemic 2021: addressing new and emerging products (2021): https://www.who.int/publications/i/item/9789240032095

57 Based on estimated made by Cancer Council Australia (2022-23 Budget Submission, forthcoming)

58 The societal costs of alcohol misuse in Australia, Manning, Matthew, Smith, Christine and Mazerolle, Paul, Australian Institute of Criminology, 2013: https://www.aic.gov.au/publications/tandi/tandi454

59 PHAA, policy position statement on Alcohol, 2019: https://www.phaa.net.au/documents/item/3781

60 AIHW, Australian Burden of Disease Study 2018: Interactive data on risk factor burden: https://www.aihw.gov.au/reports/burden-of-disease/abds-2018-interactive-data-risk-factors/contents/alcohol-use)

61 World Health Organisation, Global status report on alcohol and health 2018, https://www.who.int/publications/i/item/9789241565639

62 FARE / VicHealth / Turning Point report on Alcohol's Burden of Disease in Australia: https://fare.org.au/wp-content/uploads/Alcohols-burden-of-disease-in-Australia-FINAL.pdf).

63 Chengyi Ding, Dara O'Neill, Steven Bell, Emmanuel Stamatakis & Annie Britton, Association of alcohol consumption with morbidity and mortality in patients with cardiovascular disease: original data and meta-analysis of 48,423 men and women, BMC Medicine volume 19, Article number: 167 (2021): https://bmcmedicine.biomedcentral.com/articles/10.1186/s12916-021-02040-2

64 PHAA Position Statement on Alcohol: https://www.phaa.net.au/documents/item/3781

65 Alcohol and tax — time for real reform, Mike Daube and Julia Stafford, Med J Aust 2016; 204 (6): 218-219. || doi: 10.5694/mja16.00022: https://www.mja.com.au/journal/2016/204/6/alcohol-and-tax-time-real-reform

66 Alexander C Wagenaar, Matthew J Salois, Kelli A Komro, Effects of beverage alcohol price and tax levels on drinking: a meta-analysis of 1003 estimates from 112 studies, Addiction, 2009 Feb;104(2):179-90, doi: 10.1111/j.1360-0443.2008.02438.x.

67 Thomas F. Babor and others, Alcohol: No Ordinary Commodity – a summary of the second edition: https://doi.org/10.1111/j.1360-0443.2010.02945.x

68 The Australia's Future Tax System Review, Treasury, 2010: https://treasury.gov.au/review/the-australias-future-tax-system-review

69 WHO evidence-based SAFER strategies: https://www.who.int/initiatives/SAFER) and the National Alcohol Strategy 2019-2028 and https://www.health.gov.au/sites/default/files/documents/2020/11/national-alcohol-strategy-2019-2028.pdf

70 Foundation for Alcohol Education and Research (FARE) 2018-19 budget submission: https://fare.org.au/wp-content/uploads/FARE-Pre-budget-submission-2018-19.pdf)

71 Increasing the Price of Alcohol as an Obesity Prevention Measure: The Potential Cost-Effectiveness of Introducing a Uniform Volumetric Tax and a Minimum Floor Price on Alcohol in Australia, Ella Robinson and others, Nutrients 2020, *12*(3), 603; https://doi.org/10.3390/nu12030603: https://www.mdpi.com/2072-6643/12/3/603/htm

72 Australian Bureau of Statistics, 2020, National Health Survey: First results, key findings for health statistics including long-term health conditions; mental wellbeing; and health risk factors: https://www.abs.gov.au/statistics/health/health-conditions-and-risks/national-health-survey-first-results/latest-release

73 Australian Bureau of Statistics (2018). National Health Survey: State and Territory Findings, 2017-18. Retrieved 29/06/2021 from: https://www.abs.gov.au/statistics/health/health-conditions-and-risks/national-health-survey-state-and-territory-findings/latest-release

74 PwC Australia (2015). Weighing the cost of obesity: A case for action. pp4-5, 61-63. Retrieved 22/12/2020 from: https://www.pwc.com.au/pdf/weighing-the-cost-of-obesity-final.pdf

75 Withrow, D. & Alter, D.A. (2011). The economic burden of obesity worldwide: a systematic review of the direct costs of obesity. Obesity Reviews 12, 131-141. Doi: 10.1111/j.1467789X.2009.00712.

76 Australian Medical Association, 2021, A tax on sugar-sweetened beverages: What the modelling shows: https://www.ama.com.au/articles/tax-sugar-sweetened-beverages-what-modelling-shows

77 PHAA policy position statement on a Health Levy on Sugar Sweetened Beverages, 2020: https://www.phaa.net.au/documents/item/4636

78 National Health and Medical Research Council, Australian Dietary Guidelines, https://www.nhmrc.gov.au/adg

79 Australian Bureau of Statistics2020, National Health Survey: First results, key findings for health statistics including long-term health conditions; mental wellbeing; and health risk factors: https://www.abs.gov.au/statistics/health/health-conditions-and-risks/national-health-survey-first-results/latest-release

80 Have we reached a tipping point for sugar-sweetened beverage taxes?, Public Health Nutrition, 2016 Dec;19(17):3057-3061, doi: 10.1017/S1368980016003086.

