Government of **Western Australia**
Department of **Health**

Western Australian Health Promotion Strategic Framework

2022 – 2026

A 5-year plan to reduce preventable chronic disease and injury due to common risk factors in our communities

Important disclaimer

All information and content in this material is provided in good faith by the WA Department of Health and is based on sources believed to be reliable and accurate at the time of development. The State of WA, the WA Department of Health and their respective officers, employees and agents, do not accept legal liability or responsibility for the material, or any consequences arising from its use.

Acknowledgement of Country and People

WA Health acknowledges the Aboriginal people of the many traditional lands and language groups of Western Australia. It acknowledges the wisdom of Aboriginal Elders both past and present and pays respect to Aboriginal communities of today.

Note on terminology

Within WA, the term Aboriginal is used in preference to Aboriginal and Torres Strait Islander, in recognition that Aboriginal people are the original inhabitants of WA. Aboriginal and Torres Strait Islander may be referred to in the national context and Indigenous may be referred to in the international context. No disrespect is intended to our Torres Strait Islander colleagues and community. The terms Aboriginal and Torres Strait Islander and Indigenous are retained in this document where they are included as part of an already-existing formal title or direct quote from a cited reference.

Acknowledgements

The Chronic Disease Prevention Directorate led the development of the HPSF 2022–2026, with input and advice from the Mental Health Commission and other Government and non-government stakeholders. A consultation draft was available for feedback from 7 December 2021 to 18 February 2022 with responses from more than 60 organisations and individuals. Their thoughtful and constructive comment is gratefully acknowledged.

Illustrations by Peter Ryan Art. www.peterryanart.com.au

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Foreword

The *Western Australian Health Promotion Strategic Framework 2022–2026* (HPSF) comes at a time when preventive health has never been more important. The WA health system's blueprint for action for the next 10 years – the *Sustainable Health Review Final Report 2019* (SHR) – prioritises prevention to ensure better health and wellbeing for all Western Australians into the future.

This represents a cultural shift from a predominantly hospital-based health system and includes an undertaking to increase funding for prevention to at least 5 per cent of total health expenditure by 2029. This change in focus comes with bold targets, including to increase the percentage of the population with a healthy weight and reduce harmful alcohol use.

Western Australia has delivered one of the strongest public health responses to the COVID-19 pandemic in the world. Through our response we have gained a deeper understanding of the importance of protecting our most vulnerable members of the community, it has become increasingly clear that people with risk factors for chronic disease and injury, including smoking and living with overweight or obesity, have a greater risk of complications and poorer outcomes from COVID-19.

Restrictions associated with the pandemic have also highlighted the vital role that our neighbourhoods, including public spaces for recreation and exercise, play in supporting our physical and mental health.

The SHR recognises that social determinants of health, including secure housing, education, employment and the environment have a profound impact on our health and wellbeing. Developing and maintaining partnerships for prevention across the public sector is key to advancing the preventive health agenda. In support of this, the HPSF includes a new appendix that maps common policy areas across the public sector that contribute to and support the health and wellbeing of Western Australians.

I am confident that the HPSF will be a valuable tool in helping the WA health system and its key stakeholders meet our preventive health agenda.

Dr D J Russell-Weisz
DIRECTOR GENERAL

The WA Health Promotion Strategic Framework 2022–2026 at a glance

<table>
<tr><th>Goal:</th><th>Target population:</th></tr>
<tr><td>Empower and enable Western Australians to lead healthier lives by supporting equitable and sustainable improvements in health behaviours and environments</td><td>People who are currently well, and those who are at risk of developing preventable chronic disease or being injured due to common risk factors</td></tr>
<tr><th colspan="2">Guiding principles:</th></tr>
<tr><td>• Comprehensive, whole-of-population approach
• Intervening early and throughout life</td><td>• Promoting equity and inclusivity
• Collaborative partnerships and strategic coordination</td></tr>
<tr><th colspan="2">Domains for action:</th></tr>
<tr><td colspan="2">• Legislation and regulation
• Healthy policies
• Economic interventions
• Supportive environments
• Public awareness and engagement
• Community development
• Targeted interventions
• Building capacity and workforce development
• Research and evaluation</td></tr>
<tr><th colspan="2">Priority areas:</th></tr>
<tr><td>Reducing tobacco use and making smoking history
• Reduce tobacco use in WA, particularly among populations at higher risk of harm due to tobacco use
• Eliminate exposure to second-hand tobacco smoke where the health of others can be affected
• Strengthen regulation to reduce supply of and access to tobacco products
• Strengthen regulation of alternative nicotine and non-nicotine delivery products, including e-cigarettes</td><td>Healthy eating and active living to halt the rise in obesity
• Promote environments that support healthy eating and active living
• Increase availability and accessibility of quality, affordable and nutritious food for all
• Increase the knowledge and skills necessary to choose healthy food and drinks
• Encourage and support active living across the lifespan
• Motivate behaviour to achieve and maintain a healthy weight among adults
• Prevent and reverse childhood obesity</td></tr>
<tr><td>Reducing harmful alcohol use
• Increase community awareness of alcohol-related health risks and harms
• Prevent and delay uptake of alcohol by children and young people
• Develop supportive environments to reduce demand for alcohol
• Manage the supply and availability of alcohol</td><td>Preventing injury and promoting safer communities
• Protect children and young people from injury
• Prevent falls in older people
• Improve safety in, on and around water
• Reduce road crashes and road trauma
• Promote a safer built environment</td></tr>
<tr><th colspan="2">Monitoring progress:</th></tr>
<tr><td>• Monitoring and reporting frameworks
• Research and evaluation</td><td>• Tracking health promotion activity in WA
• Tracking the benefits of prevention</td></tr>
</table>

1. Introduction

1.1 Context for the *WA Health Promotion Strategic Framework 2022–2026*

Preventing chronic disease and injury is among Australia's biggest health challenges, due to the major impact that chronic disease and injury can have on an individual, their families and carers, and the costs to the healthcare system.

The *Western Australian Health Promotion Strategic Framework 2022–2026* (HPSF) sets out a plan for reducing the incidence of chronic disease and injury in Western Australia over the next 5 years, within the policy context of the *Sustainable Health Review Final Report to the Western Australian Government*. The Sustainable Health Review (SHR) is the WA health system's blueprint for the next 10 years, and places a clear emphasis on the importance of prevention.[1]

Sustainable Health Review (SHR)[1, 2]

The SHR promotes a cultural shift away from a predominantly reactive, acute and hospital-based health system to one with greater focus on public health and prevention. The SHR recommends increasing the investment in public health and prevention to at least 5 per cent of total health expenditure by July 2029, and a reorientation of health services towards prevention.

The SHR Final Report and Interim Report identify pressing public health areas for increased funding. These include halting the rise in obesity, reducing harmful alcohol use and continuing efforts to reduce the prevalence of smoking. Reducing health inequity in health outcomes and access to care for Aboriginal people and families, culturally and linguistically diverse people, and for people living in low socioeconomic conditions are also prioritised. The SHR acknowledges the contribution of the social determinants of health, and the importance of a cross-sector, partnership approach to tackling the complex underlying factors that lead to preventable chronic disease and injury.

The HPSF provides policy priorities and areas for action to support better health and wellbeing for Western Australians. The HPSF aligns with the SHR and is complementary to other key State and Australian preventive health frameworks, included in Appendices 1 and 2.

Implementing the priorities for action in the HPSF will contribute to meeting the targets for risk factors and chronic disease and injury prevention set by State, Australian and international frameworks, strategies and agreements. These targets are provided in Section 5.

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1.2 Goal and scope of the HPSF

The goal of the HPSF is to empower and enable Western Australians to lead healthier lives by supporting equitable and sustainable improvements in health behaviours and environments.

The target population of the HPSF is people who are currently well, and those who are at risk of developing preventable chronic disease or being injured due to common risk factors. These are:

- smoking
- living with overweight and obesity, which includes policies that support healthy eating and active living
- drinking alcohol at harmful levels.

Supporting healthy behaviours and creating safer environments also help reduce the risk of injury, which is a major cause of preventable disability and death. This is why injury prevention is included in the HPSF.

The HPSF recognises the strong link between these risk factors and mental health and wellbeing. The Mental Health Commission is lead on mental health policy, and the commissioning and providing of mental health programs and services. Strategies for mental health promotion and mental illness prevention are provided in the Western Australian Mental Health Promotion, Mental Illness, Alcohol and Other Drug Prevention Plan 2018–2025 and are not included in the HPSF.

1.3 Understanding health promotion and prevention

What do we mean by health promotion and prevention?

The HPSF uses the World Health Organization's definition of health promotion:

> 'Health promotion is the process of empowering people to increase control over their health and its determinants through health literacy efforts and multisectoral action to increase healthy behaviours. This process includes activities for the community-at-large or for populations at increased risk of negative health outcomes. Health promotion usually addresses behavioural risk factors such as tobacco use, obesity, diet and physical inactivity, as well as the areas of mental health, injury prevention, and drug and alcohol control.'[2]

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The HPSF takes a primary prevention, whole of population approach (Figure 1). Strategies to encourage healthier and safer populations need sustained, long-term investment in health promotion and approaches that take account of the wider socio-economic, cultural and environmental conditions that influence behaviour.

Secondary prevention is concerned with detecting and reducing the impact of a disease or injury that has already occurred. Tertiary prevention reduces the long-term impact of an ongoing illness or injury. These settings for prevention are not within the scope of the HPSF and are included in other State frameworks and policies in Appendix 1.

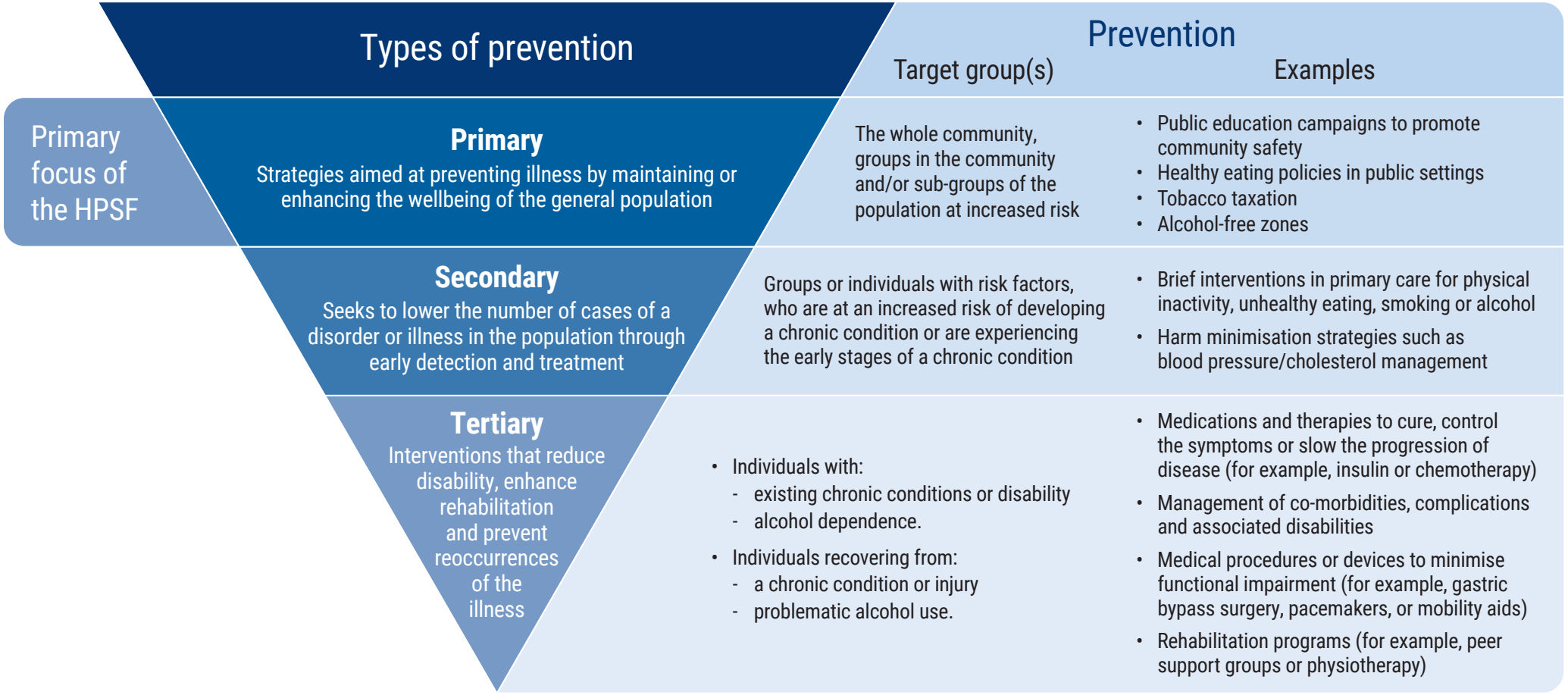

Figure 1. Promotion and Prevention model for common risk factors (adapted from the WA Mental Health Promotion, Mental Illness, Alcohol and Other Drug Prevention Plan[3])

1.4 Who is the HPSF for and how can it be used?

The HPSF provides broad strategic guidance to the WA health system and its partners for chronic disease and injury prevention. The principles, priorities and strategies in the HPSF are evidence-based and have been identified for their potential to contribute towards achieving the greatest gains in health and wellbeing for the WA population.

Overview of the WA health system

The WA health system comprises the Department of Health and Health Service Providers (HSPs)[a], as established by the *Health Services Act 2016*. The Department of Health is led by the Director General and has the role of System Manager. The System Manager is responsible for the strategic direction, oversight and management of the WA health system. HSPs are separate legal entities and are responsible and accountable for delivering health services for their local communities as contracted by the System Manager. HSPs control their own budgets and develop their operational plans consistent with systemwide policy.

The health system has a lead role in preventing chronic disease and injury, but many other stakeholders and partners play an essential part in positively influencing the broader causes of health and wellbeing. Other stakeholders with an interest in protecting and promoting the health and wellbeing of Western Australians are welcome to use the HPSF to help guide their work.

These include:

- State Government departments and agencies
- local Governments
- educational and research institutions
- health and other not-for-profit organisations
- health peak bodies
- public and private sector workplaces
- trade and industry groups
- the community services sector
- health professionals
- the general public
- the media

The HPSF provides strategic directions and recommended actions for each risk factor area and for injury. How individual organisations choose to implement the HPSF will vary according to their responsibilities, priorities, settings and the needs of the communities that they serve.

a The Health Service Providers are North Metropolitan Health Service, South Metropolitan Health Service, East Metropolitan Health Service, Child and Adolescent Health Service, WA Country Health Service, and the Quadriplegic Centre.

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For example, the HPSF can be used:

- to guide organisational policy setting for healthier workplaces and environments
- in priority setting for resource allocation
- as a basis for engagement, collaboration and partnerships to boost capacity and enable progress towards shared goals in health promotion.

1.5 Understanding chronic disease and injury

Chronic diseases, also known as non-communicable diseases, are health conditions that usually have a number of contributing factors, develop gradually over time, and have long-lasting effects.[4, 5] Chronic diseases are the leading cause of illness, disability and early death in our community.[4, 6] Common chronic diseases include cardiovascular disease, type 2 diabetes, kidney disease, some cancers, respiratory diseases, musculoskeletal conditions (including back problems, arthritis and osteoporosis), mental health issues, and some oral conditions.[4-7]

Injury is the 'physical or mental harm to a person resulting from intentional or unintentional contact with an object, substance or another person'.[8] Injury is also a leading cause of preventable disability and death.[9] People with a minor injury often recover completely,[10] but those who are seriously injured may experience lasting health problems including life-long disability.[10] Injuries have many causes, including exposure to mechanical forces, falls, transport incidents, violence, burns, poisonings, drownings and intentional self-harm and suicide.[10]

Some chronic diseases and injuries share common risk factors that can be prevented or modified.[11, 12] For example, common risk factors for chronic diseases, such as poor nutrition, being inactive and smoking, may increase the risk of falls by weakening the musculoskeletal system. Alcohol use is a major risk factor for injuries through alcohol-related falls, transport incidents, drowning and violence.

There are also protective factors that help to reduce the risk of developing chronic disease or being injured. For example an active lifestyle can help with lowering blood pressure and managing body weight.[13] A diet high in fruit and vegetables and low in saturated fat can protect against some cancers and heart disease.[14] Other protective factors include having a higher level of education, secure income and housing, and social inclusion.

Exposure to common risk factors for chronic disease and injury may start early in life, and a person's risk of developing a chronic disease or being injured increases over time because of the ageing process and the impact of long-term exposure to risk factors. Reducing exposure to risk factors and increasing protective factors at any stage of life can reduce the risk of developing disease or experiencing injury.[12]

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Around half of all Australians are estimated to live with at least one common chronic condition, and around one fifth of the population have 2 or more common chronic conditions.[15] In WA in 2015, it was estimated that nearly 40 per cent of the total burden of disease (39 per cent) could have been prevented by reducing or avoiding exposure to modifiable risk factors.[16]

The leading 4 disease groups that cause the greatest burden in WA are cancer; mental and substance use disorders; cardiovascular diseases; and back pain and other musculoskeletal problems. The fifth-greatest burden of premature death and disability is due to injury.[6]

Table 1 summarises the links between common risk factors and selected conditions, and Table 2 summarises the proportion of years of life lost prematurely to disease, disability or death (also called the total burden of disease and injury) attributable to selected behavioural and biomedical risk factors in selected populations and in the overall WA population.[16] Aboriginal people, and people who live outside of WA's metropolitan area, have a higher burden due to risk factors than the overall WA population.[17]

There are some minor inconsistencies between Tables 1 and 2 due to differences in methodology.

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Table 1. Associations between risk factors and selected chronic diseases and injury

Risk factors	Conditions[5, 16, 18-25]									
	Cardiovascular diseases	Type 2 diabetes	Mental illness	Chronic kidney disease	Some cancers	Musculoskeletal	Respiratory infections and diseases	Oral diseases	Neurological conditions†	Injury
Behavioural risk factors										
Tobacco use	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Physical inactivity	✓	✓	✓	✓	✓	✓			✓	✓
Harmful alcohol use*	✓		✓		✓	✓	✓	✓	✓	✓
Poor nutrition	✓	✓		✓	✓	✓		✓	✓	✓
Biomedical risk factors										
Overweight and obesity	✓	✓	✓	✓	✓	✓	✓		✓	✓
High blood pressure	✓			✓					✓	
High cholesterol	✓									
High blood sugar	✓	✓		✓	✓					✓
Early life factors‡	✓	✓	✓			✓		✓	✓	✓

*Drinks more than 2 standard drinks/day, †includes dementia, ‡including low birthweight; nutrition, smoking and alcohol use during pregnancy; and family violence.

Table 2. Proportion (percentage) of total burden* of disease and injury attributable to selected risk factors, WA, 2015[16]

Risk factors	Conditions (percentage)								Total burden of disease caused by specific risk factors (percentage)		
	Cardiovascular diseases	Endocrine diseases†	Mental illness	Chronic kidney disease	Some cancers	Injury	Musculoskeletal	Respiratory infections and diseases	WA population	Aboriginal persons in WA	Country WA ‡
Behavioural risk factors											
Tobacco use	11	3			22		2	43	9	13	10
Poor nutrition	42	35		7	4		<1	<1	7	12	8
Harmful alcohol use	3		13		4	15			5	15	7
Physical inactivity	10	17			3				3	4	3
Biomedical risk factors											
Overweight and obesity	21	45		38	8		12	7	8	13	9
High blood pressure	36			32					5	7	5
High cholesterol	24								3	6	3
High blood sugar	5	94		55	3				5	8	5

* Total burden is expressed as disability-adjusted life years, which represent years of healthy life lost, either through premature death or living with a disability.
† Type 1 diabetes, Type 2 diabetes, other diabetes mellitus, other endocrine disorder.
‡ Includes: Kimberley, Pilbara, Midwest, Goldfields, Wheatbelt, South West, Great Southern regions

Mental health issues can also impact on levels of health and wellbeing. One in 5 people aged between 16 and 85 will experience one of the common forms of mental health conditions (anxiety, affective or mood disorders, and substance use disorders) in any given year.[26] Mental health issues, risk factors for chronic disease and injury, and the impact of chronic disease and injury are interrelated. This is discussed further in Our state of health.

1.6 Understanding the costs of chronic disease and injury

18

Modifiable risk factors cost the WA health system an estimated

$1.96B

Overweight and obesity

$510M

High blood sugar

$336M

High blood pressure

$324M

Tobacco use

$306M

Dietary risks

$286M

Alcohol-related conditions

$164M

Costs include hospital care, non-hospital medical care and pharmaceuticals only. Source: WA Burden of Disease Study 2015.

In 2015–16, disease and injury caused by 18 modifiable risk factors cost the WA health system an estimated $1.96 billion in hospital, non-hospital medical care and pharmaceutical costs.

The risk factors with the highest financial impact on WA healthcare expenditure were overweight and obesity, high blood sugar, high blood pressure, tobacco use, dietary risks, and alcohol-related conditions.[27] Healthcare expenditure on injuries cost the WA health system $989 million, $181 million of which was attributable to modifiable risk factors such as alcohol use, illicit drug use, low bone mineral density, child abuse and neglect, and intimate partner violence.[27] For all of these risk factors, the majority of the expenditure was on hospital care.

The costs of chronic disease and injury are much higher when the costs to society, including the impact on the workforce and productivity, household labour, and quality of life, are taken into account. For example, while healthcare costs attributed to tobacco use Australia-wide in 2015–16 were estimated at $6.8 billion, the overall tangible costs (including all healthcare costs, workforce and household labour impacts) of tobacco use were estimated to be $19.2 billion.[28] If intangible costs are also included (estimated costs for pain and suffering), then the overall cost of tobacco use in Australia in 2015–16 was an estimated $136.9 billion.[28] For alcohol, tangible and intangible costs amounted to $18.2 billion and $48.6 billion, respectively, in 2017/18.[29]

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2. Our state of health

2.1 Our state of health – and the challenges we face

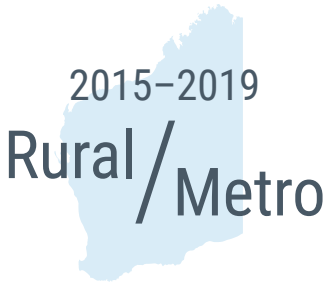
The majority of Western Australians enjoy good health but some groups are at greater risk than others

Western Australians are living longer and healthier lives due to a range of factors. Effective public health policy and legislation, safer and cleaner conditions for living and working, health promotion campaigns, vaccinations for infectious disease, and advances in medicine and healthcare technology have all contributed to safer and healthier lifestyles and environments. In WA, the average life expectancy at birth is 85 years for females and 81 years for males, in line with the Australian average.[30]

The self-reported health of WA adults is the best on record since data collection began in 2001, with 61 per cent of adults reporting that they are in 'very good' or 'excellent' health, more than in any other Australian state or territory.[31] WA adults also have a higher level of health literacy than adults in other Australian states or territories.[32] They are more likely to report that they are able to actively engage with healthcare providers, navigate the healthcare system, find good health information, and understand health information.[32] However, these gains are not seen in all Western Australians.

