



Public Health Association
AUSTRALIA

TOP 10 PUBLIC HEALTH SUCCESSES OVER THE LAST 20 YEARS



“ Great public health gains have been made in the past two decades, but efforts must continue. To maximise the benefit of all of these success stories, persistence and vigilance are needed. Continued funding, promotion, enforcement and improvement of policies remains essential. ”

Public Health Association of Australia, 2018

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INTRODUCTION

This report highlights some of the major public health success stories made in Australia in the past two decades, and the dramatic impact they have had on our health and wellbeing.

The public health measures showcased in this report have prevented an extraordinary amount of ill health and death in our communities.

The report acknowledges great decisions made by past political leaders – and gives powerful reasons for current and future leaders to make similar choices.

Had these actions not been taken, Australian society would have suffered dramatically increased ill health on many fronts, including in many cases a heightened rate of early and needless death.

Financially, our health system would have been overwhelmed by far greater costs, as well as significantly reduced public revenue.

This highlights that public health measures, which are often inexpensive to implement, more than pay for themselves.

Currently amounting to less than 2% of national health expenditure, public health investments are among our most efficient health buys. They save expenditure through avoided sickness, hospitalisation and lost working productivity. Resourcing public health measures generally saves far more than it costs.

New resourcing of public health initiatives is essential if we are to reduce future national health expenditure (or even merely stem current rates of increase).

Public health is also about equity, and is concerned with achieving fair health and wellbeing for everyone, not just those with better resources.

Scope of this report

This report examines decisions taken or implemented during the past two decades, broadly covering the period 1997 to 2017.

The subject matter of the report covers the fields of tobacco regulation, cancer prevention and screening, immunisation and the spread of diseases, road safety, oral health care, gun safety and many others.

The report is largely concerned with preventive measures – public health programs and policies which forestalled illness from even occurring.

In some cases – such as immunisation and oral care – treatment services to individuals are integral to the measures taken. But this report is largely not concerned with health services that treat illnesses per se – activity which of course takes up a very large part of our health system.

The report focuses largely on decisions made at the Australian government level, but recognises that more detailed decisions and implementation at the state/territory level were also essential. State and territory governments have often been crucial partners in national health objectives, and in most cases state and territory health services are the program deliverers or direct service providers of national initiatives.

Initiatives in areas of primarily state and territory responsibility (such as road safety and gun safety) which saw significant federal support or coordination are also recognised.

All of these achievements have proven vitally important to public health and so they are not presented in any particular order or hierarchy in this report.

Who made things happen?

Public health programs, policies, initiatives and key decisions are not made overnight. Usually there has been a large group of people doing work on the area over a number of years: researchers, advocates, clinicians, public officials and politicians.

All the matters covered in this report were the result of painstaking research and sound science, policy development, advocacy and ongoing implementation by thousands of people and many organisations.

Often these efforts cross over multiple sectors of knowledge and expertise. As this is a summary report, the rich history of such efforts cannot be included here in all the detail which they deserve.

The efforts of all of these people must be acknowledged. However, this document specifically acknowledges the peak decision makers – ministers and other politicians – who chose to fund, legislate and implement the public health measures.

These decision makers come from all sides of politics, reflecting the importance of health that all politicians recognise. During the 20 years covered in this report, the Coalition formed the national government for 14 years, and Labor for 6 years.

Most measures had support across the political divide. At state and territory level Labor and Coalition governments alternated in periods of office.

For some (but by no means all) of these measures, there was opposition at the time they came onto the public agenda. Gun law reform is a good example. Yet many of these changes have since become so accepted as a routine health policy that their reversal would be unthinkable.

History has shown that governments and individual ministers were always politically rewarded for their decisions.

Efforts must continue

Importantly, inclusion on this report does not mean the work in these fields is complete. Many people still light up a cigarette as their first act of the day, and interventions such as immunisation and cancer screening are only effective if they keep on happening. Ongoing effort is essential for current and future generations to reap the health rewards.

There is of course so much more to be done. Conspicuous by their absence from this report are many important challenges vital to the future health of Australians, including progress on mental health, Aboriginal and Torres Strait Islander health, obesity and environmental health.

What will the next edition of this report contain in twenty years' time?



FOLATE: WE REDUCED NEURAL TUBE DEFECTS

Neural tube defects

In the past decade we have dramatically reduced the prevalence of neural tube defects (NTD) in Australia. Neural tube defects (anencephaly, spina bifida, encephalocele) are severe birth defects, with high mortality and lifelong morbidity. They are a major cause of perinatal and infant death, and were estimated to cause 71,000 deaths globally in 2010. Up to the 1990s, these conditions affected 20 in every 10,000 births in Australia.

It has been known since the early 1990s that adequate maternal folate intake before and during early pregnancy reduces the risk of NTD by about 70%. This knowledge led to health promotion programs in Australia in the 1990s to encourage dietary and supplemental folic acid use. The National Health and Medical Research Council released recommendations to increase folate intake periconceptionally, and several State and Territory governments supported health promotion activities and research to monitor and evaluate progress during the 1990s and early 2000s.

Women who may become pregnant are advised to consume 400 micrograms of folic acid daily to help protect their babies against neural tube defects.

These programs were successful in increasing knowledge and intake of folic acid among women planning pregnancies. However, with up to 50% of pregnancies being unplanned, many women miss the small window of opportunity to increase folic acid intake before the neural tube closes in the very early stages of pregnancy.

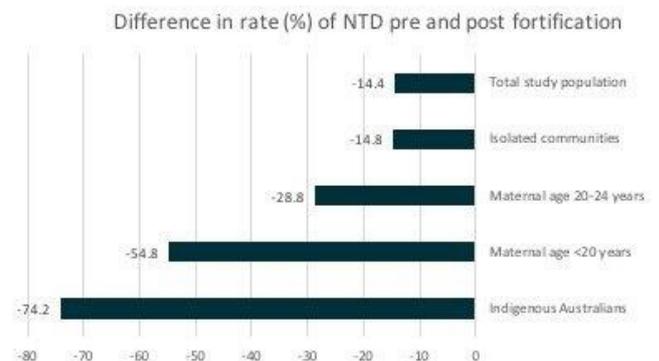
Furthermore, younger women, women with lower levels of education and smokers are less likely to take periconceptional folic acid supplements.