81 World Health Organisation, 2015, Guideline: sugars intake for adults and children

82 Pedraza LS, Popkin BM, Batis C, Adair L, Robinson WR, et al. The caloric and sugar content of beverages purchased at different store-types changed after the sugary drinks taxation in Mexico. Int J Behav Nutr Phys Act, 2019; 16(1):103: https://pubmed.ncbi.nlm.nih.gov/31718664/

83 Public Health England, Sugar reduction: report on progress between 2015 and 2019 (publishing.service.gov.uk), October 2020.

84 https://www.obesityevidencehub.org.au/collections/prevention/the-case-for-a-tax-on-sweetened-sugary-drinks

85 Veerman JL, Sacks G, Antonopoulos N, Martin J, "The impact of a tax on sugar-sweetened beverages on health and health care costs; a modelling study", (2016) PloS One, 11(4).

86 Australian Medical Association, 2021, A tax on sugar-sweetened beverages: What the modelling shows: https://www.ama.com.au/articles/tax-sugar-sweetened-beverages-what-modelling-shows

87 Australian Medical Association, 2022-23 Budget Submission (forthcoming)

88 Australian-first Deakin study shows most young people support sugar tax, Deakin University, 2018: https://www.deakin.edu.au/about-deakin/news-and-media-releases/articles/australian-first-deakin-study-shows-most-young-people-support-sugar-tax

89 Most Australians want sugar tax on drinks – Guardian Essential poll, The Guardian, 16 Jan 2018: https://www.theguardian.com/australia-news/2018/jan/16/most-australians-want-sugar-tax-on-drinks-guardian-essential-poll

90 Australian Bureau of Statistics. 4364.0.55.001 - Australian Health Survey: First Results, 2014-15. Canberra: ABS; 2015.

91 Grogan P, Banks E. Far from 'mission accomplished': time to re-energise tobacco control in Australia. Public Health Res Pract. 2020;30(3): e3032016.

92 Australian Institute of Health and Welfare (AIHW). Burden of cancer in Australia: Australian Burden of Disease Study 2011. Australian Burden of Disease Study series no. 12. Cat. no. BOD 13. Canberra: AIHW; 2017.

93 Cost-effectiveness of the Australian National Tobacco Campaign, SF Hurley and JP Matthews, Tobacco Control, 2008 Dec;17(6):379-84. doi: 10.1136/tc.2008.025213.

94 Australian Bureau of Statistics, National Health Survey: First Results, 2017-18.

95 World Health Organization, Obesity: preventing and managing the global epidemic, Report of a WHO consultation. Technical Report Series 894. Geneva, 2000; The InterAct Consortium. Consumption of sweet beverages and type 2 diabetes incidence in European adults: results from EPIC-InterAct. Diabetologia PMID, 2013.

96 Australian Institute of Health and Welfare. 2021. Australian Burden of Disease Study: impact and causes of illness and death in Australia 2018. Canberra, Australia.

97 World Obesity Federation. Obesity and COVID-19 policy statement. 2020. Available from: http://s3-eu-west-1.amazonaws.com/wof-files/Obesity_and_COVID_policy_statement_final_JulyUpdate_(002).pdf

98 Australian Medical Association, 2021. A tax on sugar-sweetened beverages: Modelled impacts on sugar consumption and government revenue, Canberra, Australia. Available from: https://www.ama.com.au/articles/tax-sugar-sweetened-beverages-what-modelling-shows.

99 Australian Bureau of Statistics, National Health Survey: First Results, 2017-18.

100 https://livelighter.com.au

101 Morley B, Niven P, Dixon H, Swanson M, McAleese A, Wakefield M. Controlled cohort evaluation of the LiveLighter mass media campaign's impact on adults' reported consumption of sugar-sweetened beverages

Morley B, Niven P, Dixon H. Assessment of Potential Unintended Consequences: Evaluation Results "LiveLighter" campaign, 2012 to 2014. 2014.

Coomber K, Morley B, Dixon H, Swanson M, Szybiakb M, Wakefield M. Investigating potential negative consequences of an adult-targeted obesity prevention media campaign in Australian adolescents.

Gascoyne C, Scully M, Wakefield M. Sugary drink consumption in Australian secondary school students. Research brief, prepared for Cancer Council Australia. 2019.

102 https://alcoholthinkagain.com.au

103 Smith J, Dunstone M, Elliott-Rudder M. 'Voldemort' and health professional knowledge of breastfeeding - do journal titles and abstracts accurately convey findings on differential health outcomes for formula fed infants? ACERH Working Paper Number 4. Canberra: Australian Centre for Economic Research on Health, Australian National University; 2008.

104 Dunstone K, Brennan E, Slater M, Dixon H, Durkin S, Pettigrew S, et al. Alcohol harm reduction advertisements: a content analysis of topic, objective, emotional tone, execution and target audience. BMC Public Health. 2017(17):312.

105 Standing Committee on Health and Ageing. Diseases have No Borders: Report on the Inquiry into Health Issues Across International Borders. Canberra (AUST) Parliament of Australia; 2013.