In WA between 2015–17, life expectancy at birth was 72 years for Aboriginal females and 67 years for Aboriginal males.[33] Aboriginal people have a lower life expectancy than the WA population as a whole, have higher rates of chronic diseases and injury, and develop disease at a younger age.[34] Culturally-secure approaches designed and implemented in partnership with Aboriginal people, the Aboriginal Community Controlled Health Sector and the community services sector are critical for improving health outcomes for Aboriginal people.

Between 2015 and 2019, higher proportions of people living in regional and remote areas of the state were current smokers (14 per cent compared to 11 per cent), were above a healthy weight (74 per cent compared to 69 per cent), or drank at risky levels (42 per cent compared to 37 per cent) compared to people living in metropolitan areas.[36, 37] They were also more likely to suffer an injury (people who live in the country are 20 per cent more likely to be hospitalised for injury or poisoning than the overall WA population).[35] The vast size of WA also presents challenges for the health system due to the higher cost of providing health services in remote and very remote areas and the limited availability of infrastructure and workforce required to deliver these services.[23]



Current smokers
14% / 11%

Above a healthy weight
74% / 69%

Drank at risky levels
42% / 37%

In WA average life expectancy at birth

85 years

81 years

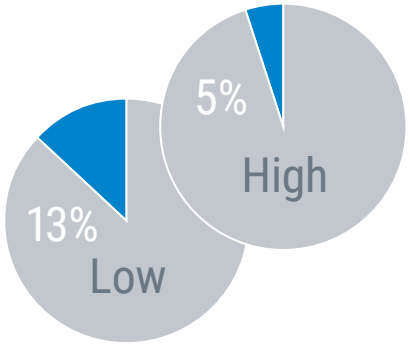
Aboriginal life expectancy at birth

72 years

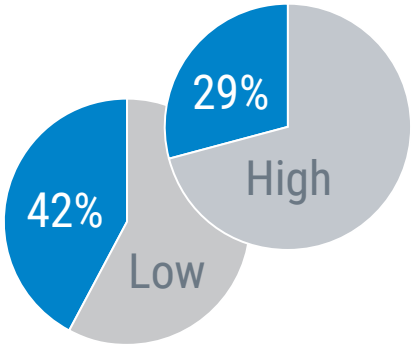
67 years

Lowest to highest socioeconomic areas in WA

Daily smokers



Living with obesity



Between 2015 and 2019, higher proportions of Western Australians living in the lowest socioeconomic areas self-reported being daily smokers (13 per cent compared to 5 per cent) and living with obesity (42 per cent compared to 29 per cent) compared to Western Australians living in the highest socioeconomic areas.[36] Western Australian households in more disadvantaged areas are at greater risk of experiencing food insecurity than Western Australian households in more advantaged areas.[37] People living in low socioeconomic conditions are also more likely to face barriers to accessing health services, such as cost, travel, and low health literacy.[38]

Only one in 4 (24 per cent) Australians living with a disability think of themselves as being in 'very good' or 'excellent' health, compared to nearly 2 in 3 (65 per cent) people without a disability.[39] People with a disability are 4 times as likely to experience 'high' or 'very high' levels of psychological distress (32 per cent) than adults without a disability (8 per cent),[39] and tend to have a higher prevalence of risk factors for chronic disease and injury.[39]

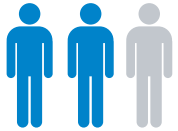
People who identify as lesbian, gay or bisexual are more likely to smoke (35 per cent) and drink alcohol at risky levels (28 per cent) than heterosexual people (29 per cent and 22 per cent, respectively).[40] People who identify as transgender and intersex are likely to have similar increased risks, however data for these groups are lacking. Some people who identify as lesbian, gay, or bisexual, transgender or intersex (LGBTI) may use these substances to cope with discrimination and other life difficulties they experience, and tobacco and alcohol use may also be more normalised in some LGBTI social settings.[40]

Some CaLD communities have a higher prevalence of risk factors for chronic disease and injury, while others have a higher prevalence of protective factors.This may be due to cultural and social reasons related to their country of origin, or their migration pathway into Australia. Effective communication of health messages for people of CaLD background must take into account their cultural beliefs and practices, levels of English proficiency, psychological effects of migration prior to and after arriving in Australia, and issues relating to access, racism and discrimination.[41]

Some people will fall into more than one of these groups that are of higher risk for chronic disease and injury. Health promotion strategies that are inclusive and equitable for people living with one or more layers of disadvantage are a key component of a comprehensive, best practice approach.

Australians who think they are in 'very good' or 'excellent' health

Australians living with a disability



Australians living without a disability

Psychological stress

4 x higher

Australians living with a disability

LGBTI more likely smoke and drink

35%

28%

Rising costs associated with chronic disease and injury

The current trend in health system costs of treating chronic disease and injury caused by common preventable risk factors such as obesity has the potential to undermine the long-term sustainability of the WA health system.[1]

Demand for health services has grown over the past 20 years as the population has grown and become older, and more Western Australians have needed medical treatment for chronic disease and injuries. In 2015–16, WA's healthcare system spent $1.37 billion in hospital costs, $300 million in non-hospital medical costs and $287 million in pharmaceutical costs on treating disease and injury caused by 18 preventable risk factors.[27]

The connection between mental health and wellbeing and the risk factors for chronic disease and injury

Mental health issues, including anxiety-related conditions and mood disorders, and behavioural conditions (alcohol or other drug problems) are becoming more common among Western Australians. The proportion of adults with a current mental health condition increased from 12 per cent in 2006 to 18 per cent in 2020.[11] In 2020, one in 10 adults reported experiencing high or very high psychological distress.[11] People with a mental health issue or a behavioural condition are more likely to have one or more risk factors for chronic disease and injury.[42] Developing chronic disease and being injured also have an impact on mental health.

People who smoke are more likely to report high or very high psychological distress.[43] People living with obesity are at increased risk of poor mental health, including depression and anxiety.[44, 45] Alcohol plays a complex role in the development and progression of mental health outcomes.[46-48] A person who is dependent on alcohol is more likely to develop a mental health condition, and having a mental health condition can also increase the likelihood of developing alcohol dependence.[47, 48] Harmful alcohol use is also associated with worse outcomes in terms of depression, self-harm and suicide risk, social functioning and health care use.[46]

Being injured can cause significant mental health impacts, with depression, anxiety and post-traumatic stress disorder commonly reported post-injury.[49] Conversely, some people may engage in self-harm as a way to deal with mental distress.[50]

In Australia, people with mental health issues experience a 20-year gap in life expectancy compared to the general population.[51] While suicide contributes to a considerable proportion of premature deaths, the majority of years of life lost relate to poor physical health including a higher prevalence of chronic conditions such as heart and lung disease and cancer, some of which is attributable to smoking, overweight and obesity, and alcohol use.[51]

The *Western Australian Mental Health Promotion, Mental Illness, Alcohol and Other Drug Prevention Plan 2018-2025*[3] and the *State Public Health Plan for Western Australia 2019–2024*[52] acknowledge the connection between lifestyle factors such as physical activity and nutrition, and mental health and wellbeing. The *Better Choices, Better Lives: Western Australian Mental Health, Alcohol and Other Drugs Services Plan 2015–2025*[53] identifies the need to continue to build on and partner with programs that support healthy lifestyles and injury prevention.

2015–16 hospital costs

$1.37B

Adults with mental health conditions

18% 2020

12% 2006

Life expectancy

20 years shorter

The COVID-19 pandemic, and risk factors for chronic disease and injury

The global pandemic has shed new light on the importance of promoting healthy lifestyles, as smoking[54, 55] and overweight and obesity[56] are strongly associated with worse health outcomes and increased risk of mortality from COVID-19.[54-56] Community lockdowns have shown how important it is to have close access to liveable neighbourhoods and open public space for physical exercise and recreation, which are important for mental as well as physical health.[57, 58]

The WA Department of Health monitored the lifestyle and mental health impacts of COVID-19 throughout and following the initial WA community lockdown in 2020.[59] Despite some variation in lifestyle impacts, people who were in good or excellent health were generally less likely to take up unhealthy behaviours during the lockdown than people who were in 'fair' or 'poor' health.[59] These findings reinforce the importance of maintaining healthy habits to protect against sudden changes in circumstances and the environment which can undermine health and wellbeing.

The WA Department of Health found that in WA, significant population level increases in psychological distress during COVID-19 were not evident, which may be because WA avoided significant community-based transmission and prolonged lockdowns during 2020.[60] However, this does not mean that individuals did not experience significant impact or distress, or that mental health impacts due to the pandemic will not be seen in the longer term. A drop in mental health-related presentations to emergency departments was seen early in the pandemic at some of WA's hospitals, which is more likely to be because of patients wishing to avoid possible exposure to COVID in a hospital setting than a decline in need. Calls to mental health helplines increased by 30 per cent.[61]

The probable emergence of COVID-19 variants is likely to present ongoing challenges for the health and social services sector and the wider community. The WA Department of Health will continue to monitor the WA community for changes in health and wellbeing. During lockdown periods in the early stages of the pandemic in 2020, the WA Government provided advice and links to physical and mental health and wellbeing information and resources online. Responding to the COVID-19 pandemic has highlighted the need for all Western Australians to be able to find reliable, easily-understood, culturally and linguistically-appropriate health information.

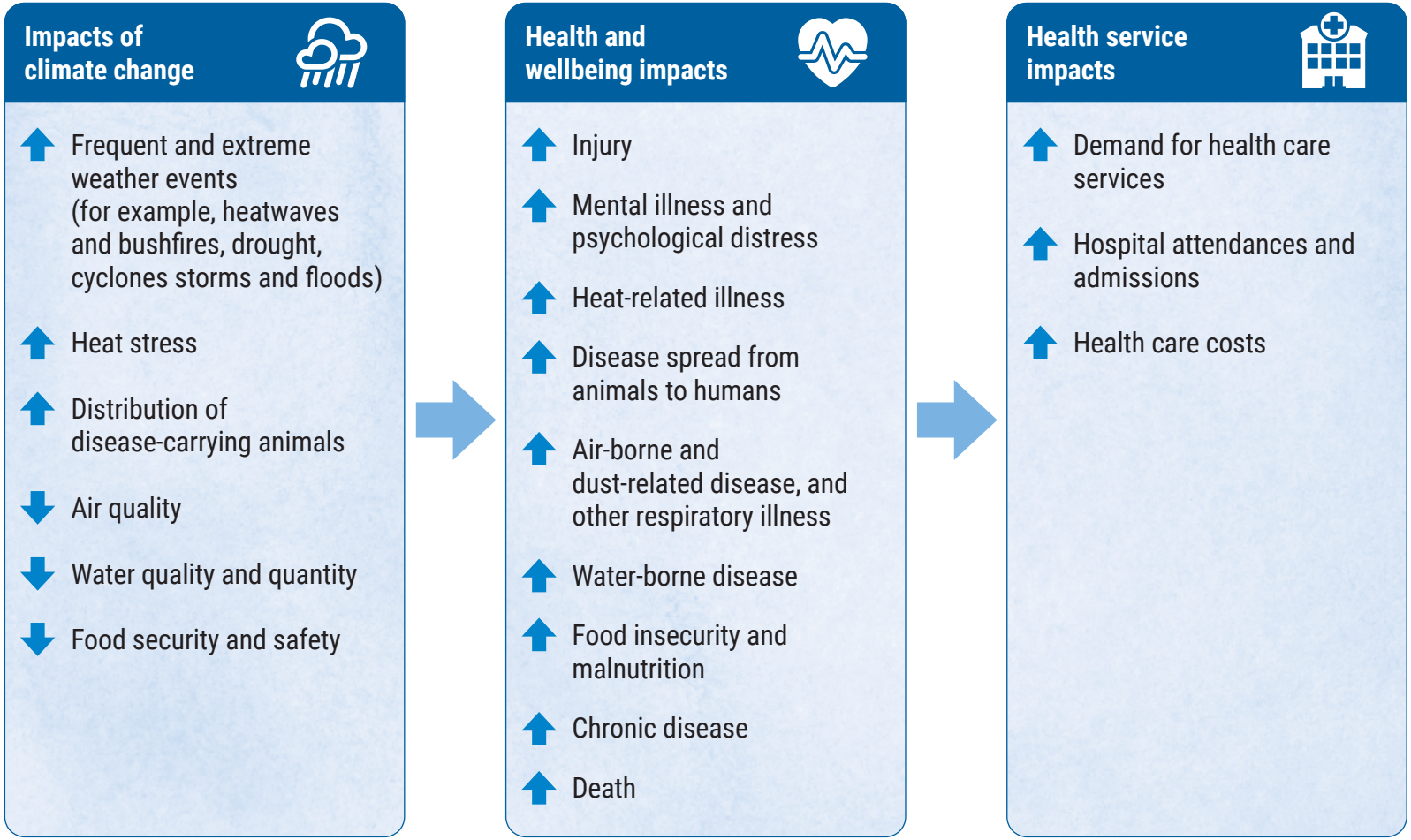
Climate change will have an impact on chronic diseases and injury

The World Health Organization describes climate change as the single biggest health threat facing humanity.[62] Climate change affects health and wellbeing through the increased intensity and frequency of extreme weather events, air pollution, disruptions to the supply of critical goods and services such as food, water, electricity and sanitation, increases in infectious diseases, respiratory conditions, injuries, and pressures on mental health.[63]

More information

Western Australian Climate Change Policy

Climate Health WA Inquiry: Final Report



Source: adapted from COP26 special report on climate change and health: the health argument for climate action[64]

Climate projections for WA show that the average annual temperature will continue to rise, and that annual rainfall in certain parts of the state will decline. This means that the intensity and duration of hot weather is likely to increase across WA, and that there will be fewer wet years and more dry years and droughts.[65]

Extreme weather events (including heatwaves, bushfires, droughts and cyclones) place people at increased risk of injury, illness and death.[63, 66-68] Groups most likely to be affected by extreme weather events include people who work outdoors or who are otherwise at greater risk (particularly the young and the old, people with chronic health conditions, people living in regional and remote areas and people living in low socioeconomic conditions). The trauma and stress of experiencing extreme weather events have been directly linked to mental health issues including post-traumatic stress disorder, depression and anxiety.[63, 69]

More information

Western Australian Climate Change Policy

Climate Health WA Inquiry: Final Report

Climate change can affect food systems and worsen food insecurity by disrupting agricultural practices and outputs, food processing, and supply chains. In turn, these impacts can push up food prices, increase transport costs and reduce food production and delivery frequency.[63] More expensive fresh and healthy foods may drive consumers towards buying cheaper, processed energy-dense and nutrient-poor foods.[63] Developing a local sustainable food supply can promote health and wellbeing and build a more resilient food system.[70]

Most of WA's population lives in urban settings, which are hotter than surrounding countryside as buildings and paved surfaces retain heat.[63] Planning and design elements that can help reduce the effects of climate change include protecting and increasing the tree canopy, providing green public spaces, and facilitating active transport to reduce private transport use (and emissions).[63] These changes also make neighbourhoods and cities more liveable, and support community health and wellbeing by improving air quality, encouraging physical activity, improving mental health and community connectedness, and reducing road crash trauma.[63]

Some groups are more vulnerable to the health impacts of climate change, depending on social, demographic, economic, and environmental factors, and the local context. Equitable access to information, community networks and financial resources are key to building the capacity of vulnerable groups to prepare and respond to hazards resulting from climate change.[63]

The SHR recommends that the health system reduces its environmental footprint and ensures that mitigation and adaptation strategies are in place to protect the health of Western Australians in the face of climate change. Since then, the WA Department of Health's *Climate Health WA Inquiry: Final Report*[63] has made recommendations to prepare WA for outcomes arising from climate change, and to reduce the health system's impact on the environment. The *Western Australian Climate Change Policy*[71] sets out the State Government's wider plan for a climate-resilient community.

2.2 The benefits of prevention

Prevention works. Helping people stay well reduces demand on the health system and makes it more sustainable.[1, 72] As well as healthcare savings, prevention delivers positive impacts for physical and mental health and wellbeing, community safety and amenity, social and health equity, social connection, workforce productivity and the broader economy.

Evidence-based preventive measures generate savings over time that outweigh the costs of implementation.[72] It is estimated that for every $1 invested in preventive health interventions, $14 is returned in savings for the health and social care sector.[73] Investment in legislative interventions can bring higher returns, with $47 in health and social care savings per $1 spent.[73]

The Australian approach to tobacco control shows how a comprehensive approach to prevention works. It also underlines the need for sustained action. While in many ways tobacco control can be seen as a public health success story in Australia, it has taken 50 years to reach this point, and challenges remain. Figure 2 shows how the introduction of a range of tobacco control measures have contributed to reduced tobacco consumption in Australia over time.[74] Figure 3 shows estimates of how many lung cancer cases would have occurred without these measures.[74]

More information

Western Australian Climate Change Policy

Climate Health WA Inquiry: Final Report

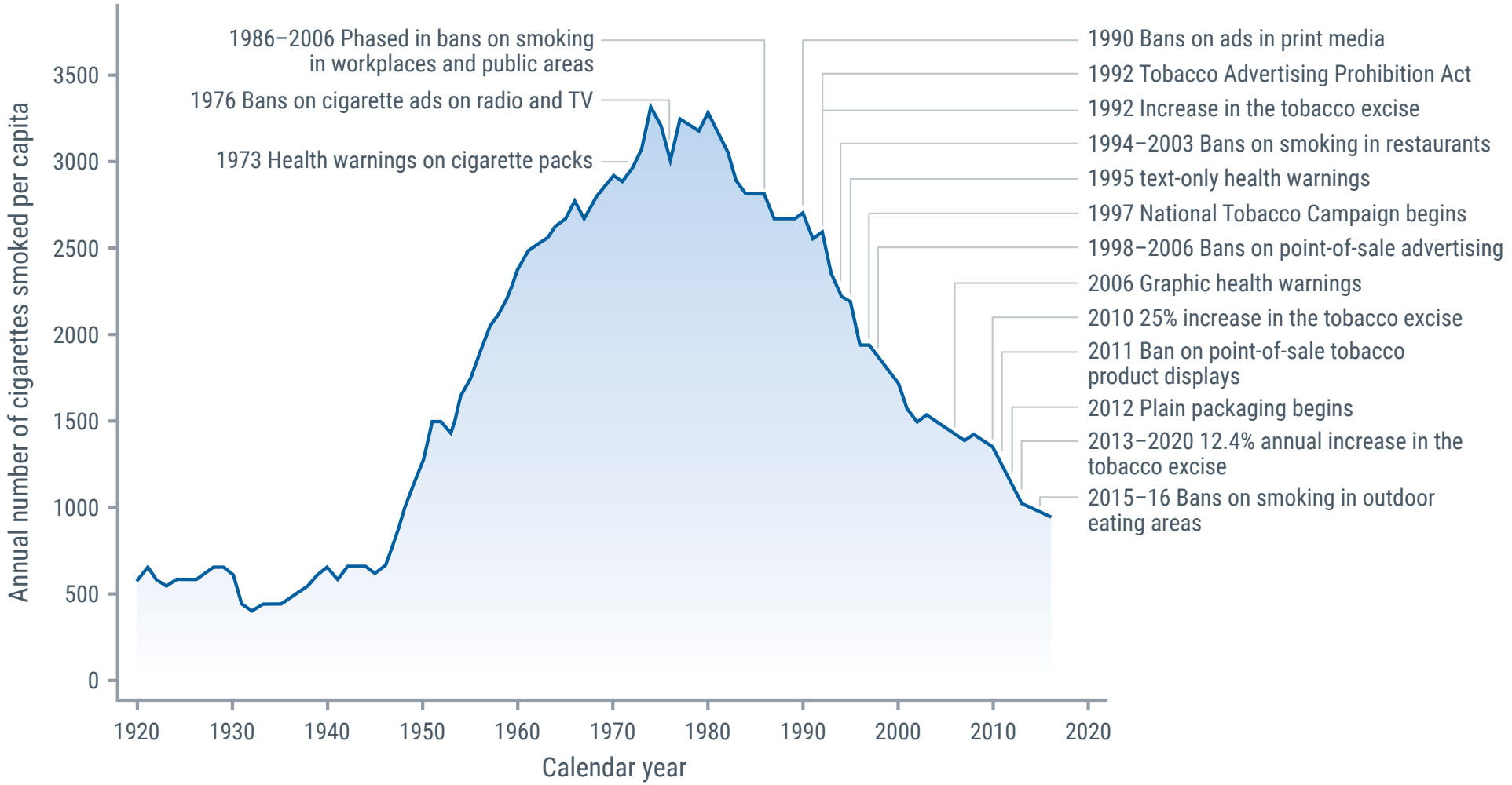


Figure 2. Timeline for tobacco control and annual number of cigarettes smoked per capita 1920–2016 in Australia[74]

Source: Luo Q, Steinberg J, O'Connell DL, Yu XQ, Caruana M, Wade S, et al. Lung cancer mortality in Australia in the twenty-first century: How many lives can be saved with effective tobacco control? Lung Cancer. 2019;130:208-15 https://doi.org/10.1016/j.lungcan.2019.02.028

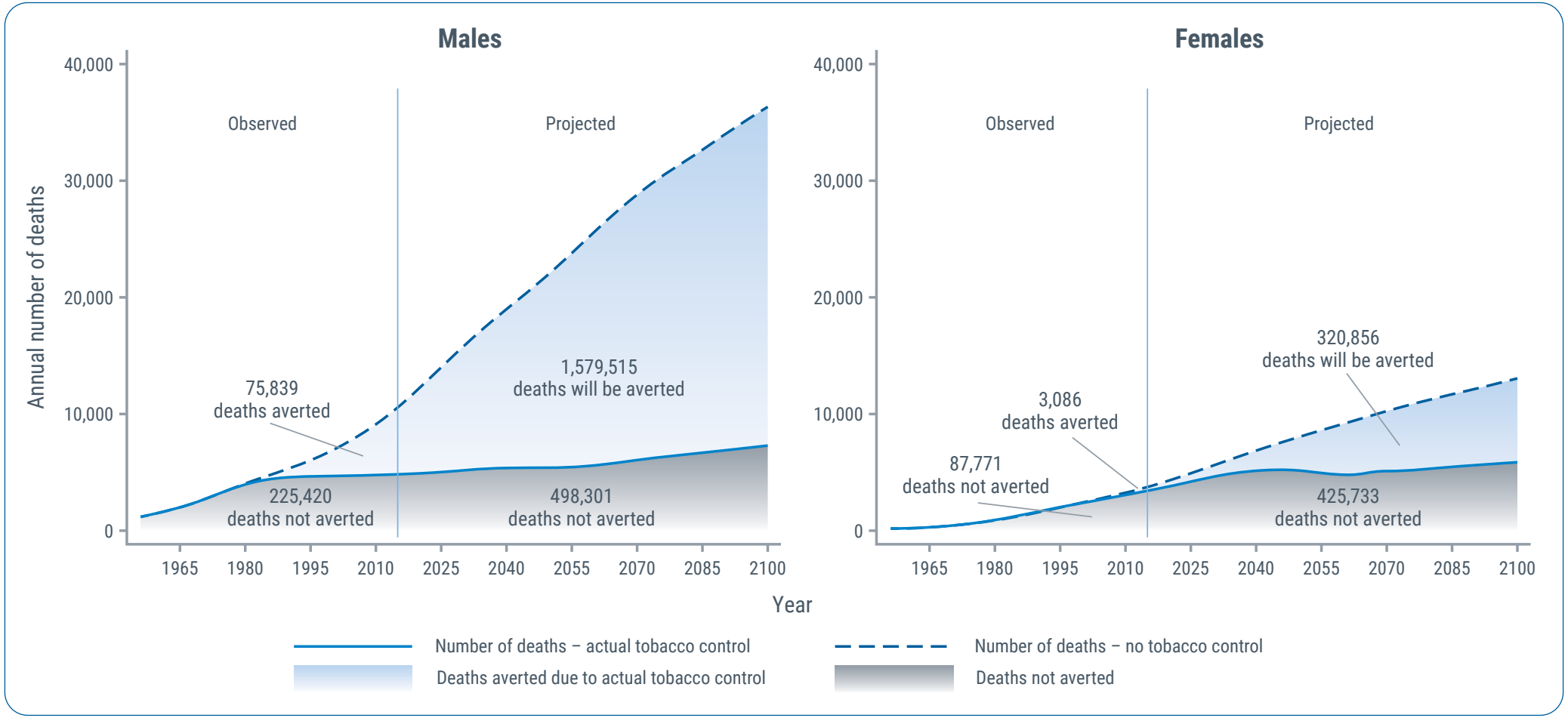


Figure 3. Annual number of lung cancer deaths and estimated numbers of deaths averted due to actual tobacco control over the period 1956–2100 in Australia[74]