Folate fortification in bread

Voluntary fortification of some foods was approved in 1995. However by 2001 few foods were fortified so the gains were limited. A 30% reduction in neural tube defects was seen following health promotion of supplement use and voluntary fortification, but not across all ethnic and socioeconomic groups. In particular, there was no effect on the prevalence of neural tube defects in Aboriginal infants, who already had a higher rate, and hence the gap between Aboriginal and non-Aboriginal rates widened.

As a result, mandatory fortification of a staple food was considered. The process to make fortification mandatory began in 2004, and was approved in 2007 with a 2 year lead in time.

From 13 September 2009 the mandatory folic acid fortification standard requires the addition of folic acid to all wheat flour for bread making, with the exception of organic bread, within the prescribed range of 200-300 µg per 100g of flour. Three slices of bread (100g) now contains an average of 120 micrograms of folic acid.



Source: Australian Institute of Health and Welfare (2016) *Monitoring the health impacts of mandatory folic acid and iodine fortification 2016.*

The results are clear. There was a statistically significant fall of 14% NTD per 10,000 conceptions following the introduction of mandatory fortification. Benefits were particularly evident for groups of women who had not benefitted from previous health promotion or voluntary fortification strategies. The rate of NTD affected babies of teenage mothers fell by more than half, and for babies with mothers of Aboriginal and Torres Strait Islander origin, the rate fell by almost three quarters and has eliminated the gap between Aboriginal and Torres Strait Islander babies and non-Indigenous babies.

Who made it happen?

A coalition of ministers from all jurisdictions, researchers and public health campaigners and supported by government officials.

Australia is a world leader in immunisation

Australia is widely regarded as having one of the most robust and comprehensive immunisation systems in the world. The National Immunisation Program (NIP) is a partnership between Commonwealth and State and Territory governments which provides free vaccines against 17 diseases (including shingles) for eligible people. Increases in immunisation of young children over two decades have seen coverage for all recommended vaccines at two years of age increase from less than 80% 20 years ago to 94% in 2017. At five years of age coverage for Aboriginal and Torres Strait Islander children is 96.6% which exceeds that for children overall (94.6%).

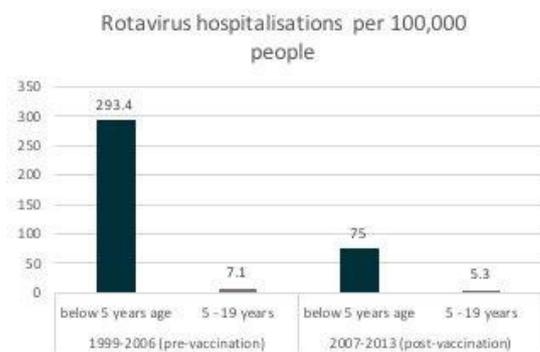
Measles, rubella, meningococcal disease and rotavirus

In the past 20 years, Australia has mounted a number of national immunisation campaigns. Two – the National Measles Control Campaign of 1998 and the Meningococcal C campaign of 2003-04 – have protected millions of Australians then and now. A third – HPV vaccine for women and girls in 2007 – is covered on page 8.

In both 1998 and 2003, a broad age group from infants to young adults was included, driving down disease rates not just in those vaccinated but across the whole community. Close cooperation with state and territory governments to deliver vaccines through schools as well as via general practice saw the targeted diseases effectively eliminated:

- **Measles** used to be an almost universal childhood infection pre-vaccine. It is a serious disease, with about 1 in 15 infected people developing pneumonia, and 1 in 1,000 brain swelling (encephalitis) - 10% of encephalitis cases die. The 1998 campaign rapidly increased immunity across the population which eliminated home-grown (endemic) measles strains very quickly, although other strains can still be imported from overseas. Elimination of endemic measles in Australia was endorsed by the World Health Organization in 2014, but because measles is so infectious, maintaining elimination requires that very high vaccine coverage (95% or more) is continued.
- **Rubella**, also known as German measles, also used to be almost universal pre-vaccine and is particularly serious for the baby when mothers acquire it in early pregnancy, causing birth defects such as blindness, deafness and heart disease. We were able to “piggyback” rubella elimination onto measles by using the measles-mumps-rubella vaccine (MMR) in the 1998 campaign. In 2018, the WHO officially declared that Australia had eliminated rubella.

- **Meningococcal C disease** is rare but serious and life-threatening. Meningococcal disease is caused by a bacterium called *Neisseria meningitidis*. It causes infection of the blood (septicaemia), often with swelling of the lining of the brain (meningitis) and can be rapidly fatal and leave survivors with permanent disabilities. There are a number of types given different letters of the alphabet. The C type virtually disappeared post the 2003 campaign targeting all persons 1 to 19 years through schools and general practice, leaving *Meningococcus B* as the main type in Australia. However meningococcus is unpredictable, and following record low rates in 2014, a new strain (W) and to some extent Y types have emerged, sending rates back to where they were in 2006.
- **Rotavirus** is a very contagious virus that can cause severe diarrhea and vomiting, mainly in children under two years. Before the rotavirus vaccine was introduced in Australia around 10,000 children under five years old went to hospital because of rotavirus every year and around 115,000 children required medical attention. Since the vaccine was introduced in 2007, the number of children who go to hospital because of rotavirus has dropped by more than 70 per cent. This represents approximately 7,000 children who have avoided hospitalisation for gastroenteritis each year.



Source: National Centre for Immunisation Research and Surveillance

Who made it happen?

The MMR and meningococcal campaigns highlighted here were initiatives of the Howard Coalition Government under Health Ministers Michael Wooldridge (1998) and Kay Patterson and Tony Abbott (2003-04). The rotavirus campaign was initiated in 2006-07 under the Howard government and continued under the Rudd government.

ELIMINATING CERVICAL CANCER

Screening

The National Cervical Screening Program (NCSP) promotes the biennial conduct of the Papanicolaou (pap) smear for women aged 18 to 69, or 2 years after first becoming sexually active. The test detects pre-cancerous cells and is very effective in reducing incidence of and mortality from the disease.