Source: Luo Q, Steinberg J, O'Connell DL, Yu XQ, Caruana M, Wade S, et al. Lung cancer mortality in Australia in the twenty-first century: How many lives can be saved with effective tobacco control? Lung Cancer. 2019;130:208-15 https://doi.org/10.1016/j.lungcan.2019.02.028

WA has long-established health promotion programs that are effective in influencing behaviours. Campaigns like LiveLighter®, Alcohol. Think Again® and Make Smoking History® aim to influence knowledge and behaviour, but behaviour change, especially for complex, addictive or relapsing behaviours, can be difficult to maintain. To remain effective, campaigns and programs must be part of a comprehensive approach and be run and funded at levels, and over sufficient time periods to support and help maintain long-term behaviour change.[75]

Economic evaluations of public health campaigns in WA

LiveLighter®

In 2020, an independent economic evaluation was undertaken to estimate the impact of the LiveLighter® campaign on dietary behaviours, weight, incidence of obesity-related diseases, and healthcare cost-savings in WA adults. The evaluation showed that the campaign significantly reduced consumption of sugary drinks and sweet foods such as chocolates, cakes, and biscuits.[76] Over a one-year period, these changes in consumption were estimated to result in an average reduction in weight of 0.6kg per person.[76] Running the campaign for just one year was estimated to have saved an additional 61 years of life and to have prevented approximately 66 new cases of type 2 diabetes and 65 new cases of osteoarthritis over the lifetime of the WA population aged 25–49 years.[76]

The average cost of developing and airing a one-year campaign was approximately $2.5 million.[76] It was estimated that a one-year campaign could result in healthcare cost-savings of approximately $3.2 million over the lifetime of the WA population aged 25–49 years.[76] Expanding this modelling to all WA adults aged 18 years and over, assuming that they were also exposed to the campaign, increased the estimated healthcare cost-savings of a one-year campaign to $6.5 million.[76] The evaluation shows that public health mass media campaigns aimed at improving dietary behaviours to maintain a healthy weight are effective, and worthy of ongoing investment.[76]

More information

LiveLighter®

Alcohol Think Again®

Make Smoking History®

Economic evaluations of public health campaigns in WA

Alcohol.Think Again®

Independent evaluations of WA's Alcohol.Think Again® campaigns have shown that they are effective. In a study comparing more than 80 international alcohol-related harm reduction campaigns, the 'Spread' campaign (which aimed to increase awareness that alcohol causes cancer) was found to be the most effective for motivating behaviour change. Alcohol. Think Again® campaigns featured 3 times in the top 10.[77]

An evaluation of the Glassbody campaign (shown left) showed a 15 per cent increase in positive behaviour change among high-risk drinkers during the campaign.[78] As a conservative estimate, this is equivalent to around 267,000 Western Australians taking some action to reduce their drinking. At $1.29 per person, it was a very cost effective campaign.[78]

More information

LiveLighter®

Alcohol Think Again®

Make Smoking History®

3. A framework for action

3.1 Priorities

The priorities of the HPSF are:

- reducing tobacco use and making smoking history
- healthy eating and active living to halt the rise in obesity
- reducing harmful alcohol use
- preventing injury and promoting safer communities.

3.2 Guiding principles

The HPSF is underpinned by 4 principles.

Principle 1: A comprehensive, whole-of-population approach to prevention

A comprehensive, whole-of-population approach to prevention is fundamental to achieving the goal of lowering the incidence of chronic disease and injury in WA. Influencing complex issues and behaviours such as overweight and obesity, poor nutrition, and insufficient physical activity cannot occur through single interventions.

It is best practice to place population-wide approaches (primary prevention) at the centre of health promotion strategies for preventing chronic disease and injury. Even small shifts in behaviour at a population level can lead to large overall reductions in the burden of chronic disease and injury.[79] A 'population-wide' approach does not mean a 'one-size-fits-all' approach, but one that is equitable in reach, accessibility and relevance to all Western Australians.

Principle 2: Intervening early and throughout life

A life course approach to health promotion recognises the importance of preventing chronic disease and injury early, in a variety of settings and at key life stages.

Many of the health problems that develop in adulthood stem from our experiences early in life sometimes even before birth.[80, 81] For example, maternal health during pregnancy, including weight, alcohol use and smoking, can affect child development and health later in life.[80, 81] Breastfeeding in infancy and good nutrition in childhood support healthy development and protect against obesity, tooth decay and the early onset of chronic diseases. Home, school, neighbourhood and cultural environments shape eating behaviours and patterns of physical activity during childhood, and influence attitudes towards tobacco, alcohol and other drug use during adolescence.[80] The critical role that parents and families play in shaping health and wellbeing in childhood and adolescence should be recognised and leveraged in health promotion initiatives.

Adopting a healthier lifestyle can slow disease progress, prevent the onset of additional health problems, and improve health and wellbeing at any age. In adulthood, experiencing pregnancy and parenthood can trigger behaviour change. Other opportunities arise in mid-life as the risk of developing a chronic disease increases. Moving into older age provides opportunities for promoting active and healthy ageing.[82] All of these ages and stages provide opportunities for tailored strategies and messaging.

Principle 3: Promoting equity and inclusivity

Health inequalities and inequities can arise from the conditions in which people are born, grow, live, work and age. These conditions are often referred to as the determinants of health. Figure 4 shows how a person's physical and psychological makeup interact with their societal, environmental and socioeconomic conditions, their knowledge and attitudes, health risk behaviours and biomedical factors to influence their health and wellbeing over time. Broader influences of society, access to health services, social support, and the built and natural environments can strengthen or undermine individual and community health.[7]

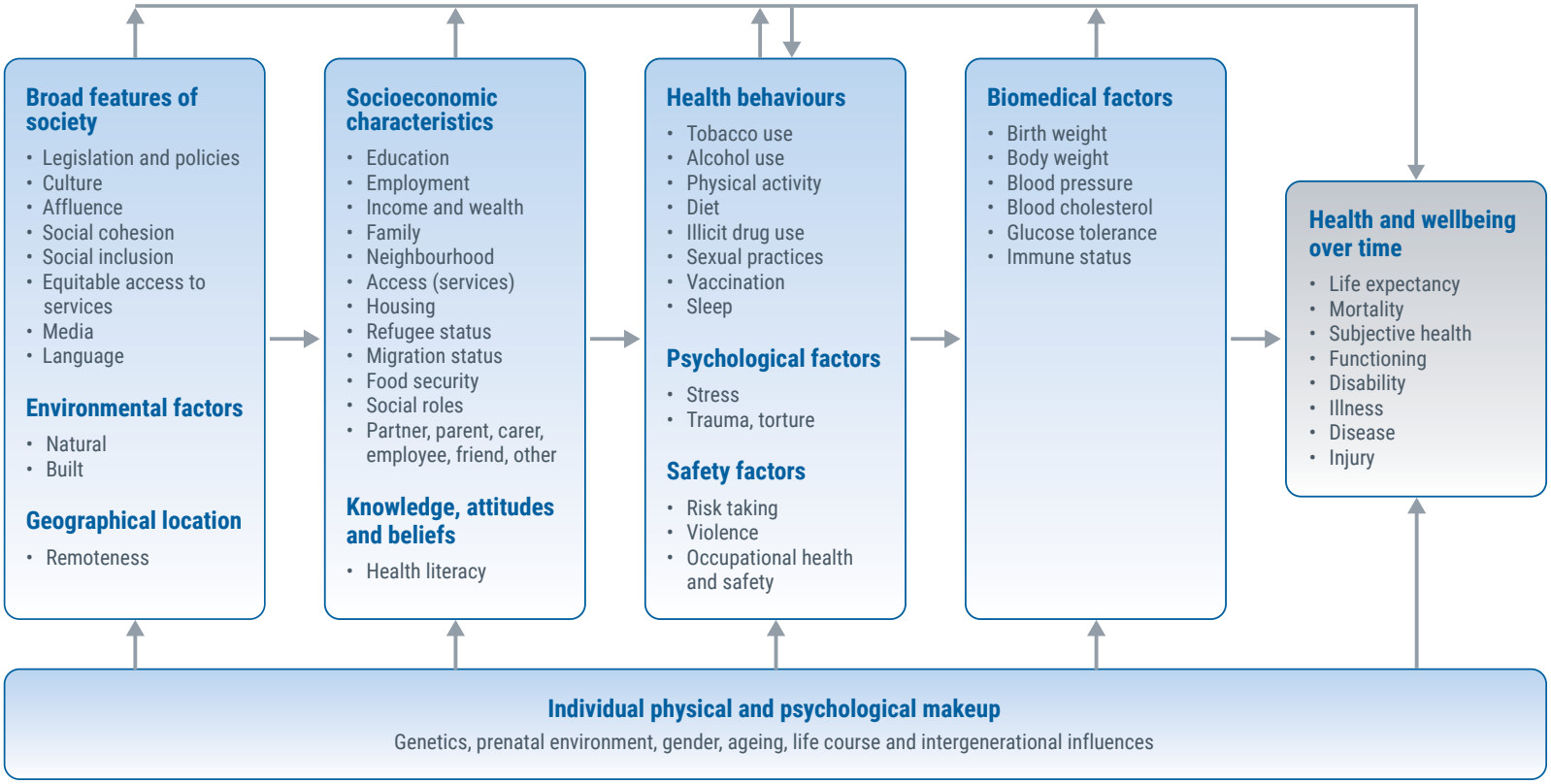


Figure 4. Determinants of health (Source: Australian Institute of Health and Welfare[84])

Health inequalities and inequities

Health inequalities are differences in health status between population groups.

Health inequities are differences in health status between population groups that are socially produced, systematic in their unequal distribution across the population, avoidable and unfair.[83]

As noted in Section 2.1, some Western Australians face more barriers to achieving good health and wellbeing than others.[7, 85]

Working to reduce the health impact of social determinants takes a cross-sector approach. Strategies that address the determinants of health are fundamental to reducing health inequities and improving health status.

Well-designed mainstream programs developed with a focus on equity, inclusiveness and cultural security may be effective in specific population groups as well as the broader community. However, sometimes programs designed to meet the needs of particular target groups are needed. Targeted health promotion programs and messages should be developed in consultation with the intended target populations.

Principle 4: Collaborative partnerships and strategic coordination

Developing partnerships across all levels of government, as well as with organisations and agencies including not-for-profit organisations, Aboriginal and CaLD community groups and associations, peak professional organisations, workplaces and the research community is vital to advancing the preventive health agenda. To reduce duplication and maximise effectiveness, it is important to identify shared goals, and pool skills and resources. The HPSF provides a common framework for priority setting. The Department of Health is well positioned to assist in coordinating alignment between strategic policies and planning for prevention.

Prevention has numerous health, social, environmental and economic co-benefits. For example, a neighbourhood with well-designed and attractive options for active transport creates more opportunities for physical activity, improves public safety and amenity, improves air quality from reduced car dependence, and reduces healthcare costs. For stakeholders with a role in addressing health promotion issues that have co-benefits for other sectors, Appendix 3 can be used as a guide for strategic engagement and partnership with state government agencies. The appropriate level of engagement and partnership between stakeholders depends on a range of factors including the setting, the target population, the impact and complexity of the issue being addressed.

Social Inclusion Mirrabooka, coordinated by the North Metropolitan Health Service's Public Health Unit, provides a current example of the partnership approach in action in urban Perth.

Social Inclusion Mirrabooka

Social Inclusion Mirrabooka (SIM) is a cross-sector partnership. The goal of SIM is to improve health outcomes, community engagement and reduce inequalities for residents living in Mirrabooka and surrounding suburbs. Led by the North Metropolitan Health Service Public Health Unit, SIM consists of more than 30 organisations including state and local government, the non-government sector, schools, CaLD communities, Aboriginal organisations and service providers. Through collaborative partnerships, SIM facilitates the development of community and individual capacity building, and interventions that foster harmonious, inclusive and healthy communities. The SIM network facilitates several programs, including the Balga Boodja Walking Trail, tailored food literacy programs, weekly community walking groups, and the With One Voice Mirrabooka community choir. SIM also holds a twice-yearly community walk against domestic violence.

3.3 Domains for Action

A comprehensive approach to health promotion means that a combination of strategies to address the causes of chronic disease and injury is needed. The HPSF is guided by 9 domains for action. Introducing an intervention in a single domain is likely to limit its effectiveness but operating across a combination of domains has the potential to achieve system, structural and cultural changes.

- Legislation and regulation
- Healthy policies
- Economic interventions
- Supportive environments
- Public awareness and engagement
- Community development
- Targeted interventions
- Building capacity and workforce development
- Research and evaluation.

Most users of the HPSF will not undertake action in all of these domains. Stakeholders can focus their efforts and investment on the domains where they have the greatest influence and potential for impact.

Legislation and regulation

Laws and regulations are the cornerstone for protecting and improving public health.[79] Laws can be used to restrict the sale, promotion and use of harmful or potentially harmful substances like tobacco or alcohol, or to protect public safety by requiring seatbelts in cars and fencing for residential swimming pools. The production, processing, transport, labelling, advertising and sale of food are all subject to regulations to protect public health and safety. While the introduction of legislation is the responsibility of governments, the health sector, non-government organisations, and the wider community make an important contribution to raising public awareness, engaging in public debate and consultation, and providing ongoing support once legislation has been passed. The World Health Organization recommends that when developing public health legislation and policies, public interest should be protected, and conflict of interests should be avoided.[86, 87]

Healthy policies

Government departments and agencies, local governments, industries and workplaces, not-for-profit organisations, the education sector, professional organisations and community groups all have an important role to play in ensuring that their policies positively contribute to the health of Western Australians. Encouraging and supporting the adoption of healthy policies extends the reach of health strategies, provides supportive environments and influences social norms about health behaviours. Healthy policies can include providing smoke-free and alcohol-free places and events, ensuring that healthy food and drink options are easily available and affordable, supporting use of public transport and active travel, and encouraging and supporting breastfeeding.

Economic interventions

Economic interventions are a very effective way of influencing consumer behaviours. For example, higher tobacco prices in Australia due to increases in taxation have been an important factor in reducing the prevalence of smoking, particularly in young people.[88] The SHR recommends the introduction of a minimum floor price for alcohol with regular adjustments for inflation, which works by setting a minimum price for alcohol based on the number of standard drinks it contains.[1, 89, 90] This type of intervention can be introduced by States and Territories, and is in place in the Northern Territory.[89] The SHR also supports the pursuit of a sugar tax, which would need to be introduced by the Australian Government.

Supportive environments

Many built and natural environments, including housing, neighbourhoods, urban green spaces such as parks and gardens, childcare, schools, workplaces, and community, sport and cultural settings have the potential to influence health. Environments that support good health may do so by promoting healthy behaviours, such as by making healthy options the easier or more attractive choice, by ensuring safe and equitable access to nutritious food; by providing safe and accessible active transport and options for recreational physical activity; and by de-normalising unhealthy or risky behaviours. Planning at a State, regional and local level is increasingly recognising the need to ensure liveable neighbourhoods. Local governments have an important role to play in shaping healthy environments for their communities.

Public awareness and engagement

Raising public awareness about chronic disease and injury educates, prompts and motivates people to think about their health-related behaviours. Providing reliable, consistent and motivating messages that are relevant at a personal, family, organisational or community level increases the effectiveness of other health promotion activities. Mass media campaigns deliver greatest public health gains when they are well-designed and delivered with appropriate reach, intensity and duration to support and maintain behaviour changes.[91] Thoughtfully designed population-wide programs can be inclusive of components that appeal to target groups, as well as to the broader population (see also Target interventions below).

Providing easily understood product information (such as nutritional information on food packaging and on menus, and health warnings on alcohol and tobacco products) are other effective and practical ways of increasing knowledge and awareness. Professional groups, health organisations and the media have a vital role in disseminating information and contributing to the public conversation about health issues.

The role of local governments in public health planning

WA's *Public Health Act 2016* is intended to protect, promote and improve the health and wellbeing of the population. The Act requires the State's Chief Health Officer to develop a public health plan that identifies the public health needs of the State, and establishes objectives and policy priorities for the promotion, improvement and protection of public health, and the development and delivery of public health services. Local governments will be required to produce local public health plans that align with the State Public Health Plan and are encouraged to link with other agencies with shared priorities, goals and intersecting policy agendas to promote health in their district. The WA Department of Health, Health Service Providers and not-for-profit health organisations have developed a range of practical, evidence-based resources to assist local governments with their public health planning.

Community development

Community approaches to health promotion take account of the social, cultural, economic, environmental, geographical and other factors that make individual communities distinct. Through meaningful community engagement, communities can identify the factors that contribute to ill-health in their particular setting, decide on priorities and work towards finding and implementing solutions. In some circumstances, health and other professionals, such those that work in local government, may work in partnership with communities, participating in decision-making and helping to manage implementation of initiatives. In other settings, communities may prefer to set their own course, with health and other professionals acting as co-facilitators.[92] Community development fosters participation, empowerment and sustainability. These important elements help to build more equitable, healthy and resilient communities.

Targeted interventions

Targeted interventions are developed and tailored to suit specific settings, or to be meaningful to specific population groups or communities. Targeted interventions ensure reach and relevance of health promotion programs and communications, and support improvement of health literacy. Fundamental to their success is the quality of consultation and engagement with target populations in the design of communication strategies and health messaging. Targeted interventions may include or be part of a larger suite of activities that consider the environmental and social determinants of health, or be a component of mainstream programs. For example, more recent waves of the LiveLighter® campaign have included Aboriginal specific advertising on the harms of over-consumption of sugar sweetened beverages (see box below), while the Make Smoking History® campaign has long used inclusive language and diverse talent in its campaigns and messaging.

Building capacity and workforce development

To ensure that interventions are effectively implemented and can be sustained over time, the HPSF adopts a capacity-building approach. In the context of health promotion, capacity building is the process of developing sustainable skills, resources and commitment to health improvement that will prolong and multiply health gains.[94] Successful capacity building supports the building of partnerships and environments that will enable programs (and health gains) to be sustained over time.[94] Providers of health promotion programs funded by the Chronic Disease Prevention Directorate are required to develop and support a program of capacity building among their stakeholders.

LiveLighter® '16 Teaspoons of Sugar'

'16 Teaspoons of Sugar' was a TV ad advertisement developed as part of the LiveLighter® campaign in 2015 by the Victorian Aboriginal Community Controlled Health Organisation in partnership with Cancer Council Victoria. The advertisement was broadcast throughout WA on Aboriginal TV and radio stations. '16 Teaspoons of Sugar' also ran inside Aboriginal Community Health waiting rooms at 21 locations across the state.

The advertisement had an all-Aboriginal cast and showed a family eating raw sugar to illustrate the large amount of sugar in sugary drinks. The advertisement highlighted the health risks associated with drinking sugar sweetened beverages including tooth decay and excess weight gain, which in turn increases the risk of developing chronic disease.

Evaluations of the campaign suggest the advertisement resonated with Aboriginal people, highlighting the importance of tailoring of health messages.[93]

Building and maintaining a workforce with specialist skills in health promotion and chronic disease prevention is crucial for improving health in WA. The SHR highlights the importance of training and supporting an innovative and responsive health workforce and recommends partnering with universities, vocational training institutions and professional colleges to shape the curriculum and skills of the workforce of the future.[1] The SHR also recommends a clearer orientation of workforce models towards community health needs, and interdisciplinary models of care,[1] which provides scope for the better embedding of prevention and health promotion messaging across the continuum of care in community and clinical settings. This has occurred through the public health response to the COVID-19 pandemic, which has engaged the wider health workforce in adopting and promoting consistent health promotion messaging. There are also opportunities for increasing the capacity and competency of the workforce beyond the health sector where there is an overlapping interest in, or responsibility for factors that influence health.

Research and evaluation

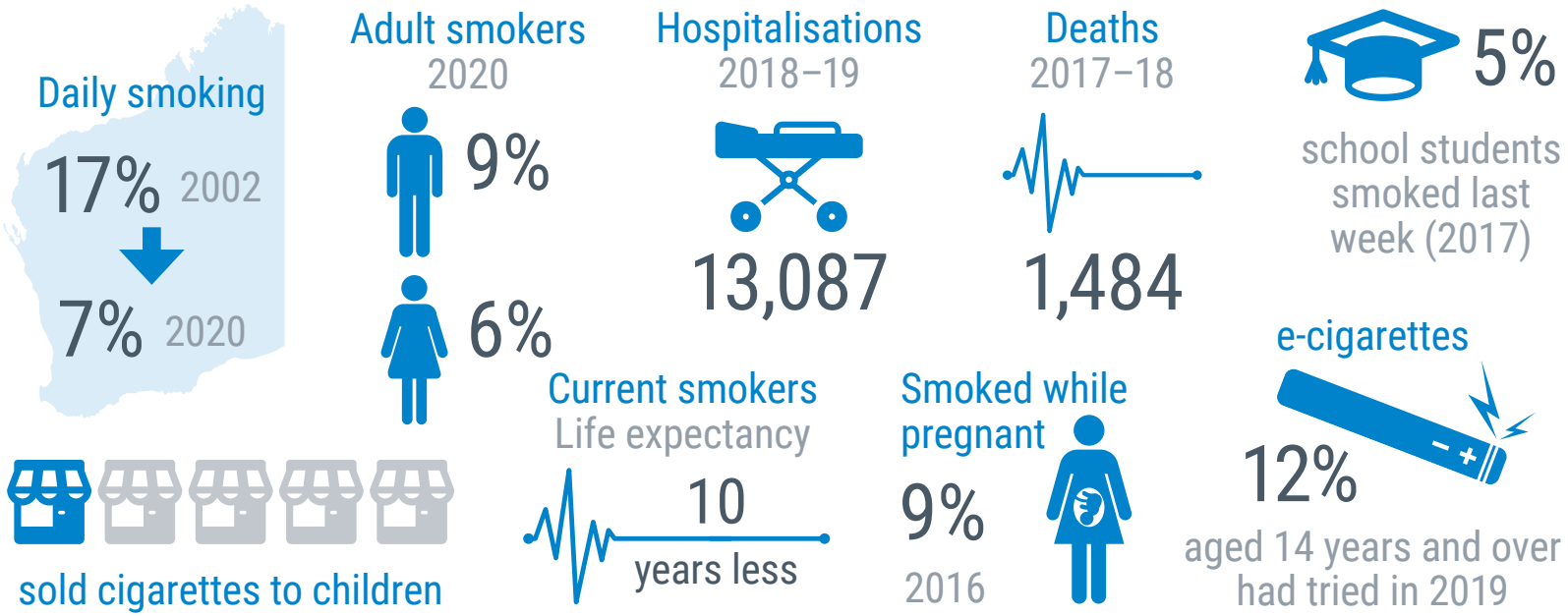
Research and evaluation are central to the development and maintenance of well-conducted health promotion policy and programs. Properly-conducted research and evaluation provide quality assurance by ensuring that policies and programs represent value for money and deliver the intended health benefits to the community. For further information on research and evaluation in the HPSF, see Section 5.

4. The 5-year plan

4.1 Reducing tobacco use and making smoking history

WA has among the lowest smoking rates in the world, and some of the strongest tobacco legislation nationally. But tobacco use is still the leading cause of disease, disability and death in WA.[16] Sustained, comprehensive, and population-wide tobacco control efforts are needed to reduce the serious impact of tobacco use now and in the years ahead. The risk of children becoming addicted to nicotine through alternative nicotine and non-nicotine delivery products and transitioning to tobacco use is an emerging challenge.

4.1.1 A snapshot of tobacco use in WA



Key Statistics

- The prevalence of WA adults aged 18 years and over who were daily smokers fell from 17 per cent in 2002 to 7 per cent in 2020.[11]
- In 2018–19, there were 13,087 tobacco-related hospitalisations and in 2017–18, 1,484 tobacco-related deaths in WA.[95]
- Between 2015 and 2019, the prevalence of current smoking in adults aged 16 years and over who lived in regional and remote WA (14 per cent) was significantly higher than the overall prevalence across the entire WA adult population aged 16 years and over (11 per cent).[96]
- In 2018–19, 41 per cent of Aboriginal people (aged 15 years and over) were current smokers.[97]

More information

Strategies

National Tobacco Strategy

National Preventive Health Strategy 2021–2030

World Health Organization Framework Convention on Tobacco Control

WA Aboriginal Health and Wellbeing Framework 2015–30

Resources

Make Smoking History®

WA Quitline

Resources for local governments

E-cigarettes – WA Health

Tobacco in Australia

Data

ABS – Smoking 2020–21 FY

AIHW – Tobacco Smoking

WA Health and Wellbeing

National Drug Strategy Household Survey 2019 – WA

Australian Secondary Students' Alcohol and Drug Survey 2017 – WA

- In 2020, 9 per cent of males over 18 and 6 per cent of females aged over 18 were smokers.[11]
- In 2020, nearly all WA children lived in a smoke-free home (over 99 per cent).[98]
- In 2017, 5 per cent of WA school students aged 12–17 smoked in the last week.[99]
- In 2020, more than one in 5 (22 per cent) of audited tobacco retailers sold cigarettes to children.[100]
- In 2019, daily smoking was higher in people living in low (18 per cent) compared to high socio-economic areas (5 per cent).[43]
- In 2016, 9 per cent of WA women smoked while pregnant.[101] Smoking during pregnancy was highest in young women (19 years or less), Aboriginal women, and women living in regional areas.
- In 2019, 12 per cent of Western Australians aged 14 years and over had tried an e-cigarette.[102]
- In 2017, 14 per cent of WA school students aged 12 to 17 years had tried an e-cigarette.[99]
- On average, current smokers die 10 years earlier than non-smokers.[103]

4.1.2 Priorities for reducing tobacco use and making smoking history in WA

Reduce tobacco use in WA, particularly among populations at higher risk of harm due to tobacco use

Higher levels of tobacco use in some population groups contribute to significant health, social and financial inequalities. Aboriginal people, people living in lower socio-economic conditions, people who live in regional and remote areas, people living with a mental illness, people who are homeless, people who identify as lesbian, gay and bisexual, older people, people who are dependent on alcohol and other drugs and people who are in prison have a higher prevalence of smoking.[43, 97, 104-106] There are also some population groups which are more at risk from the harms of use or exposure to tobacco use, such as pregnant women, infants and children, and people living with a chronic health condition.[107, 108] Social, economic and cultural factors in some population groups mean they are more likely to use tobacco, to be in environments where smoking remains the norm, and to feel less supported by their family and peers if they try to quit smoking.[109, 110]

Ongoing investment in a comprehensive suite of evidence-based approaches to tobacco control which includes high-quality mass media campaigns remains a vital part of raising awareness about the dangers of smoking, and prompting attempts to quit, both at population-wide level and for specific populations. Mass media campaigns should be complemented by targeted policies and programs to support specific at-risk populations.

Reducing tobacco use among Aboriginal people

Although tobacco use has declined among Aboriginal people in WA, smoking rates remain high compared with other Western Australians. Smoking is estimated to cause half of all deaths in Aboriginal adults aged 45 years and over. Aboriginal adults who have never smoked are twice as likely to live to the age of 75, and have an extra 10 years of life expectancy, compared with current smokers.[111] Evidence suggests that social norms in Aboriginal communities may contribute to high smoking rates, but most Aboriginal people who smoke (70 per cent) want to quit.[112]

More information

Strategies

National Tobacco Strategy

National Preventive Health Strategy 2021–2030

World Health Organization Framework Convention on Tobacco Control

WA Aboriginal Health and Wellbeing Framework 2015–30

Resources

Make Smoking History®

WA Quitline

Resources for local governments

E-cigarettes – WA Health

Tobacco in Australia

Data

ABS – Smoking 2020–21 FY

AIHW – Tobacco Smoking

WA Health and Wellbeing

National Drug Strategy Household Survey 2019 – WA

Australian Secondary Students' Alcohol and Drug Survey 2017 – WA

The most effective way of reducing tobacco use in Aboriginal people is by complementing comprehensive, population-wide tobacco control approaches with initiatives that include and are tailored to Aboriginal people. Taking a family and community approach and looking to encourage a change in social norms about quitting may have particular relevance, along with raising awareness about protecting children from second-hand smoke, and providing practical advice and support for quitting.[112] Aboriginal people should be involved in the development, implementation and evaluation of culturally appropriate tobacco control programs.[87]

Eliminate exposure to second-hand smoke where the health of others can be affected

Second-hand smoke causes disease, disability, and death in adults and children.[113] Smoke-free legislation and regulations have contributed to improvements in health outcomes for smokers and non-smokers.[114] Smoke-free laws have also led to a significant shift in social norms about smoking in public places and had flow-on effects to people's homes and cars.[98, 115] However in populations with higher prevalence of tobacco use, smoking in the home remains high.[116]

Enclosed public places have been smoke free for some time, and many outdoor shared public places and spaces in WA are also becoming smoke free, whether through State legislation, organisational policies or by local governments as part of their public health planning.[117, 118] There is generally strong compliance with smoke-free legislation and it is well supported by the public.[114, 119] Expanding smoke-free environments will be an important factor in continuing to drive down and de-normalise tobacco use, and in protecting the health of all Western Australians.

Strengthen regulation to reduce supply of and access to tobacco products

The widespread availability of tobacco products increases the amount of tobacco that smokers use, helps to maintain smoking behaviour and undermines quit attempts. It also perpetuates the idea that tobacco is a normal and acceptable consumer product rather than a dangerous product that kills 2 out of 3 long-term users.[103] Strategies to reduce the supply of tobacco products should be included as part of a comprehensive suite of tobacco control policies alongside measures to reduce the demand for tobacco products.[87, 107, 120, 121] These can include regulatory approaches that prohibit or limit sale and supply of tobacco products in certain places, or in certain ways such as by online purchasing or from vending machines. WA's *Tobacco Products Control Act 2006* includes a tobacco sellers licensing scheme which is an important mechanism to enable the effective operation of State tobacco laws relating to sale and supply of tobacco products.[117]

Children's access to tobacco products is still of concern. Most WA children aged 12 to 17 years who smoke get their cigarettes from friends,[99] but some tobacco retailers sell cigarettes to people aged under 18, although this has improved over time.[100, 122] Continuing to monitor and enforce tobacco control legislation that prohibits the sale of tobacco to children remains a priority.

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Strengthen regulation of alternative nicotine and non-nicotine delivery products, including e-cigarettes

New nicotine and non-nicotine delivery products have been developed and marketed in recent years. E-cigarettes are the most common of these, but other novel products are available overseas.

E-cigarette devices use a battery to heat an e-liquid to produce an aerosol (often called a vapour) for inhalation. There is not enough evidence to support claims that e-cigarettes help smokers quit, or are a safe alternative to tobacco cigarettes.[123] In WA, sale of e-cigarettes with or without nicotine is illegal, unless it is for assisting with smoking cessation and with a prescription from a registered medical practitioner.

The surge in use of e-cigarettes by teenagers in the USA has been described as an epidemic and underlines the urgency of preventing the uptake of e-cigarettes, particularly by children and young people in WA.[107, 124] E-cigarettes provide a gateway to nicotine addiction, increase the likelihood of starting to smoke tobacco, and expose users and bystanders to harmful chemicals.[125] E-cigarettes also renormalise smoking, increase nicotine dependence and encourage dual use of tobacco and e-cigarettes.[125] These products can also cause nicotine poisoning due to exposure to or ingestion of e-liquids, and burns due to e-cigarettes overheating, catching fire or exploding.[125, 126]

There is strong support in WA for restricting the use of e-cigarettes in public places similar to the current restrictions for tobacco cigarettes (69 per cent).[127] Polices and regulations about e-cigarettes and other alternative nicotine delivery products must aim to protect the hard-won public health gains that have been made in reducing smoking rates and exposure to tobacco smoke.

4.1.3 Strategic directions for reducing tobacco use and making smoking history in WA

1. Legislation and regulation

- Protect the development and enforcement of tobacco control legislation and regulation from industry interference, in alignment with the WHO *Framework Convention on Tobacco Control*,
- Monitor, enforce and strengthen legislative controls on the sale, supply, marketing and use of tobacco products, including alternative nicotine and non-nicotine delivery products, such as e-cigarettes.
- Eliminate exceptions to smoke-free workplaces and public places, especially where children or other groups at higher risk from exposure to tobacco smoke, or taking up smoking, are present.
- Support further regulation by the Australian Government that align with the WHO *Framework Convention on Tobacco Control* and the *National Tobacco Strategy*, including initiatives to address ingredients disclosure, regulation of ingredients, and cigarette design features.

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2. Healthy policies

- Develop tobacco control policies and ensure that they are protected from tobacco industry interference in line with the WHO *Framework Convention on Tobacco Control*.
- Support and encourage the development and implementation of smoke-free policies, including restrictions on the use of e-cigarettes, particularly in health, community and other settings where children or other groups at higher risk from exposure to tobacco smoke, or taking up smoking, are present.
- Support and encourage the development and implementation of local, state and national policies that will reduce the health, social and economic harms caused by tobacco, in line with the *National Tobacco Strategy 2022–2030* (to be released) and the WHO *Framework Convention on Tobacco Control*.

3. Economic interventions

- Support economic policies to reduce tobacco product affordability, prevent uptake and discourage use.

4. Supportive environments

- Increase access to evidence-based smoking cessation support by embedding support into routine clinical care in health, community and other settings, especially those used by groups at higher risk of tobacco use.
- Eliminate exposure to second-hand smoke and aerosols from use of e-cigarettes in health and community settings, workplaces and public places, especially those used by groups at higher risk of tobacco use.
- Support communities and stakeholders to adopt local policies to reduce the prevalence of smoking and exposure to tobacco smoke, and aerosols from e-cigarette use in places where the health of others can be affected.
- Build on strong public support for tobacco control measures.

5. Public awareness and engagement

- Invest in sustained, evidence-based statewide public education campaigns to encourage and support quitting and discourage uptake of tobacco use.
- Increase awareness of evidence-based smoking cessation support among groups at higher risk of tobacco use.
- Promote equitable access to reliable, practical and culturally appropriate information about preventing uptake of tobacco use, quitting and smoking-related harm.

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6. Community development

- Engage with the community and key stakeholders, including local governments, to identify and implement priority actions that reduce exposure to second-hand tobacco smoke and promote smoking cessation.
- Support local government to develop local public health plans that include strategies to prevent tobacco use and tobacco-related harm.

7. Targeted interventions

- Complement population-based approaches with targeted programs that are culturally-appropriate and meet the needs of groups at higher risk from tobacco use or who are particularly vulnerable to the harmful effects of smoking.
- Integrate smoking prevention and cessation messages with other healthy lifestyle, and alcohol and other drug initiatives, and develop links between programs and services that are targeted at populations at higher risk from tobacco use.

8. Building capacity and workforce development

- Strengthen existing and develop new partnerships across all sectors and the community to ensure a comprehensive, consistent and effective approach to reducing the prevalence of smoking and exposure to second-hand smoke.
- Strengthen, upskill and support relevant parts of the public health, broader health and non-health workforce to address tobacco control and cessation in their policy and programs.
- Improve and maintain the capacity of Health Service Providers, community services and the allied health workforce to provide reliable cessation information, advice and support to smokers.

9. Research and evaluation

- Support and undertake ongoing, high quality research and evaluation to ensure that tobacco control policies and programs are best-practice and evidence-based.
- Support continued population monitoring and surveillance of smoking prevalence as well as key factors that impact smoking behaviour.

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4.2 Healthy eating and active living to halt the rise in obesity

Establishing healthy eating habits and maintaining a nutritious and balanced diet are foundations of health and wellbeing, and the prevention of chronic disease across the lifespan. Good nutrition in childhood is particularly important for a healthy start in life.

Sufficient physical activity is also essential for growth and development as well as maintaining good physical and mental health over the life course. Physical inactivity and sedentary behaviours can independently increase chronic disease risk in a variety of ways. Active living provides multiple benefits to mental health and wellbeing through physical movement, social interaction, and recreational pursuits.

Consuming a poor diet, or one that does not align with the Australian Dietary Guidelines (ADGs), and a lack of sufficient physical activity are key behaviours that cause energy intake to exceed energy requirements, leading to overweight and obesity. A person is considered to be overweight if they have a body mass index (BMI) of 25.0 to 29.9 kg/m^2, and obese if they have a BMI of 30.0 kg/m^2 or more.[128]

Obesity is a chronic, relapsing, progressive condition that leads to physiological changes and ill health over time.[129] An excess accumulation of body fat can have multiple metabolic effects, including increasing inflammation in the body, which raises the risk of cancer, heart disease, and type 2 diabetes.[130] Multiple complex systems contribute to overweight and obesity, including food supply, transport, urban design, advertising, education, trade, legal, economic, biological and psychosocial factors.[131]

The SHR recommends to 'halt the rise in obesity in WA by July 2024' and for WA to 'have the highest percentage of population with a healthy weight of all states in Australia by July 2029'.

As overweight, obesity, healthy eating, and active living are closely interrelated, they are addressed together in this chapter as part of a comprehensive approach to meet the targets of the SHR.

Approaches to preventing overweight and obesity, supporting and encouraging healthy eating and active living may improve a range of health outcomes, including mental wellbeing, independent of weight loss.[132, 133]

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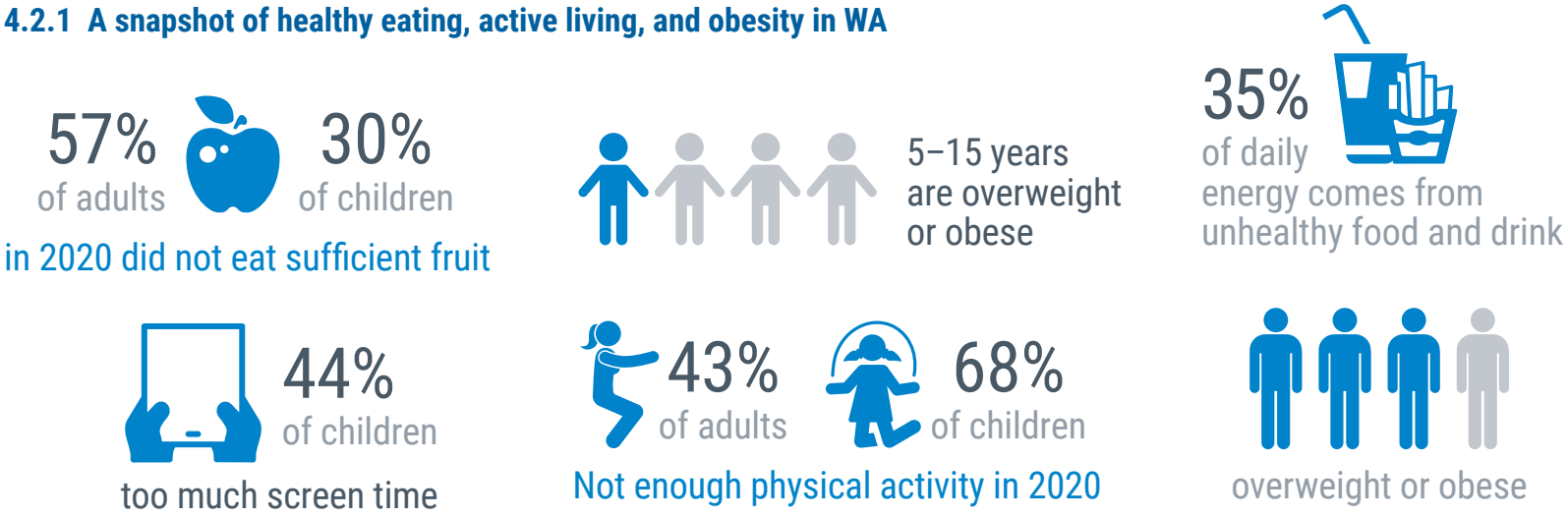
4.2.1 A snapshot of healthy eating, active living, and obesity in WA



Key statistics

- Over one third (35 per cent) of WA adults and children's daily energy intake comes from unhealthy food and drinks, such as fast food and sugary drinks.[134]
- In 2020, 57 per cent of adults and 30 per cent of children in WA did not consume sufficient serves of fruit per day for good health.[11, 98]
- WA secondary school students are highly exposed to advertisements for unhealthy discretionary food and drink on their commute to school. On a one-way trip, students commuting by train are exposed to an average of 37 advertisements, 22 advertisements if travelling by bus, and 5 if walking.[135]
- 81 per cent of WA adults report it would be easier for them and their families to eat a healthy diet if children were not exposed to unhealthy food and drink advertising and promotions.[136]
- In 2020, 43 per cent of WA adults and 68 per cent of WA children (5 to 15 years) did not engage in enough physical activity for good health.[11, 98]
- In 2020, 44 per cent of WA children did not meet the guidelines for limiting sedentary screen time.[98]
- More than two-thirds of WA adults spent 14 or more hours per week (2 hours per day) on sedentary screen time activities in 2020.[11]
- Almost 3 in 4 WA adults (71 per cent) are living with overweight or obesity.[11]
- One in 4 WA children (25 per cent) aged 5–15 years are living with overweight or obesity,[98] placing them at early increased risk of chronic diseases such as type 2 diabetes.[137]

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- The proportion of WA adults living with obesity has risen from 21 per cent in 2002 to 34 per cent in 2020.[11]
- If all WA adults were a healthy weight there would be major reductions in chronic diseases such as type 2 diabetes (53 per cent), chronic kidney disease (39 per cent), oesophageal cancer (34 per cent), coronary heart disease (25 per cent), ischaemic stroke (18 per cent), bowel cancer (13 per cent), and breast cancer (11 per cent)[16, 138]

4.2.2 Priorities for healthy eating, active living, and halting the rise in obesity in WA

Promote environments that support healthy eating and active living

Overweight and obesity are closely linked with the environments in which people are born, live, work, learn, play, and age.[139] Our environment has been called obesity-promoting or 'obesogenic' as it encourages people to consume more energy than their bodies need and to be less physically active.[140] Creating healthy environments supports all members of society to improve their health status and can help reduce inequities in health.

Healthy eating and food environments

The food environment is shaped by the food supply, food composition, pricing and affordability, nutrition labelling, food marketing and promotions, and neighbourhood access to healthy and unhealthy food retail outlets.[141]

Our current food environment promotes excess energy intake from cheap, energy dense, nutrient poor, and/or highly processed products which should be limited or avoided in a healthy diet.[14] These products, known as discretionary food and drinks, are high in saturated fat, added sugar and/or salt, and tend to displace more nutritious and minimally or unprocessed foods from the 5 core good groups, such as vegetables, fruit and wholegrain cereals.[142, 143]

Consumer demand for discretionary and convenience food and drinks is driven by big budget advertising campaigns that use multiple platforms to influence buying behaviour and dietary intake, including children's preferences and intakes.[86, 144, 145] Supermarkets also influence consumer purchasing behaviour through established marketing techniques such as product positioning and price discounting. Food and drink promotions in Australian supermarkets are overwhelmingly for unhealthy discretionary items.[146] The power of advertising and growth in the supply of discretionary food and drinks reinforces the need to step up efforts that encourage a diet consistent with the ADGs.[14]

There is evidence that in metropolitan areas, retail outlets selling predominantly unhealthy foods outnumber those that sell healthy foods, and that outlets selling unhealthy options are more concentrated in areas of greater relative socio-economic disadvantage.[147] The increase in and popularity of food delivery apps has made unhealthy food and drinks more accessible than ever, and consumer demand for online food delivery services is rapidly growing.[148]

Unhealthy food and drink sport sponsorship undermines the health promoting benefits of sport.[149] A majority of parents report feeling that elite sports sponsorship influences their children, and that most children want to buy their sponsor's products.[150, 151]

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The *National Interim Guide to Reduce Children's Exposure to Unhealthy Food and Drink Promotion*[152] developed for the former Council of Australian Governments (COAG) Health Council has been shown to be effective for identifying food and drinks that should not be promoted to children, to support action to reduce the impact of unhealthy advertising on children.[153] The COAG Health Council has also published recommendations for healthy food environments in sport, recreation, hospital and health care settings.[154, 155]

Globally, current food supply systems do not support the consumption of healthy diets. The UN Sustainable Development Goals recommend a transformation of food systems to avoid the increase in preventable chronic disease and environmental degradation.[70, 156] Ensuring a sustainable food supply that supports healthy eating patterns for all, in line with the ADGs, requires combined efforts across all segments of the food system, including food production, processing, trade, distribution, food service, marketing and retail.

Active living and urban design

The emergence of passive forms of entertainment, labour-saving devices, sedentary occupations, higher density housing, urban sprawl, and increased reliance on cars have fundamentally changed how much time people spend being physically active at home, at work, during travel and in their recreational pursuits. Active living is a way of life that incorporates physical movement into daily routines across the day and provides many benefits to physical and mental health. Everyday examples of active living include incidental activity, such as walking or cycling to the shops or school, using the stairs instead of the lift, taking public transport instead of driving, active play for children as well as structured activities such as participating in an active class, playing sport, and active recreation in parks and open spaces.