The NCSP was introduced in 1991. By 2002 it had reduced the incidence of the disease by half (from 13 to 7 cases per 100,000 women). It also reduced the death rate to 2 per 100,000 women.

The most recent development in cervical cancer screening is the introduction of the HPV test, which is a superior technology and will replace the pap smear.

HPV vaccination

One of the largest vaccination campaigns ever conducted in Australia was for Human Papilloma Virus (HPV), primarily delivered through high schools to teenage girls from 2007. HPV is a common sexually transmitted virus and some types are precursors to a number of cancers, most commonly cervical cancer.

Australia was the first country to introduce a comprehensive government-funded program of this kind, whose internationally acknowledged success was critically dependent on both Commonwealth funding and State school-based delivery.

The program has been ongoing each year for girls aged 12 and 13. From 2007 to 2009 a catch-up vaccination program for women aged 14-26 was also undertaken.

During 2007-09 an estimated 83% of females aged 12-17 were vaccinated, with 70% completing a 3-dose vaccination course. The ongoing program for girls has reached similar levels.

In 2013 a complementary program for boys, also delivered through high schools, began. In 2017, the latest version of the HPV vaccine – Gardasil 9 – was funded by the Turnbull government. It expands protection against cancer-causing HPV types from two to seven, to cover around 90% of cervical cancers in women and 95% of all HPV related cancers in men. The other two HPV types in the vaccine cause genital warts.

High uptake of Gardasil 4 has already resulted in a dramatic decline in the rate of HPV in young women. A 2012 study showed that prevalence of HPV infection in women aged 18-24 had fallen from 28% to below 7%.

There has been a 77% reduction in the two HPV types responsible for almost 75% of cervical cancers, an almost 50% reduction in the incidence of all high-grade cervical abnormalities (those most likely to progress to cancer) in girls under 18 years, and a 90% reduction in genital warts in heterosexual men and women under 21 years.

The future

It's possible that cervical cancer could be effectively eliminated from Australia within the next few decades.

As cervical cancer usually develops over more than a 10 year period, the vaccination program will continue to yield dividends over time.

Cervical cancer screening will need to continue for some decades, to offer protection for women too old to benefit from the vaccination program, but HPV vaccination has allowed screening to be less frequent and onerous for younger women.

Death from cervical cancer is predicted to fall below 1/100,000 women by 2034.

Who made it happen?

The NCSP was introduced during the Hawke/Keating governments under Health Ministers Neal Blewett and Brian Howe.

The key decisions for vaccination were made in 2007 by the Howard Coalition Government, with Tony Abbott as Health Minister. The funding for this campaign was so substantial that it made 2007-08 and 2008-09 the only two years in modern history when the proportion of total Australian health expenditure on public health measures exceeded 2% - see page 19.

ORAL HEALTH: WE PREVENTED DENTAL DECAY

Water Fluoridation

Community water fluoridation is the process of adjusting the amount of fluoride in drinking water. These programs began in the 1960s but uptake around the country has progressed slowly and been variable.

Lifetime access to fluoridated water from an early age is associated with reduced tooth decay in adults. Compared with their parents' generation, Australians born after 1970, when the majority of water fluoridation programs commenced, have about half the level of tooth decay.

Some Australian communities already have access to naturally occurring water fluoridation.

Good access to fluoride, which may also include twice-daily use of fluoride toothpaste and professionally applied fluoride, enables the mineral to be incorporated into the tooth structure, which makes the enamel and dentine more resistant to acids that can lead to tooth decay, acid erosion and tooth sensitivity.

Around 89% of Australians now have access to fluoridated drinking water, which is recommended to be within the range of 0.6 to 1.1 mg/L. National Health and Medical Research Council (NHMRC) reviews have found that water fluoridation reduces tooth decay by 26% to 44% in children and adolescents, and by 27% in adults.

Preventive child oral health services

Largely excluded from Medicare, the funding of public dental services has long been a contentious issue in Australia. Poor dental health is a serious concern, particularly for socioeconomically disadvantaged populations. Long waiting times for state-funded public dental services and the high cost of private dental services mean that many people do not access services.

The Whitlam Government began the Australian School Dental Program in 1973, but when Commonwealth funding effectively ended in the 1980s, the program languished with differing levels of services and payment requirements in the various states and territories. Following years of declines in the rates of dental decay in children, small increases were noted from 1997.

In the past decade major progress has finally been made, with two different schemes resulting in more streamlined public resourcing of dental services for eligible Australian children.

Who made it happen?

The first program was initiated by the Gillard Labor Government under Health Minister Tanya Plibersek.

The government initiated the Medicare Teen Dental Plan (MTDP) in 2008, which provided financial assistance to families to help assess the health of their teenagers' teeth, and introduce preventive strategies. The Plan provided eligible families with a voucher to receive a preventive dental check each calendar year.

The Dental Reform Package was then initiated in August 2012, arising from feedback provided by stakeholders on the MTDP. Funding was provided for subsidised dental care to children aged 2 to 17 whose family receives Family Tax Benefit Part A, capped at \$1,000 per child over a 2 year period, and to continue to fund public dental services for adults on low incomes.

Subsequently from January 2014 the Abbott Coalition Government, with Peter Dutton as Health Minister, changed the program into the Child Dental Benefits Schedule (CDBS). The new scheme had the same concept for service provision for children, and provided over 9.7 million services in its first 2 years of operation. The CDBS provides individual benefits for a range of services including examinations, x-rays, cleaning, fissure sealing, fillings, root canals and extractions.

The current scheme has been underutilised, probably due to poor promotion of the program and need to better engage stakeholders, with only 30% of the 3.4 million children eligible to be treated having accessed it. The most recent available national child oral health surveillance data are from 2012-14, so the full impact of the CDBS on health outcomes cannot be determined yet. Access to good quality epidemiological data is particularly important in the dental area.

SLIP! SLOP! SLAP!: WE REDUCED THE INCIDENCE OF SKIN CANCER IN YOUNG ADULTS

Skin cancer prevention

Public health campaigns to prevent skin cancer have been one of our greatest success stories of the past few decades.

By reason of our latitudes, clear skies and great weather, Australians demonstrate the highest rates of UVR-damage related cancers in the world.

Compared to our habits prior to the 1980s, Australians are now highly sun-aware. Sunbathing for its own sake is greatly reduced. People use sunscreen for a wide variety of outdoor exposure situations, and habitually wear hats and clothing that provide greater sun protection. And people are aware of the prospects for skin cancers and take the initiative in seeking medical checks.

For many older Australians, the damage of the past is hard to reverse, but evidence suggests that improved sun protection in middle age can successfully reduce skin cancers later in life.

And without doubt, because of better skin protection the emerging generations of younger and future Australians will be healthier.

The first major move to prevent sun-related skin cancers was the Slip! Slop! Slap! campaign in the 1970s and '80s. This evolved into the SunSmart campaign, which in turn was followed by a major Australian government campaign from 2006 to 2010.

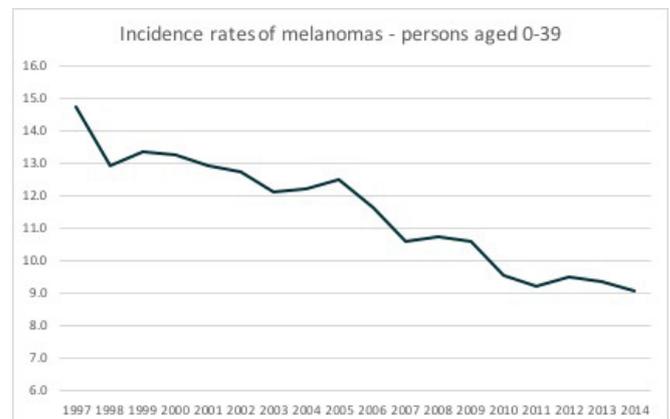
In addition to direct messaging of the community through advertising and more recently through social media, public health messages are targeted at schools, workplaces, the fashion industry, the television and movie industries and the surf lifesaving community, among many others.

The campaign to reduce skin cancers has been successful because it was a comprehensive, integrated community awareness campaign.

Moreover unlike some other public health campaigns, advocacy for greater sun care was not fighting against a specific industry which had an interest in perpetuating illness-inducing behaviour.

Health promotion campaigning has been supplemented by specific government policy decisions.

Since 2003 sun protection products have been tax-deductible work expenses for employees. Safe Work Australia has made promoting employer adoption of sun protection policies a priority.



Source: Australian Institute of Health and Welfare (2017) *Australian Cancer Incidence and Mortality books, 2017*

Clear reductions in melanoma incidence rates are demonstrated for the under-40 age group who grew up in the Slip! Slop! Slap! era, and rates are levelling in the 40-60 age group. However, melanomas in the 60+ age bracket continue to climb.

Who made it happen?

Skin protection policies have been supported by all state and national governments of all the major political parties. However, ongoing investment remains essential. The sun will come up tomorrow!

FEWER PEOPLE ARE DYING DUE TO SMOKING

Australia is a pioneer in tobacco control

Smoking is the world's number one preventable killer, and its collective impacts amount to the single largest economic burden which humanity places on itself.

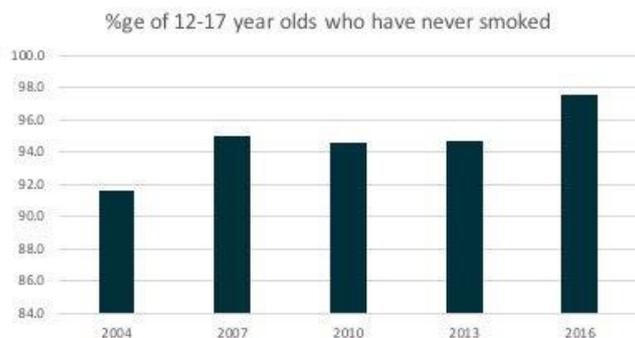
With this in mind, one of Australia's greatest health achievements is that smoking prevalence in Australia has fallen significantly over the past 20 years.

Rates of daily smoking were at around 20% of adults in 2001, but fell to under 13% in 2016.

Rates of smoking by young people aged 12-17 were at 11% in 2001, had fallen to around 3% by 2013, and to 1.5% in 2016.

In 2016 rates of Australians who have never smoked are at around 50-60% for persons over 30, 70% for ages 25-29, 79% for ages 18-24, and impressively at 97.6% for ages 12-17.

Since 2012 the number of people accessing Quitline, the nation's main assistance service to overcome tobacco addiction, has increased significantly.



Source: Australian Institute of Health and Welfare (2016) National Drug Strategy Household Survey 2016 Tobacco Chapter Supplementary Tables

Plain cigarette packaging

After determined advocacy over many years by the public health sector, in 2012 Australia adopted what at the time were the world's tightest regulatory controls over the packaging and retail presentation of all tobacco products. All branding and marketing imagery was removed from product packaging, leaving only a generic size product name. Expanded health warnings were made visually predominant in all product packaging.

Independent analysis of the implementation of plain packaging found that the combination of this and updated and enlarged graphic health warnings (implemented at the same time) triggered a reduction in smoking uptake. The modern system of tobacco regulation effectively deters smoking initiation, promotes cessation and deters relapse. These benefits are likely to grow over time.

Since 2012, countries including the UK, France, Ireland, New Zealand, Norway and Hungary have all adopted similar regulations. Currently, some 25 countries have either implemented plain packaging or are committed to its introduction.

Increase in the tobacco excise

Significant increases in tobacco excise were implemented in both 2009 and 2013. Excise per cigarette rose from \$0.28 in 2000 to \$0.71 in March 2018.

In addition, from 2013 the rate of excise has been set to automatically rise each half-year at rates higher than CPI, ensuring that effective excise rates continue to rise in real terms.

Who made it happen?

The key decisions were made by the Rudd and Gillard Labor Government, with Nicola Roxon and later Tanya Plibersek as Health Ministers.

WE BROUGHT DOWN OUR ROAD DEATH AND INJURY TOLL

Road safety

All of Australia's Commonwealth, state and territory governments cooperate in maintaining the National Road Safety Strategy, first established in 1992.

The Strategy provides a framework for national collaboration on road safety improvement. The Strategy's directions have evolved over the last two decades.