Creating environments that support active living requires:

- good planning to build healthy, liveable and sustainable cities and that enable a variety of daily activities within walking distance of where people live, learn, work and play
- sustainable transport that decreases car dependency and accommodates active transport (including well-connected bicycle lane networks, reduced traffic speeds, safe pedestrian paths and crossing points, and end-of-trip facilities)
- creating more quality public open space and green space to facilitate social connectedness and recreational activity, including tree canopy and urban greening on transport corridors.[157]

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Local governments, being closest to their communities, have a central role in creating healthy, safe and equitable spaces and places.[158, 159] As recommended by the SHR[1] and elsewhere,[160] consideration of the impact on public health and wellbeing should be considered in regulations, policies and local planning decisions that affect land use. Built environments that support and encourage active living by all members of the community regardless of age, gender, ability and cultural background, will provide population wide benefits in preventing chronic disease and injury.

Increase availability and accessibility of quality, affordable and nutritious food for all

Food security means that all people, at all times, have physical, social, and economic access to sufficient, safe, and nutritious food that meets their food preferences and dietary needs for an active and healthy life.[161] Nationally, between 4 and 13 per cent of the population are estimated to be food insecure, although in some populations this is much higher. As many as one third of Aboriginal and Torres Strait Islander people report food insecurity, depending on location.[162-164]

The causes of food insecurity are systemic, with poverty being a major determinant. Addressing food insecurity therefore requires coordinated work across multiple sectors and tiers of Government including social support services, housing, education, training, employment, agriculture, and transport.[165]

The WA Food Relief Framework 2019 provides a plan to reduce the impacts of food insecurity, and to work toward better coordinated and equitable delivery of dignified and nutritious food relief across the state.[165]

Increase the knowledge and skills necessary to choose healthy food and drinks

Australians are constantly exposed to conflicting nutrition messages and misinformation, particularly with the rise of social media and influencers. The ADGs[14] are based on extensive scientific evidence,[166] take account of Australian eating patterns[167] and recommend the best approach to eating for a longer and healthier life.[14] However, most Australians' eating patterns do not meet these Guidelines.[168]

Socio-economic differences in nutrition knowledge can contribute to inequalities in food purchasing choices, including a greater consumption of highly-processed foods.[169, 170] Lower levels of food literacy are more common among men, the unemployed, and people who have completed less formal education.[171] Many factors can influence new migrants' eating patterns, including income, limited English, and a lack of familiarity with local foods, shopping practices and cooking methods.[172] Increasing food literacy skills such as food planning, shopping, meal preparation and confidence in cooking may assist in improving dietary choices.[173]

Providing reliable, easily-understood nutrition information, for example in the media, on menus and on food labels, can support people in making better informed decisions about the foods they eat. Most WA adults (89 per cent) are in favour of improved food labelling to help them make healthier choices.[174]

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Encourage and support active living across the lifespan

Many Western Australians are not sufficiently active for good health.[11, 98] People of all ages, cultures, and abilities need to be encouraged and supported to be more physically active in line with *Australia's physical activity and sedentary behaviour guidelines*.[175] Increases in physical activity should include incidental and structured activity. Focussing on people who are currently inactive is also a priority.[176, 177]

Sedentary behaviour, or sitting or lying down (except when sleeping), is associated with poorer health outcomes, independent of physical activity levels.[178] People may meet the recommended levels of physical activity but still be sedentary if they spend a large amount of their day sitting or lying down at home, at work, while studying, travelling, or during leisure time. The amount of time spent being sedentary should be minimised and broken up as often as possible throughout the day.[175, 179]

Physical activity requirements for good health change over the life course. During childhood it is critical to develop fundamental movement skills (such as running, jumping, catching and throwing) as these are the building blocks for more complex skills used in a wide range of activities, games, sports and recreational pursuits. Where possible, these activities should be sustained throughout life.[180] Ongoing physical activity is important for maintaining and improving mobility, strength, balance, and protecting against falls as we age.[181]

Potential barriers to people living active lifestyles include cost, lack of access to appropriate facilities, long working hours, perceived or real threats to safety, a lack of social support, and lack of access to culturally-inclusive activities. People with disabilities, Aboriginal people, some CaLD groups, people who live in regional or remote areas, older adults, and those who live with socio-economic disadvantage face a greater range of barriers to active living than others.[182]

All members of the community should be supported to have equitable, accessible, safe, convenient and affordable options to be more active in their daily lives.[183] The design of neighbourhoods and cities is an important influence on whether and how people are supported to lead healthy lifestyles.

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Motivate behaviour to achieve and maintain a healthy weight among adults

Studies show that adults consistently underestimate their weight status and parents mistake the weight status of their children.[184, 185] Common misperceptions about what is a healthy weight need to be challenged. Social marketing campaigns, professional organisations and the media all have a role to play in raising awareness of the risks of being above a healthy weight and providing information about healthy lifestyle behaviours.

Although some people living with obesity may appear healthy or not have markers of poor health such as high blood pressure or cholesterol, their risk of diabetes, heart disease, respiratory disease and early death is significantly greater than people with a healthy weight.[186-189] The risk of chronic disease increases the longer a person is above a healthy weight. Efforts should continue to educate the public about chronic disease risks associated with being above a healthy weight.

It is important to address gradual weight gain by encouraging behaviours that support the maintenance of a healthy weight and early reversal of weight gain. For people above a healthy weight, a modest loss of 5 to 10 per cent of body weight can lead to significant health benefits.[190] Once gained, it can be difficult to lose excess weight and maintain a healthy weight. Everyone should have access to person-centred, effective weight management programs. The *WA Healthy Weight Action Plan 2019–2024* supports systemwide change and reorientation of services for the early intervention and management of overweight and obesity.[191]

Adults and children affected by overweight and obesity frequently experience weight-related social stigma or biases, which can lead to poor physical and mental health outcomes, and increased risk of mortality.[45] Experiences of weight stigma or weight bias can lead to an increased risk of bullying, depression, anxiety, disordered eating, avoidance of physical activity, and delays in seeking health care.[45] Weight bias can translate into discrimination and inequities in health care settings, educational settings, workplaces, and personal relationships. The pervasive narrative that blames individuals for being overweight or obese needs to shift to acknowledging the environmental and societal causes of obesity. The language used by health professionals and in public health messages must avoid stigmatisation or shaming and support respectful conversations about weight. Depictions or images of people living with overweight or obesity must be positive and supportive.[45, 192]

Prevent and reverse childhood obesity

Obesity in childhood affects all aspects of child development, physical health, social and emotional wellbeing[193] and is associated with an increased risk of obesity in adulthood.[194, 195] There is a strong basis for preventing and addressing overweight and obesity in children and adolescents for both short and long-term benefits to physical and mental health.[196]

A child's risk of becoming overweight or obese starts before conception and birth, and is influenced by the mother's pre-pregnancy weight, dietary intake, weight gain during pregnancy, and factors such as smoking and alcohol use.[197] Following birth, the first 1,000 days of life are also a critical time that can have lifelong impacts on child health and wellbeing.[1, 198]

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Infant and early feeding practices determine a child's growth trajectory and can shape the development of a child's longer term food preferences.[199, 200] Breastfeeding provides social and health benefits for the child and mother, including a reduced risk of child obesity.[201] Breastfeeding initiation rates in WA are high (86 per cent in 2019)[202] but environmental strategies and supports are needed to encourage and enable mothers to continue to breastfeed for longer.[14, 203]

The home environment has a critical influence on a child's future dietary and physical activity habits. Opportunities to provide parents with education and resources on healthy eating, appropriate growth, sleep, movement and development of motor skills should be prioritised.[204]

Schools are effective settings for nutrition education and promotion in children and young people.[205, 206] The COAG Health Council's *Good Practice Guide: Supporting healthy eating and drinking at school* recommends whole of school approaches to support food literacy education and the creation of healthy school food environments.[205] Many Australian children spend regular or prolonged periods of time in early childhood education and care settings (such as long day care, preschools and kindergartens). These settings also provide important opportunities to facilitate healthy eating and physical activity through the development of policies, education, and resources.[207]

Healthy growth screening is appropriate throughout childhood and adolescence so that early intervention for both over- and under-nutrition, where needed, can be initiated and the prevalence of child overweight and obesity may be monitored to assist with health service planning. The World Health Organization's Report of the Commission on Ending Childhood Obesity recommends multi-component family-based early intervention programs for children and adolescents who are above a healthy weight.[206, 208]

4.2.3 Strategic directions for halting the rise in obesity in WA

1. Legislation and regulation

- Support stronger controls across all levels of government to reduce exposure to the marketing and promotion of discretionary food and drinks, particularly to children.
- Support regulations and policy to ensure that food and drink advertising and promotion is not misleading or deceptive, particularly to children.
- Support regulations that restrict the inappropriate marketing and labelling of infant formula and complementary foods.
- Support food regulation to assist consumers to make informed food choices consistent with the ADGs, through mandatory nutrition labelling and information at point of sale.
- Support food regulation to improve the nutrition content of food products through industry reformulation.
- Support regulatory initiatives that positively influence active lifestyles and sedentary behaviour, including those that address planning, transport, land use and the built environment.

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2. Healthy policies

- Support and encourage the development and implementation of policies that support achievement of the ADGs across key settings including schools, early education and childcare, healthcare, sport, arts, recreation, and publicly owned facilities.
- Strengthen and elevate the priority of breastfeeding policies, including support for breastfeeding mothers in hospitals, child care services, workplaces and community venues, to encourage and enable continued breastfeeding.
- Encourage, shape, and support the development and implementation of policies across the food supply system to improve the availability and accessibility of healthy foods and reduce that of less healthy foods.
- Support and encourage the development and implementation of policies that positively influence active lifestyles and reduce sedentary behaviour.

3. Economic interventions

- Investigate and support economic policies with potential to increase the production of healthy foods and reduce that of less healthy foods.
- Encourage and support effective strategies to improve equitable access to quality and affordable nutritious foods.
- Encourage and support economic policies e.g. taxes and levies, that have been shown to reduce consumption of sugar, fat and/or salt.
- Investigate and consider economic policies with the potential to remove barriers to participation in physical activity.

4. Supportive environments

- Facilitate the creation of health-promoting environments that encourage healthy eating patterns in line with the ADGs in public settings such as schools, health care, sport and recreation.
- Support and implement initiatives that limit exposure to the marketing and promotion of discretionary food and drinks and encourage promotion of healthy products, both in children's settings and the broader community.
- Work across government and key sectors to influence urban planning to ensure urban design and infrastructure promotes and supports healthy eating patterns in line with the ADGs, increases local access to healthy food and drink, and reduces children's exposure to unhealthy food outlets.
- Work across government, key sectors, and the community to influence, facilitate, and support the creation of safe, good quality and accessible environments that enable active lifestyles (including active play, active transport, sport, recreational activity and incidental activity).
- Work with key food system stakeholders to improve the sustainable production, availability, relative affordability, acceptability and promotion of healthier food and drinks.

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Australian Dietary Guidelines

Physical activity and exercise guidelines

LiveLighter®

LiveLighter® resources – physical activity and healthy eating

Data

WA Nutrition Monitoring Survey Series

ABS – Overweight and obesity

AIHW – Overweight and obesity

WA Health and Wellbeing Surveillance System

ASSAD WA Physical Activity and Sedentary Behaviour

5. Public awareness and engagement

- Invest in sustained, evidence-based statewide public education campaigns that increase community understanding about the risks of overweight and obesity and motivate behaviour to support the achievement and maintenance of a healthy weight across key life stages.
- Implement strategies that stimulate debate and increase community demand and support for measures aimed at obesity prevention strategies, including legislation, policies and community-based health promotion initiatives.
- Invest in evidence-based programs that increase awareness, skills, beliefs and attitudes regarding healthy eating patterns in line with the ADGs.
- Increase access to evidence-based advice across multiple settings about what is a healthy weight and how to prevent unhealthy weight gain across key life stages.
- Increase access to evidence-based advice across multiple settings about the quantity and quality of physical activity needed at all stages of life to maintain good health.
- Promote equitable access to reliable, practical, culturally-appropriate nutrition information and education about the healthy eating patterns needed at all stages of life for good health, including compulsory school curriculum.

6. Community development

- Support local governments to develop local public health plans that include strategies to prevent overweight and obesity.
- Engage with the community and key stakeholders, including local governments, to identify and implement priority actions that support healthy eating patterns in line with the ADGs, community food security, and create environments and opportunities for physical activity at a local level.
- Encourage and support community-based obesity prevention initiatives in partnership with key stakeholders to maximise their reach and impact

7. Targeted interventions

- Implement strategies targeting those planning a pregnancy and pregnant women, that support dietary patterns in line with the ADGs and weight gain during pregnancy.
- Implement strategies targeting parents and families to increase behaviours that support the healthy growth and development of children, particularly in the first 1,000 days of life.
- Invest in early intervention initiatives for children who are identified as above a healthy weight and their families to support adoption of healthy lifestyle behaviours.

More information

Strategies

World Health Organization – Obesity and Overweight

National Preventive Health Strategy 2021–2030

National Obesity Strategy 2022–2032

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- Support programs that increase the food and nutrition knowledge and skills of parents, children and other Australians most at risk of poor nutrition.
- Complement population approaches with targeted programs that are culturally appropriate and meet the needs of those at higher risk of poor nutrition including pregnant women, new mothers, adolescents, Aboriginal people, some CaLD groups, low income earners and those who are socially or geographically isolated.
- Complement population approaches with targeted programs that are culturally appropriate and meet the needs of those who are less likely to be physically active, including adolescents, young females, Aboriginal people, some CaLD groups, people living with a disability, people who live in rural and remote areas, and older people.

8. Building capacity and workforce development

- Strengthen existing and develop new partnerships across all sectors and the community to ensure a comprehensive, consistent and effective approach to promoting healthy eating, active lifestyles and reducing sedentary behaviour.
- Strengthen, upskill and support relevant parts of the workforce (for example, allied health, nutrition, child health, child care, public health, environmental health, local government, food industry, and other non-health sectors) to address public health nutrition, physical inactivity and sedentary behaviour in their programs, services, policies and plans.
- Build the primary health care workforce capacity to support healthy eating and active lifestyles for all patients and clients, regardless of weight status, including building understanding of the multiple causes of obesity and skill development in discussing weight.
- Establish effective shared leadership across education and health to build professional knowledge and skills to embed physical literacy, healthy eating, and wellbeing across the learning spectrum including early childhood care and the school environment.

9. Research and evaluation

- Support and undertake research and evaluation to ensure that nutrition, physical activity and obesity prevention policies and programs are best-practice and evidence-based.
- Support and undertake research and evaluation to collect evidence to inform new approaches to supporting good nutrition and healthy eating patterns in line with the ADGs, active lifestyles and reducing sedentary behaviour.
- Support continued population monitoring and surveillance of nutrition and food consumption, physical activity and sedentary behaviour in the population as well as key factors that impact on these behaviours.
- Develop system level targets for nutrition, obesity, and physical activity, for example targets for a healthy weight at first antenatal appointment, and breastfeeding.

More information

Strategies

World Health Organization – Obesity and Overweight

National Preventive Health Strategy 2021–2030

National Obesity Strategy 2022–2032

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4.3 Reducing harmful alcohol use

Alcohol use in WA is high by national and world standards.[3, 209] While alcohol-related harm is a whole of community issue, some groups experience greater risk of harm due to economic, cultural, social, geographical and educational factors.[3] The impact of alcohol use in regional and remote communities can be increased by geographical isolation, limited access to programs and services, and stresses presented by weather conditions such as drought and flooding.[210]

Experiences of stigma, trauma, discrimination and social exclusion can also increase vulnerability to alcohol use and related harms.[211-213] Harmful alcohol use is associated with significant economic, health and social costs such as unemployment, homelessness, poverty, frequency and severity of family domestic violence, and family breakdown. These matters need to be addressed by all levels of government, and the community.[1, 3]

The WA Government takes a collaborative, cross-agency approach to reducing harmful alcohol use through the implementation of alcohol demand, supply and harm reduction initiatives. The Mental Health Commission leads on commissioning, providing and partnering in the delivery of alcohol prevention and early intervention programs, community support services, treatment services, and related policy and system improvements. Other government departments and agencies that contribute to alcohol management include the Department of Local Government, Sport and Cultural Industries through its administration of the *Liquor Control Act 1988*, and the Western Australia Police Force, which leads enforcement activities. The Chief Health Officer of the Department of Health has the ability to intervene in matters before the Licensing Authority to make representations about harm or ill-health caused to people due to the use of liquor, and the minimisation of that harm or ill-health. However the Chief Health Officer is not a decision-maker in the liquor licensing process.

The SHR recommends a reduction in harmful alcohol use by 10 per cent by July 2024.[1] This will require sustained focus and investment in evidence-based strategies and policies, supported by strong cross-sector collaboration and partnerships.

More information

Alcohol – Cancer Council WA

FASD Hub

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2020 Australian Guidelines to Reduce Health Risks from Drinking Alcohol – Summary

WA Mental Health Promotion, Mental Illness, Alcohol and Other Drug Prevention Plan

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WA Alcohol and Drug Interagency Strategy

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Managing Alcohol in Our Communities: A Guide for Local Government

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ABS – Alcohol Consumption

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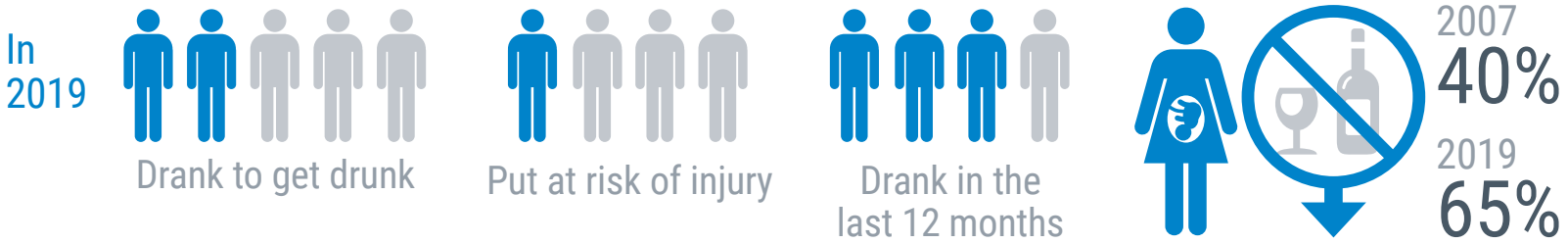
National Drug Strategy Household Survey – WA

WA Health and Wellbeing

4.3.1 A snapshot of alcohol use in WA



Key Statistics

- Harmful alcohol use has decreased over time, from approximately 1 in 3 adults drinking more than 2 standard drinks on any given day in 2002 to 1 in 4 adults in 2020.[11]
- In 2019, 3 in 4 WA adults consumed alcohol in the last 12 months[102] with 2 in 5 drinking to get drunk.[214]
- Between 1984 and 2017 the number of young people aged 12 to 17 years who drank alcohol in the past year almost halved from 80 per cent to 42 per cent.[215]
- The number of students aged 12 to 17 years drinking amounts that placed them at risk of short-term harms such as injury has not changed significantly in the last 25 years.[7]
- In 2019, people living in regional and remote areas were more likely than people in major cities to drink alcohol at risky levels.[43]
- In 2020, WA males were significantly more likely than WA females to drink at risky levels (long-term harm 32 per cent compared to 18 per cent, short-term harm 13 per cent compared to 5 per cent).[11]
- In 2019, more than 1 in 4 (26 per cent) Western Australians drank alcohol in quantities that placed them at risk of injury.[214]
- In 2019, Aboriginal people (29 per cent) were more likely to abstain from alcohol than other Australians (23 per cent).[43]
- Between 2007 and 2019 the proportion of pregnant women abstaining from alcohol increased from 40 per cent to 65 per cent.[43] Of those who consumed alcohol, most (96 per cent) usually consumed one to 2 standard drinks on a typical day they drank.[43]
- Most Western Australians believe more needs to be done to reduce alcohol-related harm (78 per cent) and that there are places where alcohol advertising should be banned (86 per cent).[216]
- Each week in WA, approximately 10 deaths, 105 ambulance call outs, 315 hospitalisations and 160 family violence assaults occur as a result of alcohol use.[214, 217]
- Some people drink alcohol to help them cope with stress, anxiety and depression, or in situations they would otherwise find difficult to manage. People with mental health conditions or high or very high psychological distress are more likely to drink at risky levels than people without these conditions.[105]

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Alcohol use and injury

Alcohol use is the most significant risk factor for injuries, increasing the risk of falls, assaults, drowning and road crashes. In Australia in 2017, 1,646 people died as a result of an injury related to alcohol.[218] Introducing effective strategies to reduce harmful drinking in the community will also reduce injuries caused by alcohol use.

Alcohol use and family and domestic violence

Alcohol use is documented in up to two-thirds of family violence incidents reported to the police.[219] Harmful alcohol use can contribute to the prevalence and severity of family and domestic violence. Between 2010 and 2019, alcohol use was documented in more than 2 in 5 (44 per cent) of family and domestic violence trauma admissions to Royal Perth Hospital.[220] The SHR recommends the development of a health system action plan for alcohol-related violence, to be aligned to a whole-of-government approach to family and domestic violence and the *WA Alcohol and Drug Interagency Strategy 2017–2021*.

4.3.2 Priorities for preventing and reducing harmful alcohol use in WA

Increase community awareness of alcohol-related health risks and harms

People tend to underestimate the risks associated with alcohol use, and often do not recognise when they are using alcohol in quantities damaging to their health.[221] The National Health and Medical Research Council's *Australian Guidelines to Reduce Health Risks from Drinking Alcohol* note that the risk of developing an alcohol-related condition or other harm rises the more a person drinks. Risk is reduced by drinking less often and drinking less on each occasion. At the community level, the greatest number of alcohol-related problems occur in people who drink at risky levels only occasionally.[222] A large proportion of the general drinking population has this pattern of use.[222]

Sustained, population-wide public education strategies are a key part of a comprehensive approach to preventing and reducing alcohol-related health risks and harms. They also help to prevent and delay uptake of alcohol by children and young people. Their broad reach and widespread impact contribute to reducing high risk alcohol use in the general population, and the risk of a range of alcohol related harms.[3] Population-wide public education is a cost-effective strategy within a demand, supply and harm reduction framework. Statewide evidence-based strategies can be strengthened through complementary, localised community development initiatives.

Providing information at the point of consumption is also an important way to raise community awareness. The recent requirement for health warnings on alcohol drink containers about drinking in pregnancy provides a vital reminder to drinkers about the risks of drinking at the point of consumption and contributes to public knowledge about the potential harms of alcohol use.

More information

Alcohol – Cancer Council WA

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Prevent and delay uptake of alcohol by children and young people

In addition to a range of risk factors for alcohol use, drinking behaviours are shaped by attitudes and perceived cultural and social norms about alcohol use.[223] The widespread presence of alcohol advertising, and inclusion of alcohol in everyday activities and settings contributes to the establishment of social norms, values and expectations.[224] In recent years, alcohol has become more available for purchase or use in many aspects of Western Australian life, including in environments that have traditionally been alcohol-free, such as supermarkets, play spaces and cinemas.