The Australian approach to road safety has achieved major reductions in road trauma and related public health improvements through sustained policies on road and roadside infrastructure improvements, safer vehicles, lower speed limits, graduated licensing and a range of behavioural programs targeting drink driving, seatbelt usage and speeding.

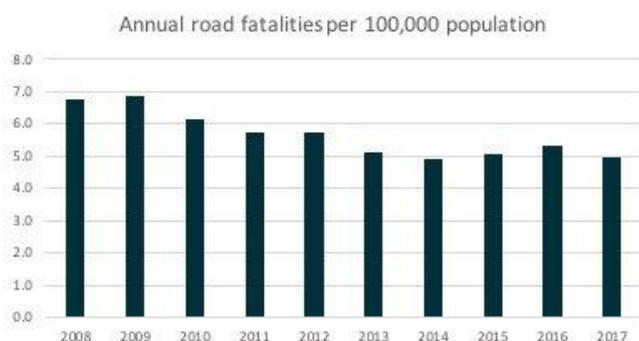
Despite these achievements, road crashes continue to cause many deaths and serious injuries each year.

Under the 2001–2010 strategy, Australia was one of the first countries to formally adopt the Safe System approach to road safety improvement, which takes an holistic view of the road transport system and the interactions of its various elements.

Outcomes of the 2001–2010 Strategy fell some way short of targets. There is also an ongoing debate about whether targets (including death toll targets) should be 'realistic' or 'aspirational'. The current approach is for moving 'Towards Zero'.

Who made it happen?

Governments across the political spectrum at all levels have consistently contributed to road safety measures.



Source: Bureau of Infrastructure, Transport and Regional Economics, *Road Trauma Australia annual series, 2017*

State and territory governments spend significant amounts each year on infrastructure maintenance, safety features, and regulatory controls over vehicles, drivers and driving habits.

On the other hand the economic (as well as social) impacts of road traumas are still devastating. The annual cost to the Australian economy of road death, injuries and damage is estimated to still be at least \$27 billion. Without the Strategy, this cost would have been far higher.

Governments are currently undertaking a periodic review of the Strategy. The previous national Strategy, covering 2001 to 2010, aimed to achieve a 40% reduction in the per capita rate of road deaths.



GUN CONTROL: WE REDUCED GUN DEATHS IN AUSTRALIA

National Firearms Agreement

In response to the Port Arthur Massacre in 1996, the Howard Coalition Government led all state and territory governments in adopting strict controls on the civil ownership of firearms.

Under the National Firearms Agreement (NFA) of 1996, gun ownership and trade in Australia is limited to legitimate professional or sporting purposes, and ownership of automatic and semi-automatic weapons in particular is strictly limited.

The principles of the NFA prohibited, and made provision to buy back and destroy, specific types of firearms; established firearm registration systems in all jurisdictions, established 'genuine reason' and 'genuine need' provisions for owning, possessing or using a firearm, and developed uniform standards for the security and storage of firearms.

The Agreement has been maintained by state and federal governments of both parties in the past two decades.

In 1996-97, 2003 and 2017 amnesty and buyback programs removed more than 1.1 million privately owned firearms from circulation. The amnesty of 1996-97 is estimated to have removed around 650,000 firearms. The amnesty of 2017 removed over 57,000 illegal firearms from the community, estimated to be around 18% of those present.

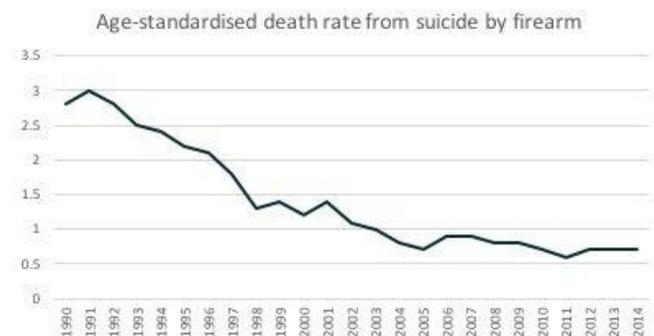
In striking contrast to many other developed nations, Australia significantly reduced incidence of mass shootings since 1996.

The annual rate of total gun deaths fell from 2.9 per 100,000 in 1996 to 0.9 per 100,000 in 2016.

Studies note that a causal relationship between the NFA and changes in rates of injury and death cannot be verified, because of the complex issues dealt with in the Agreement and other changing societal factors.

Although the rates had already been falling prior to the NFA, the rate of decline was more rapid between 1997 and 2013 compared with before 1997.

In particular, the rate of firearm suicide after the NFA was less than would have been expected given the rate prior to the NFA. While rates have declined, firearm suicides are still occurring, particularly for some groups. Rates are higher for men than women and for people living in rural and remote regions than those living in urban areas.



Source: ABS Causes of Death data collection

Implementation of the NFA has been incomplete, with no state or territory in Australia being fully compliant with all of the terms of the agreement. Consistent application of firearm legislation across all states and territories in Australia is required to ensure a strong and consistent response, and full implementation of the NFA.

This would be overwhelmingly endorsed by the public, with close to 90% of Australians supporting our current or stronger gun laws.

Who made it happen?

The key decisions were made by the Howard Coalition Government, with Prime Minister John Howard and Deputy Prime Minister Tim Fischer leading the debate and essential support provided by Opposition leader Kim Beazley.

WE SUSTAINED LOW PREVALENCE OF HIV AND AIDS

Transmission and treatment of HIV and AIDS

Since the 1980s Australia has taken a range of measures to achieve a sustained low prevalence of HIV and AIDS.

The long journey began with vital campaigns about safe sex, needle and syringe exchange programs, and other behavioural changes among key populations.

Communities most affected by HIV mobilised early and quickly to ensure the best response. This was achieved through strong and determined advocacy efforts and creation of care and support services. This continued advocacy has driven multiple policies and initiatives to ensure Australia's success at maintaining low levels of HIV & AIDS cases.

Australia moved early to adopt a national needle exchange program, which although initially politically controversial have played a significant role in reducing the transmission of blood-borne viruses.