Ongoing exposure to alcohol-related prompts throughout childhood and adolescence can increase positive attitudes to alcohol use, and influence alcohol-related behaviours in youth and early adulthood.[225, 226] Early initiation to alcohol use can be a risk factor for future harmful drinking, and increases the risk of physical, social and mental health problems over the lifespan.[227] Evidence shows that exposure to alcohol-related prompts has a cumulative effect which increases the likelihood of underage drinking and using larger amounts of alcohol compared to those who are exposed less frequently.[228, 229] Initiatives to reduce harmful alcohol use in all ages and prevent uptake of alcohol use by children and young people would benefit from policies that aim to limit cumulative exposure to alcohol-related reminders in the community.

The *Australian Guidelines to Reduce Health Risks from Drinking Alcohol* recommend that children and people under 18 years of age should not drink alcohol, to reduce their risk of injury and other harms to health.[230] Targeted strategies to inform and support parents and families to prevent and delay young people's use of alcohol are reinforced through supportive community environments and effective population-based approaches.

Develop supportive environments to reduce demand for alcohol

Establishing supportive settings that enable and reinforce healthy cultural norms around drinking form part of a comprehensive approach to reducing harmful alcohol use. Supportive environments can be shaped and created in a number of ways, such as by ensuring the community receives timely and accurate information about the possible risks of drinking, by reducing the reach and prominence of messaging that promotes alcohol use, and through pricing policy. Local governments and communities also have an important role in shaping an environment that supports healthy behaviours. Reducing stigma and discrimination for people wanting to change their alcohol use or for those experiencing difficulties can also support help-seeking behaviours.

The removal of alcohol advertising from WA's public transport infrastructure has been an important initiative to reduce exposure of young people and the wider community in settings that large numbers of Western Australians access on a daily basis.[231] For forms of alcohol advertising governed at the national level, research shows that moving from the current self-regulatory regime to an independent, regulated alcohol advertising system would reap reductions in harmful use and related harms.[89, 90]

More information

Alcohol – Cancer Council WA

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There is strong evidence that controls on price, such as a minimum unit floor price on alcohol, are among the most cost-effective measures for reducing alcohol use and harm.[225, 226] Minimum unit floor pricing, as adopted in the Northern Territory in 2018, sets a minimum price for alcohol based on the number of standard drinks it contains.[228, 229] Increasing the cost of cheap alcohol by having a minimum unit price mainly affects those who drink at harmful levels and has limited impact on moderate drinkers.[89, 90] The introduction of a minimum unit floor price for alcohol in WA, with regular adjustments for inflation, has been recommended by the Sustainable Health Review.[1] A 2019 survey found that 65 per cent of WA adults agreed that governments should ensure that alcohol products are not sold for less than the price of bottled water or soft drinks, and 55 per cent supported the introduction of a minimum price for alcohol.[43, 216]

Under the *Public Health Act 2016*, local governments will be required to produce local public health plans to promote health in their district. Local governments that identify alcohol-related harm as a priority issue for their community can consider using existing legislative and policy mechanisms. Developing alcohol policies related to alcohol use in council-owned facilities, using town planning to create safer environments, and partnering with key stakeholders can all make a difference. Local government policies that provide for alcohol-free events and spaces strengthen a separation of alcohol from everyday experiences and activities. Effective policy and planning that protects against the factors that cause or support alcohol issues occurring are important tools to enable local governments to prevent alcohol-related problems in their communities.

Manage the supply and availability of alcohol

How, where, and when alcohol is available in the community influences the level of social acceptability of alcohol use and the extent to which alcohol-related harm occurs.[232]

The *Liquor Control Act 1988*, administered by the Department of Local Government, Sport and Cultural Industries, controls the sale and supply of alcohol in WA. One of the primary objectives of the Act is to minimise harm or ill-health due to use of alcohol. The Act is supported by policy designed to assist licensees to apply harm-minimisation principles in their venues.

Online sales of alcohol, made available for either in-person collection or delivered directly to people's homes, have grown rapidly in recent years, and have more than trebled during the COVID-19 pandemic. Research has found that online sales and delivery contribute to an increased risk of underage access to alcohol, continuation of alcohol use for extended periods, and increased risk of domestic violence and other harms.[233, 234] In February 2022, regulation came into effect in WA to strengthen requirements around the home delivery of alcohol to minimise harm.

Legislation was introduced in 2019 to limit the size and number of takeaway liquor outlets in WA due to the harm associated with a higher density of large takeaway alcohol outlets in the community. Some remote communities in WA continue to opt for a complete ban on alcohol being brought into their community and have these bans enacted under Section 175 of the *Liquor Control Act 1988*.

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WA Health and Wellbeing

4.3.3 Strategic directions for reducing harmful levels of alcohol use in WA

1. Legislation and regulation

- Support the development, implementation and enforcement of legislative controls on the availability, price and promotion of alcohol products, including restrictions and bans on alcohol advertising, limited high risk outlet opening hours, and outlet density.
- Monitor, enforce and strengthen legislative controls to reduce the exposure of children and young people to alcohol use, alcohol promotion and settings where alcohol is sold and consumed.
- Encourage partnerships between State and Australian government agencies to enable and support legislative and regulatory approaches to preventing and reducing harmful levels of alcohol use.
- Monitor online delivery regulations designed to prevent and minimise harm to young people and those at risk in the community.

2. Healthy policies

- Support and encourage the development and implementation of a range of supply, demand and harm reduction policies as part of a comprehensive approach to reducing and preventing alcohol-related harm to drinkers and harm to others.
- Support and encourage the development and implementation of policies that aim to create and encourage alcohol-free and/or low risk drinking settings, particularly where children and young people may be present.
- Support and encourage the development and implementation of policies that aim to reduce alcohol advertising, particularly in places where children and young people are present, such as outdoor settings, sports, arts and community events, on social media, and government-owned infrastructure.
- Support the development and implementation of policies that prevent children's exposure to alcohol use and promotion of alcohol.
- Support a whole of school system approach that includes policies and guidelines that prevent children's exposure to alcohol in the school environment.

3. Economic interventions

- Support economic policies to reduce harmful alcohol use, including reforms of alcohol taxation and the introduction of minimum unit alcohol pricing.

More information

Alcohol – Cancer Council WA

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4. Supportive environments

- Encourage and support the development of settings that are alcohol-free or discourage alcohol use, such as alcohol-free community events, and alcohol-free sport, arts and recreation venues.
- Reduce alcohol advertising in the community. Support strategies that prevent and reduce exposure of children and young people to alcohol use, marketing and promotion.

5. Public awareness and engagement

- Invest in sustained, evidence-based statewide public education campaigns to increase community understanding about the risks associated with alcohol use and motivate behaviour to reduce harmful levels of alcohol use and related harm.
- Community development and localised education and awareness initiatives to complement statewide activity.
- Increase public awareness and understanding of the National Health and Medical Research Council's Australian Guidelines to reduce health risks from drinking alcohol.
- Incorporate targeted initiatives within public education strategies to increase the reach of key messages to groups that are at a higher risk or who are more vulnerable to the harmful effects of alcohol use, including Aboriginal people, people of CaLD background, youth and women who are pregnant or breastfeeding.
- Implement strategies to increase community and stakeholder awareness, demand and support for evidence-based alcohol-related harm prevention strategies, including legislation, policies and community-based health promotion initiatives.
- Mobilise communities and other stakeholders to work in partnership on evidence-based prevention activities addressing alcohol use and related harm.
- Promote equitable access to reliable, practical and culturally-secure information about reducing alcohol use and preventing alcohol-related harm.

6. Community development

- Engage with the community and key stakeholders, including local governments, to identify and implement priority actions to prevent alcohol-related harm.
- Support local governments to develop local public health plans that include strategies to prevent harmful alcohol use and alcohol-related harm.
- Support local implementation of evidence-based strategies to consider needs of regional and remote communities.

More information

Alcohol – Cancer Council WA

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7. Targeted interventions

- Complement population-based approaches with targeted interventions that are culturally appropriate where necessary and address the needs of people at higher risk of alcohol-related harm.
- Promote the adoption of evidence-based school approaches to preventing alcohol use among children and young people.
- Promote curriculum-based programs with established impact in schools.
- Integrate messages about preventing or reducing harmful levels of alcohol use with other healthy lifestyle initiatives and develop links between programs and services that are targeted at populations at a higher risk from alcohol use or who are more vulnerable to alcohol-related harm.
- Invest in the development and delivery of workplace health promotion programs that incorporate initiatives aimed at preventing or reducing harmful alcohol use.
- Deliver needs based and community driven actions to prevent alcohol-related harm.

8. Building capacity and workforce development

- Cross agency coordination, governance, evaluation targets, and prevention activities.
- Strengthen existing and develop new partnerships across all sectors and the community to ensure a comprehensive, consistent and effective approach to reducing alcohol-related harm.
- Strengthen, upskill and support relevant parts of the public health, broader health and non-health workforce to incorporate strategies (including culturally secure approaches) to prevent or reduce harmful levels of alcohol use in their programs, policies and plans.
- Improve and maintain the capacity of the wider health and allied health workforce to provide reliable information, advice and support to prevent harmful levels of alcohol use.

9. Research and evaluation

- Support and undertake ongoing, high quality research and evaluation to ensure that alcohol policies and programs are best-practice and evidence-based.
- Support continued population monitoring and surveillance of prevalence of harmful alcohol use as well as key factors that impact on alcohol use.

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4.4 Preventing injury and promoting safer communities

Injury is the 'physical or mental harm to a person resulting from intentional or unintentional contact with an object, substance or another person'.[8] Most injuries are predictable and preventable. By identifying the causes of injury, and those people most vulnerable, it is possible to reduce the harm or prevent the injury from happening entirely.

Injuries have a profound impact on the Western Australian community in health system costs, loss of productivity, quality of life and mental health. Injuries occur across all ages and stages of life.

The WA Department of Health works with a range of injury prevention stakeholders, including other government departments and non-government agencies, to promote safer communities. The department takes a lead role in the areas of child safety, falls prevention and water safety. In areas led by other agencies, including road safety, mental health (including intentional self-harm and suicide), family and domestic violence, workplace health and safety and product safety, the department provides support by offering policy advice, networking opportunities, and data provision and analysis. Links to the strategic frameworks developed by other agencies working to prevent injury in the WA are provided in Appendix 2.

Recognising the need to connect the broad range of organisations that work in injury prevention, the WA Department of Health has partnered with Injury Matters to develop the Know Injury program and website. The Know Injury program provides ongoing networking, training and development opportunities to support the prevention of injury in WA.

4.4.1 A snapshot of injury in WA

In WA each year, injuries cause

1,000 deaths

70,000 hospitalisations

250,000 ED visits

Leading cause of injury in 2020

42,160 falls-related ED visits

Key Statistics

- The prevalence of WA adults with injuries requiring treatment by a health professional in the past 12 months has decreased over time from one in 4 adults in 2002 to one in 6 in 2020.[11]
- In WA each year, injuries cause almost 1,000 deaths, 70,000 hospitalisations and 250,000 emergency department visits.[235-238]
- In 2018, injury was the leading cause of death for Western Australians aged under 45 years.[239]
- The top 5 causes of injury-related death in WA in 2014–2018 were suicide and self-inflicted injuries, poisoning, transport, falls, and other unintentional injuries.[240]

More information

Know Injury

Strategies

National Injury Prevention Strategy 2020–2030

Australian Water Safety Strategy 2030

Resources

Kidsafe WA

Royal Life Saving WA

Injury Matters

Injury Matters Guide to Promoting Safety and Preventing Injury for Local Governments

Heart Foundation – Healthy Active by Design

Data

AIHW – Injury

WA Health and Wellbeing

Incidence and costs of injury in Western Australia 2012

- The leading cause of injury related death by age group was transport injuries for children 0–14 years, suicide and self-inflicted injuries for people 15 to 64 years, and falls for people 65 years and over.[240]
- The top 5 causes of injury-related hospitalisations in WA in 2015–2019 were falls, other unintentional injuries, transport, self-harm, and interpersonal violence and assault.[241]
- The leading cause of injury related hospitalisations for all age groups was falls.[241] In 2020, falls accounted for 42,160 emergency department submissions.[242]
- In WA, Aboriginal people are 3 times more likely than non-Aboriginal people to be hospitalised or to die because of an injury.[243, 244]

Alcohol use increases the risk of being injured and harming someone else

Alcohol use is a factor in one in 3 emergency department presentations, one in 10 hospitalisations, and one in 5 fatalities related to injuries in WA.[238] The Mental Health Commission's Western Australian Mental Health Promotion, Mental Illness, Alcohol and Other Drug Prevention Plan 2018-2025 provides an overview of evidence-based programs, strategies and initiatives that promote mental health and prevent mental illness, alcohol and other drug-related issues in the WA community.[3]

Section 4.3 of the HPSF discusses priorities and strategic directions for reducing harmful alcohol use.

Suicide and self-harm

Suicide is the leading cause of death in people aged between 15 and 44.[245] Three-quarters of people who take their own life are male,[245] in WA the suicide rate for Aboriginal people is 2.6 times higher than for non-Aboriginal people,[246] and LGBTI people aged between 16 and 27 are 5 times more likely to attempt suicide than the general population.[247] The Mental Health Commission's *Western Australian Suicide Prevention Framework 2021–2025* sets directions for action to reduce the rate of suicide attempts and death by suicide in Western Australia.[248]

Interpersonal violence

Interpersonal violence, including assault, family and domestic violence, and sexual violence are leading causes of injury in WA.[241] Path to Safety: Western Australia's strategy to reduce family and domestic violence 2020–2030,[249] led by the Department of Communities WA, has a goal of reducing family and domestic violence in Western Australia, and prioritises Aboriginal family safety.[249]

More information

Know Injury

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National Injury Prevention Strategy 2020–2030

Australian Water Safety Strategy 2030

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Kidsafe WA

Royal Life Saving WA

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Heart Foundation – Healthy Active by Design

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AIHW – Injury

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Incidence and costs of injury in Western Australia 2012

4.4.2 Priorities for preventing injury and promoting safer communities in WA

Protect children and young people from injury

Injury is a leading cause of disability and death in children and young people.[6] Each year in WA around 27 children die from preventable injuries and a further 7,000 are hospitalised.[250] The main causes of injury-related death for children and young people are transport injuries, suicide and self-inflicted injuries, assault and drowning.[240] Leading causes of hospitalisations among children are falls, transport injuries, accidental poisoning, burns and scalds, and intentional self-harm.[251]

Children are susceptible to certain types of injuries depending on their age and stage of development, the environment in which they live and play, and they activities they engage in. While it is important that children are allowed to explore the world around them to build awareness of risks and potential dangers, these risks must be managed. Therefore, a variety of age-appropriate strategies are required to minimise both the frequency and severity of injuries in children.

Transport injuries are the leading cause of child injury death and second most common cause of injury-related hospital admission for children aged 0 to 14 years. Transport injury prevention addresses all areas of road safety including driveway safety, car safety, child car restraints and car seats, dangers of hot cars, pedestrian safety, small-wheeled devices like scooters and skateboards, and bike safety. Children should be engaged early and often to increase knowledge and awareness of road rules and safe road use.

Intentional self-harm is the second leading cause of death due to injury among children aged 0 to 19 years in Western Australia.[252] Intentional self-harm may be used as a coping mechanism to manage emotional pain, significant feelings of distress or an overwhelming emotional state. Strategies for reducing intentional injuries include developing alternative coping strategies, developing and maintaining good mental health, increasing resilience, reducing stigma around poor mental health, and encouraging help-seeking behaviours. Preventive strategies can start early, with parental mental health having a strong influence on infant, child and teen development.[3]

The home is the most common place where children are injured. Mobility in children often develops sooner than cognitive understanding of the hazards around them, putting them at an increased risk of injury.[253] Parental and caregiver behaviour plays a vital role in the prevention of injuries to children, through supervision and removing or managing access to hazards. Increasing knowledge and awareness among parents and caregivers about how to minimise risk protects children from harm, as does teaching children about what is and isn't safe, as developmentally appropriate.

More information

Know Injury

Strategies

National Injury Prevention Strategy 2020–2030

Australian Water Safety Strategy 2030

Resources

Kidsafe WA

Royal Life Saving WA

Injury Matters

Injury Matters Guide to Promoting Safety and Preventing Injury for Local Governments

Heart Foundation – Healthy Active by Design

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AIHW – Injury

WA Health and Wellbeing

Incidence and costs of injury in Western Australia 2012

Children are also injured at playgrounds and sporting facilities.[254, 255] Play is an essential part of childhood that promotes physical and cognitive development and contributes to the social and emotional wellbeing of children. Nature-based play spaces allow for unstructured play and connection to nature. Falls from play equipment are a significant cause of injury,[256] with primary-school aged children at greatest risk.[257] Aside from behavioural risk factors such as lack of adult supervision and misuse of equipment,[258] environmental risk factors include poor design, overcrowding of equipment and poor maintenance.[259] Playgrounds should be designed, installed and maintained to Australian Standards for Playgrounds.[260, 261] Nature-based play spaces should give children the opportunity to experience risk and challenge while being a safe place for them to explore.[262]

Common sports injuries for children include concussion, overuse injury, dehydration and playing while injured. Measures to reduce the risk of injury include providing adequate supervision, suitable warm-ups and training, use of protective equipment, appropriately trained first responders and provision of modified sports suitable for a child's age and stage of development.

Safe product design and safety regulation are effective in minimising risk of injury to children, but injuries associated with consumer products still occur. Product safety issues and priorities for prevention include toppling furniture, swallowing button batteries, quad bike safety, safe sleeping and exposure to and use of electronic cigarettes. The ready availability of products online from anywhere in the world makes ensuring product safety a continuing challenge. Advocating for improvements to the design of products intended for or accessed by children, education, research, and monitoring existing and identifying emerging child product safety issues are critical to reducing consumer product related injuries in children.

Prevent falls in older people

Falls are an important cause of injury-related hospitalisations in all age groups, and are the leading cause of injury-related death for people aged 65 years and over.[240] In frail older people, experiencing a fall can be life-changing and lead to a permanent loss of independent living.

Falls in elderly people commonly occur in the home, in hospitals and residential aged care facilities.[242] Falls can be caused by having poorer strength and balance, unmanaged medications, inadequate diet, poor eyesight, unsafe footwear and tripping hazards. Activities to improve leg strength and balance, managing health conditions (including use of medications that can impair balance) and removing hazards around the home all help reduce the risk of a fall.[181, 263] Good nutrition and physical activity help to support keeping bones and muscles strong for healthy ageing.[263]

Falls are preventable and not an inevitable part of ageing. Community-wide recognition of the importance of falls prevention and commitment to implementing falls prevention strategies will significantly improve safety and quality of life for older Western Australians.

More information

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Strategies

National Injury Prevention Strategy 2020–2030

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WA Health and Wellbeing

Incidence and costs of injury in Western Australia 2012

Improve safety in, on and around water

Water-based recreational activities including swimming, surfing, diving and sailing are a part of life in WA. As a result of this, beaches, swimming pools, rivers, lakes and dams are common places for fatal or non-fatal drownings. A non-fatal drowning can result in full recovery, but it may also result in permanent brain or organ damage.

Drowning prevention strategies need to be tailored to specific life stages and target population groups who are most at risk. Home swimming pools and bathtubs are the most common drowning locations for children. A lack of adult supervision contributes to most toddler drownings. Parents and carers of children aged 0–4 need to be taught about water safety in and around the home, particularly the need for supervision, restricting access to water, water familiarisation and knowing how to respond in an emergency.

In young people aged 15 to 24, risky behaviours like cliff jumping, over-estimating abilities and combining alcohol consumption with water-based activities are major risk factors for drowning. Young males continue to be over-represented in drowning statistics.[264] Effective drowning prevention activities include targeted programs to promote safe behaviour around water, targeted breath and drug testing and enforcement of legislation regarding drinking and operating aquatic vessels.

In older adults, factors that contribute to a greater risk of drowning are reduced fitness, poorer health, an overconfidence in swimming ability, and greater opportunities for participation in water-based recreation in retirement. It is important that older people are aware of these risk factors and encouraged and supported to maintain their swimming and water safety skills.

People living in regional areas, and Aboriginal people are at greater risk of drowning compared to other population groups. People born overseas are also at higher risk of drowning.[265] This may be because they are less likely to have learned about water safety, or to be experienced swimmers. Effective preventive measures include culturally-appropriate and affordable swimming and water safety education programs, supporting participation in recreational aquatic activities, cultural competency training for swimming instructors, and including drowning prevention in broader community health programs.

Reduce road crashes and road trauma

The WA Department of Health supports the Road Safety Commission's *Driving Change – Road Safety Strategy 2020–2030* and has a representative on the Road Safety Council.

More information

Know Injury

Strategies

National Injury Prevention Strategy 2020–2030

Australian Water Safety Strategy 2030

Resources

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Transport-related injuries are a leading cause of injury-related death and hospitalisation in WA and include incidents involving on and off-road vehicles, motorcycles, bicycles and pedestrians.[240, 241] Being distracted, speed, fatigue, non-use of child car restraints and seatbelts, and alcohol and other drug use are common factors in road trauma.[266-268]

Driving Change: Road Safety Strategy for Western Australia 2020 – 2030[267] aims to reduce the number of people killed or seriously injured by 50 to 70 per cent. The strategy focuses on 5 priority areas: road users, safe roads, vehicles, speed, and timely post-crash response.

The growing popularity of eRideable devices including electric bikes and scooters, skateboards, and self-balancing wheels is becoming an important issue in injury prevention. New legislation governing the use of electric rideable devices came into effect in WA in December 2021, and as the use of eRideables escalates, this legislation and other measures designed to keep riders and users of shared spaces safe will need to be monitored for their effectiveness.[269]

Promote a safer built environment

Good urban design can help reduce the risk of injury while also improving health outcomes. For example, urban design strategies for neighbourhoods, streets, and outdoor spaces can take into account injury prevention and support active living.[270] Transport networks that consider traffic calming and speed reduction make travel safer for all road users, and more enjoyable for cyclists and pedestrians. Raised median and pedestrian islands, frequent and safe road crossing opportunities, shade and shelter, and opportunities to stop and rest create an environment that is safe and welcoming for people of all ages and abilities.

Public open spaces and green spaces provide important opportunities for recreation and enhance community connectedness. These spaces should be designed with accessibility and inclusivity in mind. Consideration of seating options, surfaces of paths and playgrounds, access to shade and drinking water, adequate signage and maintenance of play equipment and other infrastructure can help to minimise injury risks and ensure that public spaces can be enjoyed by all members of the community.

Urban design can also be a tool for deterring antisocial behaviour and violence, for example through adequate street lighting, ensuring good visibility, passive surveillance and other design measures.[271] Crime prevention through environmental design (CPTED) is an approach which involves the application of a range of architectural and urban design principles to an area or site to minimise the potential for that site to facilitate and support criminal behaviour.[272]

The *National Injury Prevention Strategy 2020–2030* (to be released) recognises that a well-designed built environment can reduce the risk of injury for everyone.[24] Injury prevention should be on the agenda of decision makers with responsibility for the built environment.