In recent years programs for subsidised access to HIV treatment through the PBS for all people with HIV regardless of their CD4 count (2014) and subsidised access to Pre-Exposure Prophylaxis (PrEP) (2018) have made major contributions to our national outcome.

A recommendation from the Pharmaceutical Benefits Advisory Committee (PBAC), approved the use of antiretroviral therapy (ART) for people with HIV regardless of CD4 count.

Equitable access to treatment for people with HIV (PWHIV) removes barriers to treatment. Treatment enables individuals to live well into old age and also has the benefit of reducing an individual's HIV viral load to undetectable levels which reduces the risk of onward sexual transmission to zero.

Previously, access to treatment for PWHIV was only accessible if the individual's CD4 count was less than 500 or they were clinically symptomatic. Equitable access to treatment significantly boosts the public health response to HIV and reduces the long-term cost burden of HIV through reduced demand on health services and reduced rates of onward transmission.

Subsidised access to PrEP through the PBS for HIV negative people at medium to high risk of HIV enables them to access medication that reduces the risk of HIV acquisition by 99%. Combined with HIV treatment, PrEP is expected to significantly reduce HIV transmission in Australia. Early data from PrEP demonstration projects shows a significant reduction in new HIV transmissions among gay and bisexual men.

PrEP also has the added benefit of increasing an individual's engagement with health services. This increases STI screening among a priority population of gay men, allowing for early detection and treatment of STIs, which reduces onward transmission of STIs.

The cost of providing PrEP through the PBS to those at medium to high risk of HIV infection will be offset by savings from HIV infections averted. A recent estimate of the average cost of HIV treatment and care for one person is approximately \$20,000 per year.

Epidemiological modelling indicates that if Australia achieves the Joint United Nations Programme on HIV/AIDS (UNAIDS) target of 95% of PWHIV on treatment alongside 80% of men who have sex with men at high risk of HIV acquisition on PrEP by 2020, over 2,000 men will avoid HIV acquisition. The cumulative health system savings from these infections averted is estimated at \$82 million by 2020.

Moreover, the lifetime medical and treatment costs for a person living with HIV are estimated to be \$1 million. The savings for preventing lifetime costs from all infections averted until 2020 is therefore likely to be over \$2 billion.

Who made it happen?

The nation's longest serving federal Minister for Health, Neal Blewett (minister 1983-90), is rightly acknowledged as overseeing the birth of Australia's successful policy towards HIV in the 1980s.

The more recent key decisions were made in 2014 by the Abbott Coalition Government, with the Hon Sussan Ley MP as Health Minister, and the Turnbull Coalition Government with the Hon Greg Hunt MP, Minister for Health, subsequently approved the listing of PrEP on the PBS in April 2018.

FINDING CANCER EARLY: WE PREVENTED DEATHS FROM BOWEL AND BREAST CANCER

Broad issues in cancer screening

The fundamental approach of finding cancer early to allow successful intervention at early stages of disease has stood the test of time and remains a fundamental tenant of public health approaches to cancer. The approach does however rely upon having an effective test for each cancer that is proven in large population trials to cause greater benefit than harm.

The main harm linked to cancer screening involves over-diagnosis. That is, finding and treating early stage disease that may not have progressed to cause adverse effect, causing unnecessary intervention, anxiety and exposure to the health care system thus absorbing public and private resources.

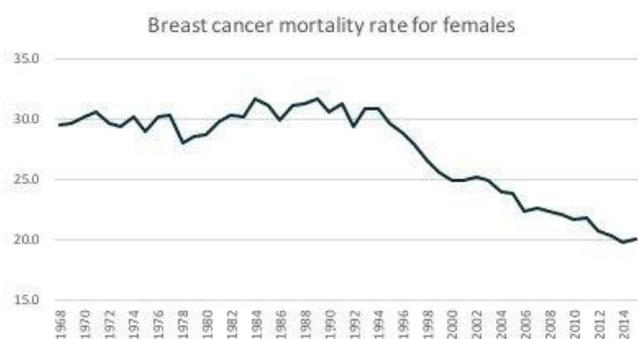
However, three main forms of cancer screening have been well proven and effective in reducing cancer deaths in Australia. They are screening for breast, bowel and cervical cancer. Success on cervical cancer is addressed elsewhere in this report.

Many governments have been lobbied to introduce cancer screening programs over the decades. The major barriers are the strength of evidence to justify the program and cost.

Breast cancer

Free mammographic (x-ray of the female breast) screening for women over the age of 40 commenced in Australia between 1991 and 1995, with women aged 50 to 70 actively invited through the establishment of a state based network of Breast Screen programs. Women aged 70 to 74 were added to the target audience in 2013.

Over 20 years, mortality from breast cancer has fallen by 32% as a result of advances in both screening and treatment.



Sources: Australian Institute of Health and Welfare (AIHW) 2017 Australian Cancer Incidence and Mortality (ACIM) books

Who made it happen?

The key decision to introduce breast cancer screening was made by the Hawke/Keating government with relevant ministers being Neal Blewett and Brian Howe. All governments since have maintained the focus on breast cancer.

Bowel cancer

After a 1997 report by the Australian Health Technology Advisory Committee recommending the introduction of Faecal Occult Blood Testing for average risk Australians aged over 50, support grew for the establishment of what became the National Bowel Cancer Screening Program (NBCSP).

In 2006 the Howard government introduced a program inviting people turning 55 and 65 to participate in the program by sending a bowel cancer testing kit through the post. The program was not based on the best evidence as randomised controlled trials pointed to the need to do the test every 2 years to achieve the reduction in bowel cancer mortality.

The Rudd government made further progress in providing testing to people turning 50, the early threshold age at which the biennial testing should commence.

However the major advance came in 2014, when the new Abbott Coalition government fulfilled an election commitment to provide comprehensive biennial screening from age 50 by introducing the NBCSP.

Full implementation will be reached with all age groups between 50 and 74 in two year intervals being invited to undergo screening from July 2020.

In advance of the Abbott government's NBCSP commitments, there were estimates that over 30 years, early diagnosis would save approximately 35,000 lives. Early evidence supports the anticipated outcome that rates of survival increase significantly with early detection of bowel cancer.

Who made it happen?

The key decisions were made in 2014 by the Abbott Coalition Government, with Peter Dutton as Health Minister.



DISCUSSION

Great public health gains have been made in the past two decades, but efforts must continue. To maximise the benefit of all of these success stories, persistence and vigilance is needed. Continued funding, promotion and enforcement and improvement of policies remains essential.

Themes

The overriding theme common to all the measures highlighted in this report is prevention. That is, the prevention of ill health or injury – or even death – before its causes and consequences take hold.

Another theme is the promotion of health information to individuals, empowering them to exercise their own choice to be healthy.

The measures outlined in this report also generally operated at a population level – providing health advantages to large components of the community simultaneously, in contrast to health treatments to individual clients.

Some of these population-level measures have a virtuous circle of impacts across the community-immunisation campaigns being an obvious example, given their capacity to contain or even eliminate infectious diseases.

Demography and social determinants

Health is a human right, a vital resource for everyday life, and key factor in environmental and economic 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 always necessary to reduce the unfair and unjust effects of conditions of living that cause poor health and disease.

The health stories highlighted in this report show a tendency to particularly relate to disadvantaged demographic categories. However, public health measures should seek to avoid increasing the divide between those who are better off and those with the least resources.

The wellbeing of Aboriginal and Torres Strait Islander people is a common theme.

People living in low socio-economic situations are another demographic afflicted by health conditions which need addressing by public health measures.

Young people and people with mental illnesses are also key demographics.

Economics and public finance

The economic significance of preventive measures cannot be understated. Many preventive spending measures have been shown to save more money than they initially cost. Spending on prevention reduces overall spending over the long term. So to develop the best policy, it is essential that public policy-makers, treasuries and ministers think long term.

Preventing illness also feeds straight back into the wider economy, by minimising lost days and years of productivity for workers, large and small businesses and business owners.

Some key examples include tobacco control, bowel cancer screening, obesity campaigns, and SunSmart.

A 2018 report by Cancer Council Victoria demonstrated remarkable government finance 'return-on-investment' results for public health measures:

- every \$1 invested by governments in Quitline returned an estimates \$1.24 in healthcare cost savings
- every \$1 invested by governments in SunSmart returned an estimates \$2.22 in healthcare cost savings
- every \$1 invested by governments in obesity prevention is estimated to returned \$5.22 in healthcare cost savings
- every \$1 invested by governments in bowel screening returned an estimates \$11.40 in healthcare cost savings

These are powerful returns on investment for government treasuries, individual wellbeing and stronger economic vitality.

The political rewards

Against the background of all their benefits, what arguments have been raised against preventive health measures?

Apart from short term cost the two main objections have been resistance from industries which have profit-making opportunities curtailed in some way, and in some cases claims that public health measures limit individual freedoms.

The case for freer industry opportunities at the expense of public wellbeing is deeply problematic. Should tobacco companies, gun manufacturers and other businesses be permitted to make unrestricted profits from selling and promoting products which harm people?



The ideological debate over the interaction of public health initiatives and personal liberty is similar. We rightly do not allow people individual freedom to drive at high speeds or otherwise dangerously on our roads. We rightly do not permit unfettered gun use merely to concede a theoretically absolute freedom of personal action.

Some damaging actions remain to this day free domains of individual choice. Tobacco has been identified as the world's top social burden generated by human beings, but we do not prohibit its use (other than in places and circumstances where its harms are visited on others nearby).

With tobacco, we have struck a balance between discouragement and disallowance, and that balance is clearly improving the health of both smokers and the almost 90% of people who do not smoke but whose health and wellbeing would otherwise be damaged by exposure to second-hand smoke.

All the measures highlighted in this report – even those which temporarily saw individual or commercial resistance – have resulted in no political harm to the decision-makers who implemented them. In every case, opposition ended without lasting trace, and the public benefits remain well acknowledged by the community. All these measures have come to be seen as wise political decisions in hindsight. To reverse these policies and programs is now unthinkable.

Had we done nothing...

Finally, it's worth looking at what sort of Australia we would live in today if the measures highlighted in this report had not been undertaken.

It would be an Australia where many more babies were born with birth defects. It would be an Australia where children developed more oral and dental health problems, which might last with them throughout their lives. It would be an Australia where infections with viruses such as HPV, HCV, HIV, measles and severe disease due to meningococcal and pneumococcal bacteria were much more prevalent. These diseases would have claimed many more lives, damaged even more people's long-term health, and placed major additional resource burdens on our already strained health system.

If Australians were still smoking at rates of around 30%, instead of 13%, our nation would be a very different place. Far more cancers and cardio-vascular diseases would have developed, leading to major additional financial burdens on the health system, and eventually claiming many more lives prematurely.

It would be an Australia where the impact of road trauma was far greater, resulting in more injuries and deaths.

It could well have been an Australia where – as in the United States – the impact of gun injuries and deaths was traumatising our society, and where anxieties about personal security had led us into many forms of wasteful expense and limitation of our daily lives.

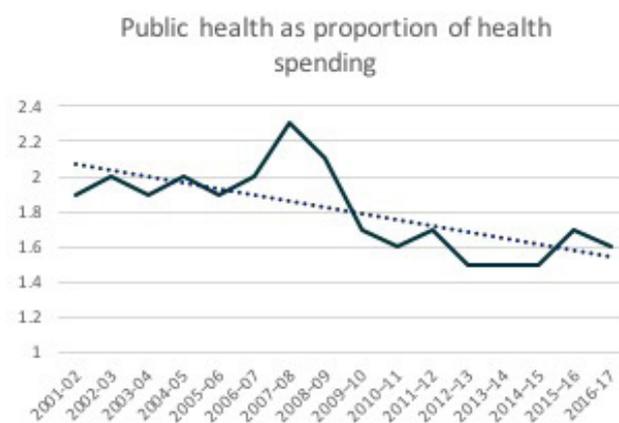
We would have failed to prevent and detect cancers of the skin and of our internal organs, storing up pain and death for ourselves into the future.

We didn't let that happen. We kept these things under control. We saved the lives of many Australians and gave millions better and healthier lives.

We prevented enormous resource implications for our health system, our public finances and our national economy.