Measures to create liveable neighbourhoods that promote health and wellbeing are also discussed in Section 4.2.

More information

Know Injury

Strategies

National Injury Prevention Strategy 2020–2030

Australian Water Safety Strategy 2030

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AIHW – Injury

WA Health and Wellbeing

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4.4.3 Strategic directions for preventing injury and promoting safer communities in WA

1. Legislation and regulation

- Support the development, implementation and enforcement of legislation relevant to injury prevention, such as consumer protection, alcohol and other drug use, and road safety legislation.
- Support the regulation of products and environments to improve community safety.
- Encourage partnerships between State and Australian government agencies to enable and support legislative and regulatory approaches to preventing injury and promoting safer communities.

2. Healthy policies

- Encourage and support the development and implementation of a range of policies as part of a comprehensive approach to lowering the incidence of injury and promoting safer communities.

3. Economic interventions

- Investigate and support economic interventions to prevent injury and promote safer communities.

4. Supportive environments

- Encourage and support the development of health-promoting environments that support injury prevention and safer communities.
- Work across government and other key sectors to influence, facilitate and support creation of safe and accessible environments that promote community safety and reduce the risk of injury.

5. Public awareness and engagement

- Invest in sustained, high-quality statewide public education campaigns to promote a culture that injuries are preventable
- Implement strategies to increase community and stakeholder awareness of, demand and support for safe design to prevent injury across all life stages.
- Promote equitable access to reliable, practical, culturally-appropriate information about reducing the risk of injury.

6. Community development

- Engage with the community and key stakeholders, including local governments, to identify and implement priority actions to prevent injury and promote safer communities.
- Support local governments to develop local public health plans that include strategies to prevent injury and promote safer communities.

More information

Know Injury

Strategies

National Injury Prevention Strategy 2020–2030

Australian Water Safety Strategy 2030

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AIHW – Injury

WA Health and Wellbeing

Incidence and costs of injury in Western Australia 2012

7. Targeted interventions

- Complement population-based approaches with targeted programs that meet the needs of people at greater risk of injury at various stages of the life-course, or who have higher risk of injury, including Aboriginal people, CaLD communities, people who live in regional or remote areas, and people who live in low socio-economic conditions.
- Integrate injury prevention messages with other healthy lifestyle initiatives (for example, initiatives to increase participation in active travel), and develop links between programs and services that are targeted at populations at higher risk of injury.

8. Building capacity and workforce development

- Strengthen existing and develop new partnerships across all sectors and the community to ensure a comprehensive, consistent and effective approach to preventing injury and promoting safer communities.
- Strengthen, upskill and support relevant parts of the public health, broader health and non-health workforce to address injury prevention in their programs, policies and plans.
- Improve and maintain the capacity of the wider health and allied workforce to provide reliable information, advice and support to prevent injury and promote safer communities.

9. Research and evaluation

- Support and undertake research and evaluation to ensure that injury prevention policies and programs are best-practice and evidence-based.
- Support continued population monitoring and surveillance of injury as well as individual and key environmental factors that impact on the risk of injury.
- Support and undertake research and monitoring activities as they relate to emerging issues in injury prevention.

More information

[Know Injury]

Strategies

[National Injury Prevention Strategy 2020–2030]

[Australian Water Safety Strategy 2030]

Resources

[Kidsafe WA]

[Royal Life Saving WA]

[Injury Matters]

[Injury Matters Guide to Promoting Safety and Preventing Injury for Local Governments]

[Heart Foundation – Healthy Active by Design]

Data

[AIHW – Injury]

[WA Health and Wellbeing]

[Incidence and costs of injury in Western Australia 2012]

5. Monitoring progress

5.1 Monitoring and reporting frameworks

The WA Department of Health reports regularly against a range of chronic disease indicators in State and Australian Government-endorsed Australian and international frameworks. State Government and Australian Government data sets are used for this reporting.

WA health system annual reporting

One of the ways that the quality and effectiveness of the WA health system is monitored is by the annual reporting of 'years of life lost due to premature death'. Indicators that relate to chronic disease and injury are years of life lost due to lung cancer, ischaemic heart disease, and falls. These indicators have been selected because a large proportion of these conditions or events could have been prevented, and they contribute to a significant burden of disease within the community. Table 3 shows that between 2009 and 2018 a reduction in years of life lost due to premature death occurred across all 3 indicators.[273] The most recent data reported are at least 2 years behind the current year. This is due to a time lag between the collection, analysis and release of annual data on cause of deaths.

Table 3. Age standardised person years of life lost to premature death 2009 to 2018 per 1,000 population[273]

Condition*	Year										
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Target
Lung Cancer	2.1	1.7	1.8	1.7	1.6	1.7	1.9	1.6	1.5	1.4	1.6
Ischaemic heart disease	3.3	3.0	3.1	2.5	2.7	2.7	2.7	2.4	2.4	2.3	2.2
Falls	0.5	0.3	0.4	0.3	0.4	0.3	0.6	0.5	0.3	0.2	0.2

* 2009 to 2016 deaths are final, 2017 deaths are revised, and 2018 deaths are preliminary.

* ICD-10AM codes: Lung cancer C33 to C34.9; Ischaemic heart disease I20 to I25.9; Falls W00. to W19.9 or X59. to X59.9 (with multiple cause codes of: S02. to S02.9 or S12. to S12.9 or S22. to S22.9 or S32 to S32.9 or S42. to S42.9 or S52. to S52.9 or S62. to S62.9 or S72. to S72.9 or S82. to S82.9 or S92. to S92.9 or T02. to T02.9 or T08. to T08.9 or T10. to T10.9 or T12. to T12.9 or T14.2)

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Monitoring and Reporting

WA Department of Health Annual Reports

SHR Outcomes Measures Project

National Healthcare Agreement Performance Reporting Dashboard

WA Health Promotion Strategic Framework 2007–2011: Highlights of major achievements in priority areas

WA Health Promotion Strategic Framework 2012–2016: Achievements and outlook for priority areas

WA Health Promotion Strategic Framework 2017–2021: Achievements and outlook for priority areas

Resources

Evaluation Framework and Implementation Guide (EFIG)

WA Health Promotion Inventory

Sustainable Health Review

The final report of the SHR includes targets for expenditure on prevention, the prevalence of obesity, and reductions in harmful alcohol use. It also calls for a reduction in inequality in health outcomes and access to care for Aboriginal people, CaLD people and people living in low socio-economic conditions.[1]

Table 4. Sustainable Health Review Indicators for prevention

Enduring Strategy	Recommendations	
Commit and collaborate to address major public health issues	1	Increase and sustain focus and investment in public health, with prevention rising to at least 5 per cent of total health expenditure by July 2029.
	2	a. Halt the rise in obesity in WA by July 2024 and have the highest percentage of population with a healthy weight of all states in Australia by July 2029. b. Reduce harmful alcohol use by 10 per cent by July 2024.
	3	Reduce inequity in health outcomes and access to care with focus on: a. Aboriginal people and families in line with the WA Aboriginal Health and Wellbeing Framework 2015–2030. b. CaLD people. c. People living in low socio-economic conditions.

Progress against these indicators is reported in the Public Health Indicator Set, which has been developed by the Department's Epidemiology Directorate.

National Healthcare Agreement

All Australian State and Territory Governments have signed the *National Healthcare Agreement*.[274] This agreement affirms that Australia's health system should focus on the prevention of disease and support an integrated approach to the promotion of healthy lifestyles, prevention of illness and injury. The National Healthcare Agreement sets performance benchmarks, some that relate to chronic disease and injury (Table 5). At the time of writing, the performance benchmarks for smoking and overweight and obesity are out of date, but the WA Department of Health and other states and territories are required to report against these indicators to the Australian Government. They are published in the National Healthcare Agreement Performance Reporting Dashboard.

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WA Health Promotion Strategic Framework 2007–2011: Highlights of major achievements in priority areas

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Table 5. National Healthcare Agreement 2021 performance benchmarks[274]

Indicator	Benchmark
Prevalence of overweight and obesity in adults and children	By 2018, increase by 5 percentage points the proportion of Australian adults and children at a healthy body weight, over the 2009 baseline (36.9 per cent and 67.7 per cent, respectively).
Rates of current daily smokers	By 2018, reduce the national smoking rate to 10 per cent of the population. By 2018, halve the Indigenous smoking rate over the 2009 baseline (44.8 per cent).
Prevalence of Type 2 diabetes for adults 25 years and over	Reduce the age-adjusted prevalence rate for type 2 diabetes to 2000 levels (the national benchmark of 5 per cent or below) by 2023.

National Preventive Health Strategy

The National Preventive Health Strategy provides 30 targets across its Aims and Focus Areas. The targets for risk factors included in the HPSF are in the table below. The strategy does not include targets for injury prevention.

Table 6. Selected National Preventive Health Strategy targets

Area	Targets
Investment in prevention is increased	Investment in preventive health will rise to be 5 per cent of total health expenditure across Commonwealth, state and territory governments by 2030
Reducing harmful alcohol use	At least a 10 per cent reduction in harmful alcohol consumption by Australians (aged 14 years and over) by 2025 and at least a 15 per cent reduction by 2030.
	Less than 10 per cent of young people (aged 14 to 17 years) are consuming alcohol by 2030.
	Less than 10 per cent of pregnant women aged 14 to 49 years are consuming alcohol whilst pregnant, by 2030.

Area	Targets
Increasing physical activity	Reduce the prevalence of insufficient physical activity amongst children, adolescents and adults by at least 15 per cent by 2030.
	Reduce the prevalence of Australians (aged 15 years and over) undertaking no physical activity by at least 15 per cent by 2030.
	Increase the prevalence of Australians (aged 15 years and over) who are meeting the strengthening guidelines by at least 15 per cent by 2030.
Improving access to and consumption of a healthy diet	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 per cent by 2030.
	Adults and children (aged 9 years and over) maintain or increase their fruit consumption to an average of 2 serves a day by 2030.
	Adults and children (aged 9 years and over) increase their vegetable consumption to an average of 5 serves a day by 2030.
	Reduce the proportion of children and adults' total energy intake from discretionary foods from greater than 30 per cent to less than 20 per cent by 2030.
	Reduce the average population sodium intake by at least 30 per cent by 2030.
	Increase the proportion of adults and children who are not exceeding the recommended intake of free sugars by 2030.
	At least 50 per cent of babies are exclusively breastfed until around 6 months of age by 2025.
Reducing tobacco use and nicotine addiction	Achieve a national daily smoking prevalence of less than 10 per cent by 2025 and 5 per cent or less for adults (aged 18 years and over) by 2030.
	Reduce the daily smoking rate among Aboriginal and Torres Strait Islander people (aged 15 years and over) to 27 per cent or less by 2030.

World Health Organization Global Action Plan for the Prevention and Control of Noncommunicable Diseases targets

Australia is a signatory to the WHO *Global Action Plan for the Prevention and Control of Noncommunicable Diseases 2013–2020*. As part of the agreement, voluntary global targets have been set (Table 7). The WA Department of Health reports against these indicators to the Australian Government, which in turn reports to the WHO.

Table 7. Selected WHO Global Action Plan voluntary targets[204]

Area	Target
Harmful levels of alcohol use	At least a 10 per cent relative reduction in the harmful use of alcohol, as appropriate, within the national context
Insufficient physical activity	A 10 per cent relative reduction in prevalence of insufficient physical activity
Tobacco use	A 30 per cent reduction in prevalence of current tobacco use in persons aged 15+ years
Raised blood pressure	A 30 per cent reduction in the prevalence of raised blood pressure or contain the prevalence of raised blood pressure, according to national circumstances
Obesity	Halt the rise in diabetes and obesity
Premature mortality	A 25 per cent relative reduction in the risk of premature mortality from cardiovascular disease, cancer, diabetes or chronic respiratory diseases

The WA Department of Health also reports annually against the WHO *Framework Convention for Tobacco Control*.[87] This information is collated and forwarded to the WHO by the Australian Government.

5.2 Research and evaluation

Well-conducted research and evaluation are essential steps in the development, planning, implementation and assessment of robust, evidence-based health promotion programs and policies. Research and evaluation are complementary.

Research is the detailed study of a subject, in order to discover new information or reach a new understanding.[275] In health promotion, research is useful for collecting evidence on the most effective ways to tackle a problem, including the barriers and enablers to implementing a successful solution. Evidence on what works and what doesn't helps inform the development and quality improvement of health promotion programs, policies and practices. Research also helps to identify priorities for health promotion and where investment and activity can be most efficiently applied to achieve the best health outcomes for the greatest number of people.

Evaluation assesses the quality and effectiveness of a program by measuring it against its aims, objectives, and intended outputs, outcomes and impacts. Evaluating the extent to which a program has achieved its intended outcomes guides decisions about whether it should be continued, and how the program could be improved. Taken together, research and evaluation ensure that health promotion programs are fit for purpose and evolve to remain relevant and effective. Importantly, they also ensure that government resources are wisely invested. Finally, research and evaluation guide directions for future development and implementation of chronic disease and injury programs and policies.

The WA Department of Health, has developed the Evaluation Framework and Implementation Guide (EFIG). The EFIG is designed to assist stakeholders that deliver health promotion programs commissioned by the WA Department of Health to conduct research and evaluation. The EFIG is freely available and includes a range of helpful tools and templates.

5.3 Tracking health promotion activity in WA

The WA Department of Health tracks health promotion initiatives in WA in the Health Promotion Inventory. The inventory collects information about health promotion programs across WA that aim to reduce the incidence of chronic disease and injury by:

- reducing tobacco smoking
- promoting a healthy weight and preventing obesity
- increasing physical activity
- improving nutrition and healthy eating
- reducing alcohol-related harm
- preventing injuries and creating safer communities.

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WA Health Promotion Strategic Framework 2007–2011: Highlights of major achievements in priority areas

WA Health Promotion Strategic Framework 2012–2016: Achievements and outlook for priority areas

WA Health Promotion Strategic Framework 2017–2021: Achievements and outlook for priority areas

Resources

Evaluation Framework and Implementation Guide (EFIG)

WA Health Promotion Inventory

Information on programs is collected by a survey that includes programs delivered or funded by the WA health system (including health service providers), State Government agencies, and selected not for profit providers of health promotion services. The inventory assists with:

- mapping current programs against state and national priority areas for chronic disease and injury prevention
- providing stakeholders, including health service providers and local governments, with information about programs that are active in their area
- identification of possible gaps in program delivery
- sharing of good practice
- setting of strategic directions and planning for future resource allocation.

The Inventory is an easy to use interactive and searchable database which lets the user find programs by risk factor, target population, setting for the program, and location. The database uses spatial mapping technology to display programs across health regions and Local Government Areas.

5.4 Tracking the benefits of prevention

Monitoring progress in chronic disease and injury prevention is complex. The most widely-used measures of progress tend to focus on trends in behavioural risk factors and health outcomes. While these indicators are important, they do not provide the whole picture, as there is often a time lag between health promotion activities, behaviour change and measurable improvements in chronic disease and injury. For example, most deaths from lung cancer are due to smoking, but lung cancer usually takes 20 to 30 years to develop. The declines that are now being seen in deaths from lung cancer are therefore an indicator of quitting behaviours in earlier decades. It also takes time to establish if there are real, statistically significant trends in risk factors at a population level.

A general conceptual framework of the steps in identifying and addressing health issues caused by behavioural risk factors for chronic disease and injury is provided below (Figure 5). Tracking progress in prevention involves monitoring changes across these stages, to the extent possible within resources. Health promotion programs funded by the WA Department of Health to reduce the risk factors for chronic disease and injury include periodic surveys about attitudes, knowledge and beliefs about risk factors, intention to change, and public opinion about potential policy options to influence behaviour change as part of their evaluation. It should be noted that health promotion in action does not usually conform to a linear process, as behaviour change and the ability for it to be maintained at an individual and a population level are influenced a range of external factors. With complex health risk factors, activity is likely to be occurring across multiple stages at the same time.

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WA Health Promotion Strategic Framework 2017–2021: Achievements and outlook for priority areas

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Evaluation Framework and Implementation Guide (EFIG)

WA Health Promotion Inventory

Identification of a problem	Problems requiring public health solutions are often identified through monitoring population health. Changes in population health are observed from epidemiological data collected from medical settings such as hospitals or in population health surveys. These data may be verified or supported using data from other sources such as program or policy evaluations or case studies.
Implementation of a policy, program or intervention	Health promotion approaches to solving problems should be based on the best available evidence informed by high-quality research. The costs and benefits of intervening must outweigh the long-term health, social and financial costs of not intervening. Best-practice health promotion for reducing risk factors involves sustained implementation of a comprehensive set of interventions, including public health programs and campaigns, legislation, policies or guidelines, and changes to the physical environment. Successful health promotion also takes account of the social determinants of health which can support or prevent behaviour change.
Change in setting	Setting refers to the built and natural environments in which people live, work and play, and it plays an important role in shaping behaviour. Changes in settings can occur as part of an intervention (for example banning smoking in enclosed public places). Settings are dynamic and are shaped by our broader physical, social, cultural, economic and political environments.
Change in knowledge, attitudes and beliefs	Changes in knowledge, attitudes and beliefs are the first step in the behaviour change process. In the case of the common and often relapsing risk factors addressed in the HPSF, it can take considerable motivation to initiate these changes and sustained efforts over time to maintain them.
Change in intentions	Positive changes in knowledge, attitudes and beliefs lead the intention to make a change, but there may be a number of real and perceived barriers to be overcome. For example, a perceived or real lack of time, resources or social support can stop or delay intentions being put into action.
Change in behaviour	Achieving and maintaining behaviour change in the long-term is the most challenging aspect of chronic disease prevention. Behaviour change is best achieved through sustained implementation of a comprehensive set of population-wide interventions over a long period of time.
Improvement in health outcomes	If behaviour change is achieved at a population level, and the behaviour is linked to health outcomes, then changes in health outcomes will be seen over time. For example, reductions in tobacco smoking will lead to reductions in lung cancer rates as shown in section 2.2. It is important to note that chronic diseases develop over long periods of time, and that these health gains are often not realised immediately, but rather, over decades.
Reduction in health, social and economic costs	Improved health and wellbeing leads to longer and healthier lives, and to reductions in health, social and economic costs. This benefits individuals and families and also has good outcomes for the wider community. Preventable hospitalisations and emergency department visits are reduced, which enhances health system sustainability.

Figure 5. A conceptual model of how health promotion leads to a reduction in risk factors, change in chronic disease outcomes and benefits the community, the health system and the economy

6. Appendices

Appendix 1: Complementary WA Health and WA Government policies and strategies

Web addresses correct as of April 2022.

The HPSF is complementary to and aligns with policies that address other aspects of health in WA. This list is not intended to be exhaustive and does not include the WA health system's internal policies.

- Sustainable Health Review Final Report
- State Public Health Plan 2019–2024
- WA Aboriginal Health and Wellbeing Framework 2015–2030
- WACHS Aboriginal Health Strategy 2019–2024
- Climate Health WA Inquiry: Final Report
- Western Australian Men's Health and Wellbeing Policy
- Western Australian Women's Health and Wellbeing Policy
- WA Sexual Health and Blood-borne Virus Strategies 2019–2023
- WA Healthy Weight Action Plan 2019–2024
- WA Cancer Plan 2020–2025
- WA Primary Health Alliance Strategic Plan 2020–2023
- WACHS Mental Health and Wellbeing Strategy 2019–2024
- State Oral Health Plan 2016–2020
- WA Child Ear Health Strategy 2017–2021
- WA Disability Health Framework 2015–2025
- WA Lesbian, Gay, Bisexual, Transgender, Intersex (LGBTI) Health Strategy 2019–2024
- You Matter: A guideline to support engagement with consumers, carers, communities and clinicians in health

Other WA Government departments and agencies

- Mental health, suicide prevention, alcohol and other drugs are addressed by the Mental Health Commission in policies that include:
  - Western Australian Mental Health, Alcohol and Other Drug Services Plan 2015–2025
  - WA State Priorities Mental Health, Alcohol and Other Drugs 2020–2024
  - Western Australian Alcohol and Drug Interagency Strategy 2018–2022
  - Western Australian Methamphetamine Action Plan
  - The Western Australian Mental Health Promotion, Mental Illness, Alcohol and Other Drug Prevention Plan 2018–2025
  - Western Australian Suicide Prevention Framework 2021–2025
  - Young People's Mental Health and Alcohol and Other Drug Use: Priorities for Action 2020–2025
- Healthway's Strategic Plan, Active Healthy People: 2018–2023, provides direction and information for organisations seeking Healthway sponsorship or granting funding.
- The Department of Communities implements initiatives and strategies to support older people in ageing safely, happily, with dignity and respect.
- The Commissioner for Children and Young People's Strategic Directions 2021–2026 monitors and advocates to strengthen the wellbeing of WA children and young people.

Other WA Government Departments that develop policies and strategies that provide for the support and promotion of healthier lifestyles for Western Australians include:

- Biodiversity, Conservation and Attractions
- Communities
- Education
- Jobs, Tourism, Science and Innovation
- Transport
- Justice
- Local Government, Sport and Cultural Industries
- Planning, Lands and Heritage
- Primary Industries and Regional Development
- Water and Environmental Regulation
- Fire and Emergency Services

Appendix 3 maps areas of intersecting policy interest.