Decision-makers in the past prevented those outcomes. The decision-makers of today now owe it to the next generation to make similar decisions.

Since at least 2001, the proportion of the health budget spent on prevention has been in decline - this has to change. Greater investment in public health and preventive policies and programs is critical to avoiding exponentially higher costs down the road. Current spending is inadequate for us to achieve our full potential as a healthy nation.



Source: Australian Institute of Health and Welfare (AIHW) *Health Expenditure in Australia series (to 2017)*

CHOOSING OUR FUTURE

The story told in this report is far from over. Indeed, protecting public health is a perpetual activity for any society.

Advancing public health often requires making changes. Lasting changes. And change is rarely easy and often resisted. So courage is often required to lead and champion those changes.

What should that agenda include?

Firstly, some measures described in this report can go further.

There is more to do to limit smoking, which remains one of our most pervasive killer whilst the tobacco industry continues to see new means of attracting young people into a smoking lifestyle. Although our immunisation achievements are world-leading, Australia stands out as the only country requiring manufacturer-sponsored submissions to achieve National Immunisation Program funding. This is problematic for timely consideration of public good (not commercially viable) funding, such as for Aboriginal and Torres Strait Islander people and people with uncommon medical conditions, or emergency vaccine use, such as for newly emergent meningococcal strains. Many cancers can be checked through prevention and early screening beyond what has already been achieved. More can be done to bring oral care within the scope of the Medicare system, from which it remains illogically separated.

Next, there are several domains of population health which have been neglected and where more activity is urgently needed.

Good nutrition remains one of the most basic foundations of health, yet our society addresses it in a very inconsistent manner. Even Australians with abundant access to food options often have very poor diets. The influence of a food industry where too many players seek profits over the wellbeing of their customers remains a major problem.

The place of mental health in Australia has been changing over recent decades. Many stigmas preventing people from identifying problems and seeking care have been significantly reduced, and knowledge and services are increasing. Yet mental health outcomes do not feature among the top 10 improvements in health identified in this report. More must be done to identify specific forms of mental wellbeing and to develop strong preventive programs.

We also face major challenges in bringing wellbeing and equity to Aboriginal and Torres Strait Islander Australians, with the Closing the Gap agenda (itself only an incomplete vision) making inadequate progress in too many of its aims.

Too little attention is paid to the underlying realities of environmental health. There are issues of air, soil and water contamination that are inadequately addressed. At a higher level, we fail to address the long term role of the changing climate in its impacts on human health and on the overall health of the planet.

Opportunities exist to advance public health while also attracting much needed government revenue. A prime example is the often recommended reform of the alcohol tax regime in Australia. Properly constructed, such a reform could reduce alcohol-related harm and boost government resources through fairer distribution of the tax take across the alcohol industry.

Evidence is abundant that the health of all people is driven by the many modifiable determinants at work - social, economic, environmental, political, cultural and commercial. These include resource equity, education and social empowerment and freedoms to name just a few. Health outcomes are responsive to public decisions affecting all these domains.

The political rewards from strong public health policy are enormous.

No significant public health measure has ever caused political harm to the decision-makers which approved it. Many past decisions have come to be lauded as political decision-making operating at its very best.

The decision-makers of today need to decide whether they will run with the clear preferences of the community for a healthier world, or stand against it.

Rationally, morally and politically, it's very clear which is the wiser path.



The Public Health Association of Australia

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

The PHAA works to ensure that the public's health is improved through sustained and determined efforts of the Board, the National Office, the State and Territory Branches, the Special Interest Groups and members.

The efforts of the PHAA are enhanced by our vision for a healthy Australia and by engaging with like-minded stakeholders in order to build coalitions of interest that influence public opinion, the media, political parties and governments.

Health is a human right, a vital resource for everyday life, and key factor in sustainability. Health equity and inequity do not exist in isolation from the conditions that underpin people's health. The health status of all people is impacted by the social, cultural, political, environmental and economic determinants of health. Specific focus on these determinants is necessary to reduce the unfair and unjust effects of conditions of living that cause poor health and disease. These determinants underpin the strategic direction of the Association.

All members of the Association are committed to better health outcomes based on these principles.

Vision for a healthy population

A healthy region, a healthy nation, healthy people: living in an equitable society underpinned by a well-functioning ecosystem and a healthy environment, improving and promoting health for all.

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

Mission for the Public Health Association of Australia

As the leading national peak body for public health representation and advocacy, to drive better health outcomes through increased knowledge, better access and equity, evidence informed policy and effective population-based practice in public health.

PHAA Special Interest Groups

The Public Health Association of Australia has seventeen Special Interest Groups which enable members to meet with those who have similar interests and passions, attend events, exchange information, participate in advocacy activities and develop policy positions and papers.

Our Special Interest Groups:

- Aboriginal and Torres Strait Islander Health
- Alcohol, Tobacco and Other Drugs
- Child Health
- Complementary Medicine - Evidence, Research and Policy
- Ecology and Environment
- Food and Nutrition
- Health Promotion
- Immunisation
- Injury Prevention
- International Health
- Justice Health
- Mental Health
- One Health
- Oral Health
- Political Economy of Health
- Primary Health Care
- Women's Health

Membership

The PHAA is a diverse, non-partisan organisation representing more than 40 public health related disciplines. Membership of the PHAA is open to any person who is supportive of the objectives of the Association. Members of the PHAA advocate for public health policy in Australia and actively help to shape better population health outcomes such as those detailed in this report.

To find out more about the benefits of PHAA membership please visit our website: www.phaa.net.au

TOP 10 PUBLIC HEALTH SUCCESSES OVER THE LAST 20 YEARS

Folate: We reduced neural tube defects ✓

Immunisation: heading towards disease elimination ✓

Oral health: We reduced dental decay ✓

We contained the spread of HPV & its related cancers ✓

Slip! Slop! Slap!: We reduced the incidence of skin cancer in young adults ✓

HIV: We contained the spread ✓

Fewer people are dying due to smoking ✓

Gun control: We reduced gun deaths in Australia ✓

Finding cancer early: We prevented deaths from bowel & breast cancer ✓

We brought down our road death & injury toll ✓



Public Health Association
AUSTRALIA

www.phaa.net.au