Appendix 2: State, Commonwealth and International frameworks and policies

Web addresses correct as of December 2022

General

State

Closing the Gap Jurisdictional Implementation Plan

State Oral Health Plan 2016–2020

State Public Health Plan

Sustainable Health Review Final Report

WA Aboriginal Health and Wellbeing Framework 2015–2030

WA Charter of Multiculturalism

WA Child Ear Health Strategy 2017–2021

WA Climate Policy

WA Disability Health Framework 2015–2025

WA Multicultural Policy Framework

WA Workforce Diversification and Inclusion Strategy for WA Public Sector Employment 2020–2025

Western Australian Language Services Policy 2020

National

Aboriginal and Torres Strait Islander Health Performance Framework 2020

Equally Well: Improving the physical health and wellbeing of people living with mental illness in Australia

Healthy Mouths, Healthy Lives: Australia's National Oral Health Plan 2015–2024

National Aboriginal and Torres Strait Islander Health Plan 2021–2031

National Action Plan for the Health of Children and Young People

National Agreement on Closing the Gap

National Arts and Health Framework

National Food Waste Strategy: Aiming to halve Australia's food waste by 2030

National Healthcare Agreement (2022)

National Mental Health and Suicide Prevention Plan

National Preventive Health Strategy 2021–2030

National Strategic Framework for Chronic Conditions

International

Tackling NCDs: 'best buys' and other recommended interventions for the prevention and control of noncommunicable diseases

WHO Global Action Plan for the Prevention and Control of Noncommunicable Diseases 2013–2020

WHO Sustainable Development Goals

Reducing tobacco use and making smoking history

National

National Drug Strategy 2017–2026

National Tobacco Strategy 2012–2018

National Tobacco Strategy

International

WHO Framework Convention on Tobacco Control

Halting the rise in obesity

State

Directions 2031 and Beyond: Metropolitan planning beyond the horizon

Foundations for a Stronger Tomorrow: State Infrastructure Strategy Draft for public comment

Liveable Neighbourhoods

Public Transport Plan for Perth 2031

State Planning Strategy 2050

WA Food Relief Framework Report 2019

WA Healthy Weight Action Plan

Western Australian Bicycle Network Plan 2014–2031

National

2021 Australian Infrastructure Plan

Australian Dietary Guidelines

Australian Guide to Healthy Eating

Australian National Breastfeeding Strategy: 2019 and Beyond

Blueprint for an Active Australia (3rd edition), 2019

Food Policy Index Australia

Healthy Active by Design

Healthy food and drink choices in public sector healthcare settings for staff and visitors: goals, principles and recommended nutritional standards

Healthy food and drink choices in sport and recreation

National Interim Guide to Reduce Children's Exposure to Unhealthy Food and Drink Promotion

National Obesity Strategy

Physical activity and exercise guidelines for all Australians

International

WHO Global action plan on physical activity 2018–2030: more active people for a healthier world

WHO Report of the Commission on Ending Child Obesity

Action framework for developing and implementing public food procurement and service policies for a healthy diet

Reducing harmful levels of alcohol use

State

Strong Spirit Strong Mind – Aboriginal Drug and Alcohol Framework for Western Australia 2011–2015 (currently under review)

WA State Priorities Mental Health, Alcohol and Other Drugs 2020–2024

Western Australian Alcohol and Drug Interagency Strategy 2018–2022

Western Australian Mental Health, Alcohol and Other Drug Services Plan 2015–2025

Western Australian Mental Health Promotion, Mental Illness, Alcohol and Other Drug Prevention Plan 2018–2025

Western Australian Methamphetamine Action Plan

National

Australian Guidelines to Reduce Health Risks from Drinking Alcohol

National Aboriginal and Torres Strait Islander Peoples Drug Strategy 2014–2019

National Alcohol and Other Drug Workforce Development Strategy 2015–2018

National Alcohol Strategy 2019–2028

National Drug Strategy 2017–2026

Injury prevention and promoting safer communities

State

Driving Change – Road Safety Strategy for Western Australia 2020–2030

Path to Safety: Western Australia's strategy to reduce family and domestic violence 2020–2030

Western Australian Suicide Prevention Framework 2021–2025

National

Australian Water Safety Strategy 2030

Australian Work Health and Safety Strategy 2012–2022

Draft National Road Safety Strategy 2021–2030

National Injury Prevention Strategy 2020–2030: Draft for consultation

Appendix 3: Common policy areas, strategies and initiatives among State Government departments and agencies

The information in this table has been gathered from WA Government websites.

		Biodiversity, Conservation and Attractions	Communities	DevelopmentWA	Education	Finance	Fire and Emergency Services	Health	Jobs, Tourism, Science and Innovation	Justice	Local Govt, Sport and Cultural Industries	Lotterywest and Healthway	Mental Health Commission	Mines, Industry Regulation and Safety	Planning, Lands and Heritage	Primary Industries and Regional Development	Public Sector Commission	Road Safety Commission	Training and Workforce Development	Transport	Treasury	VenuesWest	Water and Environmental Regulation	WA Police
Healthy People and Communities	Community engagement and capacity building	✓	✓			✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓
	Alcohol and other drugs				✓			✓		✓	✓	✓	✓	✓				✓		✓	✓	✓		✓
	Mental health				✓			✓		✓	✓	✓	✓	✓		✓					✓	✓		✓
	Tobacco				✓			✓				✓		✓										
	Arts and culture										✓	✓								✓		✓		
	Sponsorships and grants		✓					✓			✓	✓						✓		✓		✓		
Healthy and Safe Settings	Natural and built environment	✓		✓		✓		✓	✓		✓	✓		✓	✓	✓				✓	✓	✓	✓	
	Housing		✓	✓			✓	✓					✓	✓		✓								
	Preventing injury and promoting safety		✓		✓		✓	✓		✓	✓	✓	✓	✓		✓		✓		✓		✓		✓
	Active transport	✓		✓	✓	✓		✓							✓			✓		✓	✓	✓		✓
	Arts and culture	✓		✓		✓					✓					✓				✓				
	Food and product safety							✓						✓		✓						✓		
	Sponsorships and grants							✓	✓		✓	✓				✓		✓		✓		✓		

		Biodiversity, Conservation and Attractions	Communities	DevelopmentWA	Education	Finance	Fire and Emergency Services	Health	Jobs, Tourism, Science and Innovation	Justice	Local Govt, Sport and Cultural Industries	Lotterywest and Healthway	Mental Health Commission	Mines, Industry Regulation and Safety	Planning, Lands and Heritage	Primary Industries and Regional Development	Public Sector Commission	Road Safety Commission	Training and Workforce Development	Transport	Treasury	VenuesWest	Water and Environmental Regulation	WA Police
Healthy and Safe Settings	Workplaces		✓			✓	✓	✓			✓		✓	✓			✓		✓	✓	✓	✓		
	Schools				✓	✓	✓	✓		✓	✓	✓	✓			✓		✓		✓				
	Tobacco, alcohol and other drugs							✓		✓	✓	✓	✓	✓				✓		✓		✓		✓
Healthy Food and Drinks	Local produce (regulation, promotion, use)										✓					✓							✓	
	Drinking water — management															✓							✓	
	Community engagement and capacity building				✓			✓			✓	✓										✓		
	Food safety and security							✓			✓			✓	✓	✓				✓	✓	✓		
	Sponsorships and grants							✓			✓	✓										✓		
Healthy Recreation	Physical activity	✓		✓	✓	✓		✓	✓		✓	✓			✓	✓				✓	✓	✓		✓
	Arts and culture					✓					✓	✓				✓				✓		✓		
	Volunteering	✓	✓				✓				✓													
	Preventing injury and promoting safety	✓	✓		✓		✓	✓		✓	✓	✓	✓	✓		✓		✓		✓		✓		✓
	Responsible gambling										✓	✓												
	Tobacco, alcohol and other drugs							✓			✓	✓	✓	✓				✓		✓		✓		✓
	Sponsorships and grants							✓	✓		✓	✓				✓		✓		✓		✓		

Appendix 4: Broad indicator set for chronic disease and injury prevention in WA

Progress in WA for chronic disease and injury prevention is partly informed by population level changes in risk factors, disease prevalence and rates of injury. A set of indicators is provided below for monitoring progress in chronic disease and injury over time, drawn from the *WA Health and Wellbeing Surveillance System* and the *WA Hospital Morbidity Data System*. The indicators are divided into 3 categories:

Risk factors

- Tobacco smoking – daily (WA Adults 18 years and over)
- Smoking in the home (WA Children, 0–15 years)
- Overweight and Obesity (WA Adults, 16 years and over)
- Overweight and Obesity (WA children, 5–15 years)
- Physical inactivity (WA Adults, 18 years and over)
- Physical inactivity (WA Children, 5–15 years)
- Screen time (WA Children, 0–15 years)
- Insufficient fruit and vegetable consumption (WA Adults, 16 years and over)
- Insufficient fruit and vegetable Consumption (WA Children, 2–15 years)
- Fast food consumption (at least once per week) (WA Adults, 16 years and over)
- Fast food consumption (at least once per week) (WA Children, 1–15 years)
- High cholesterol (WA Adults, 25 years and over)
- High blood pressure (WA Adults, 25 years and over)
- Current mental health condition (WA Adults, 16 years and over)
- High or very high psychological distress (WA Adults, 16 years and over)
- Mental health – emotional, concentration or behavioural (WA Children 1–15 years)
- Alcohol consumption (WA Adults, 16 years and over)
- Injury (WA Adults, 16 years and over)

Disease and biomedical indicators

- Ischaemic heart disease hospitalisations (ICD-10-AM: I20-I25)
- Cerebrovascular disease hospitalisations (ICD-10-AM: I60-I69)
- Diabetes and intermediate hyperglycaemia hospitalisations (ICD-10-AM: E09-E14)
- Chronic obstructive pulmonary disease hospitalisations (ICD-10-AM:J40-J44,J47)
- Colorectal cancer incidence (ICD-10-AM: C18-C20, C21.8)
- Breast cancer incidence (ICD-10-AM: C50)
- Lung, bronchus and trachea cancer incidence (ICD-10-AM: C33, C34)

Injury events

- Transport incident hospitalisations (ICD-10-AM: V00-V99)
- Accidental drowning, submersion and threats to breathing hospitalisations (ICD-10-AM: W65-W84)
- Falls hospitalisations (ICD-10-AM: W00-W19)
- Accidental poisoning hospitalisations (ICD-10-AM: X20-X49)
- Intentional self-harm hospitalisations (ICD-10-AM: X60-X84)

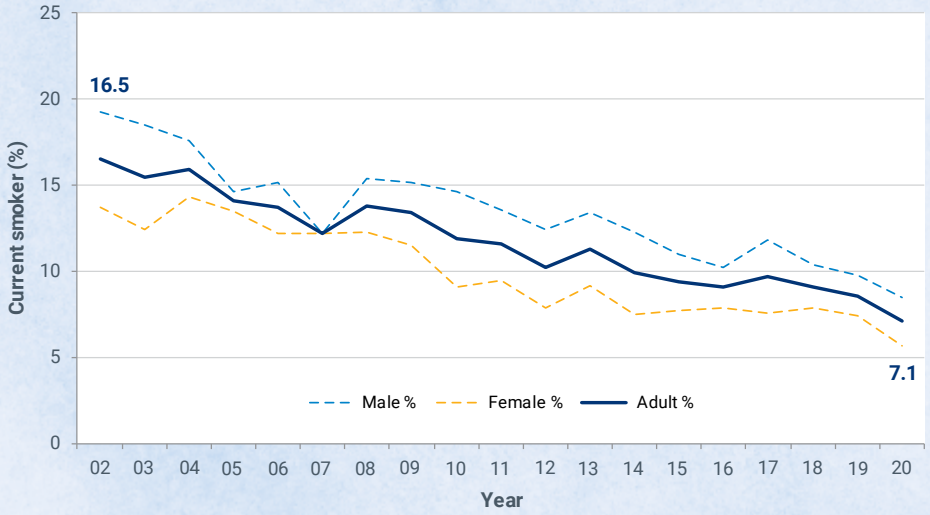
Risk factors

Risk Factors – Source: WA Health and Wellbeing Survey[11, 98]

Tobacco smoking – daily (WA Adults 18 years and over)

Interpretation: Tobacco smoking in WA adults has declined over time

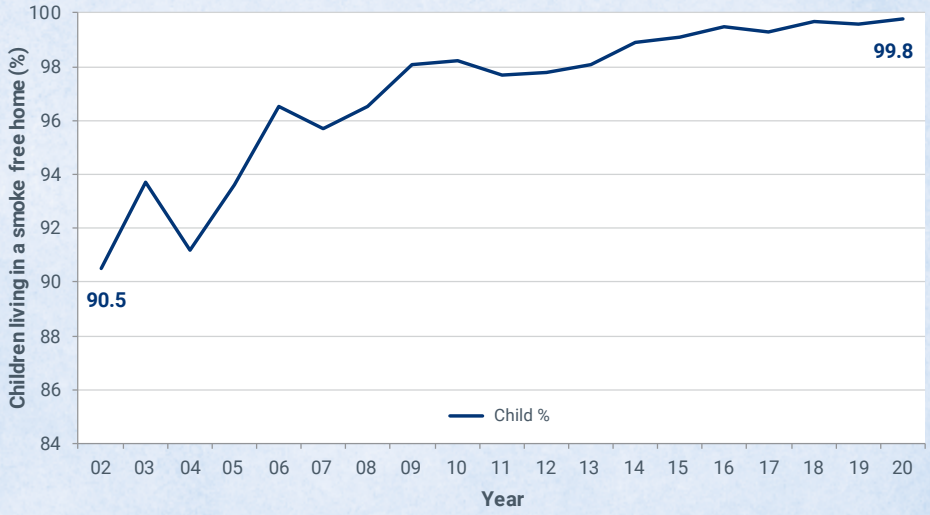
(16.5% in 2002, 7.1% in 2020)



Smoking in the home (WA Children, 0–15 years)

Interpretation: WA children living in a smoke free home has increased over time

(90.5% in 2002, 99.8% in 2020)



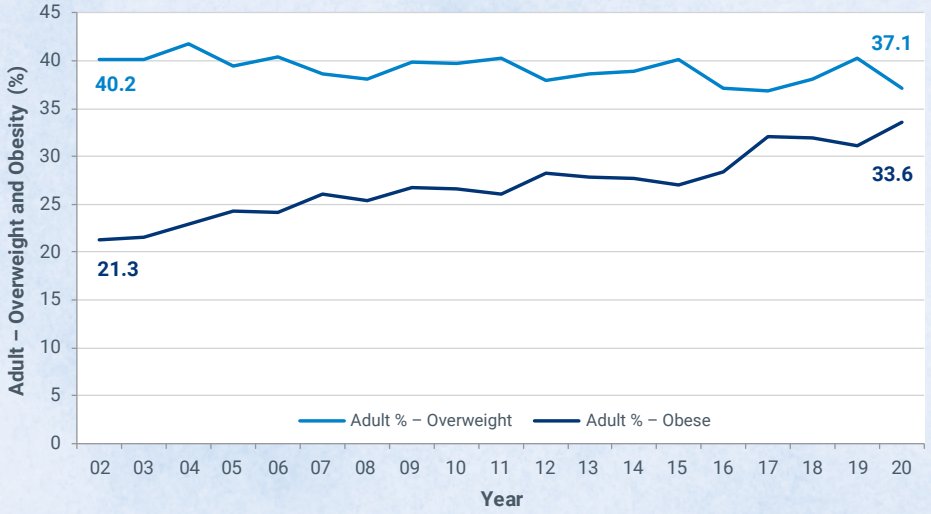
Risk factors *(continued)*

Risk Factors – Source: WA Health and Wellbeing Survey[11, 98]

Overweight and Obesity (WA Adults, 16 years and over)

Interpretation: The prevalence of WA adults who are overweight has remained the same over time (40.2% in 2004, 37.1% in 2020), however the proportion who are obese has increased over time

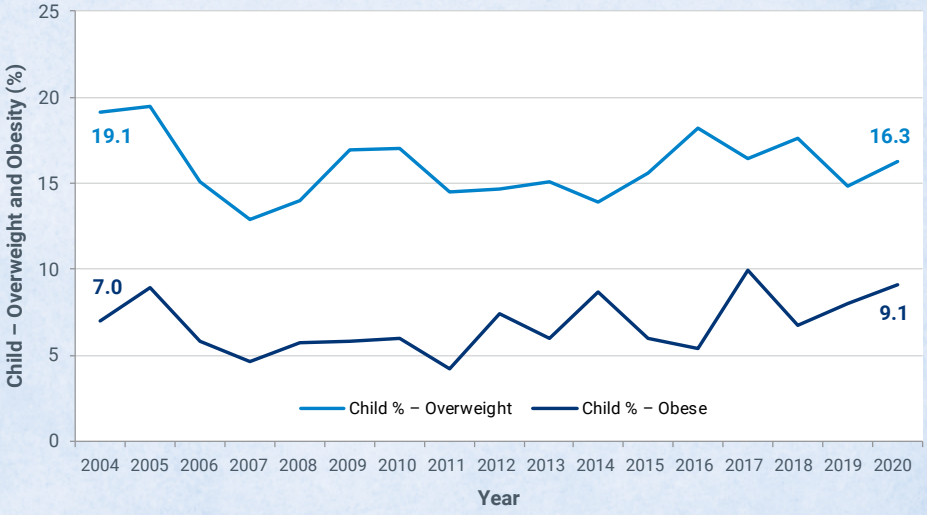
(21.3% in 2004, 33.6% in 2020).



Overweight and Obesity (WA children, 5–15 years)

Interpretation: The prevalence of WA children who are overweight or obese has remained the same over time

(overweight 19.1% in 2004, 16.3% in 2020, obese 7.0% in 2004, 9.1% in 2020).



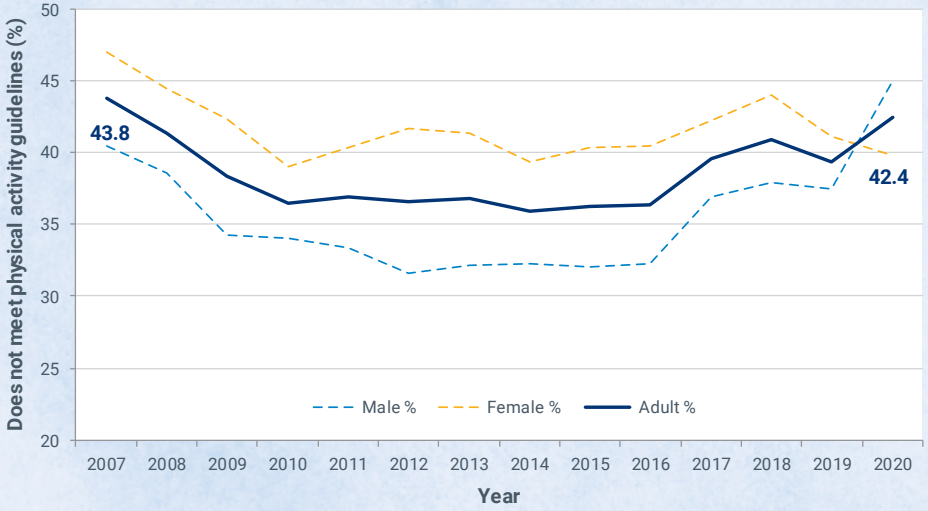
Risk factors *(continued)*

Risk Factors – Source: WA Health and Wellbeing Survey[11, 98]

Physical inactivity (WA Adults, 18 years and over)

Interpretation: Physical inactivity in WA adults has remained the same over time

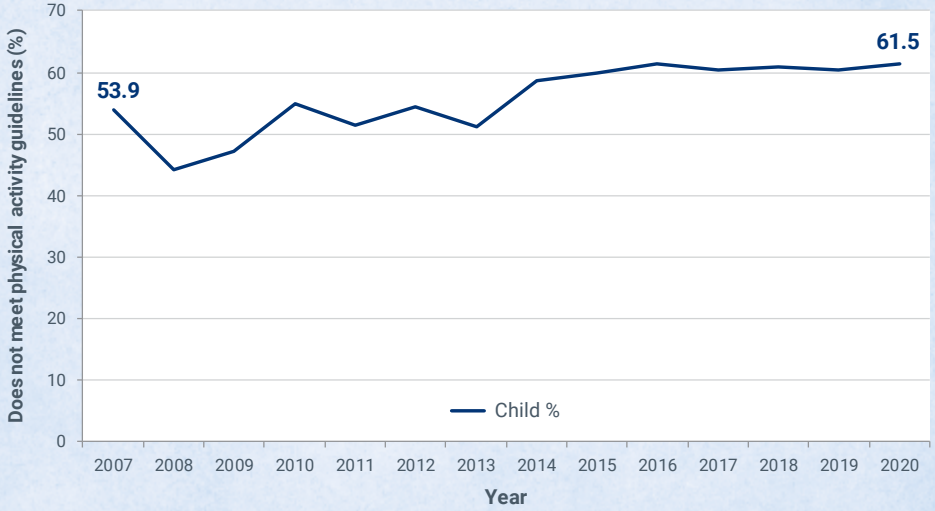
(43.8% in 2007, 42.4% in 2020)



Physical inactivity (WA Children, 5–15 years)

Interpretation: Physical inactivity in WA children has increased over time

(53.9% in 2007, 61.5% in 2020)



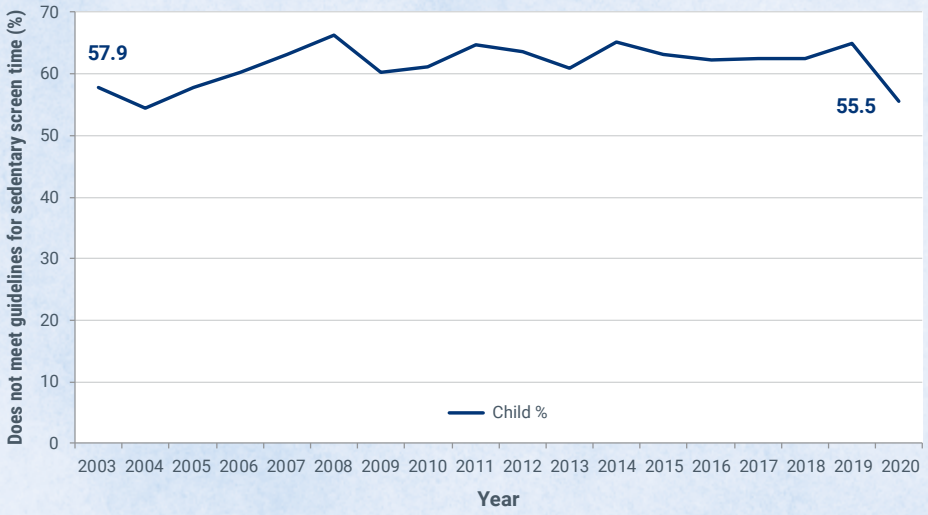
Risk factors *(continued)*

Risk Factors – Source: WA Health and Wellbeing Survey[11, 98]

Screen time (WA Children, 0–15 years)

Interpretation: Sedentary screen time in WA children has remained the same over time (e.g. TV, electronic games, computer use)

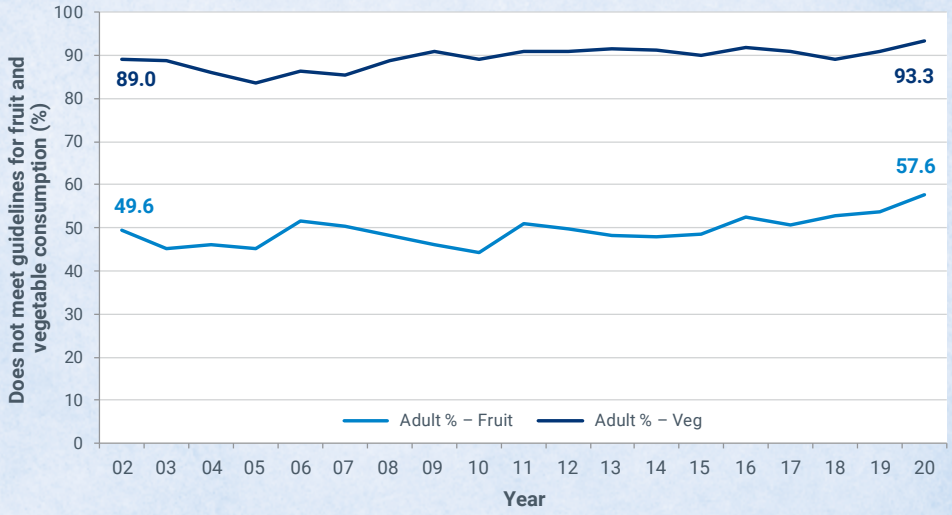
(57.9% in 2003, 55.5% in 2020)



Insufficient fruit and vegetable consumption (WA Adults, 16 years and over)

Interpretation: Insufficient fruit and vegetable consumption in WA adults has increased over time

(Fruit 49.6% in 2002, 57.6% in 2020.
Vegetables 89.0% in 2002, 93.3% in 2020)



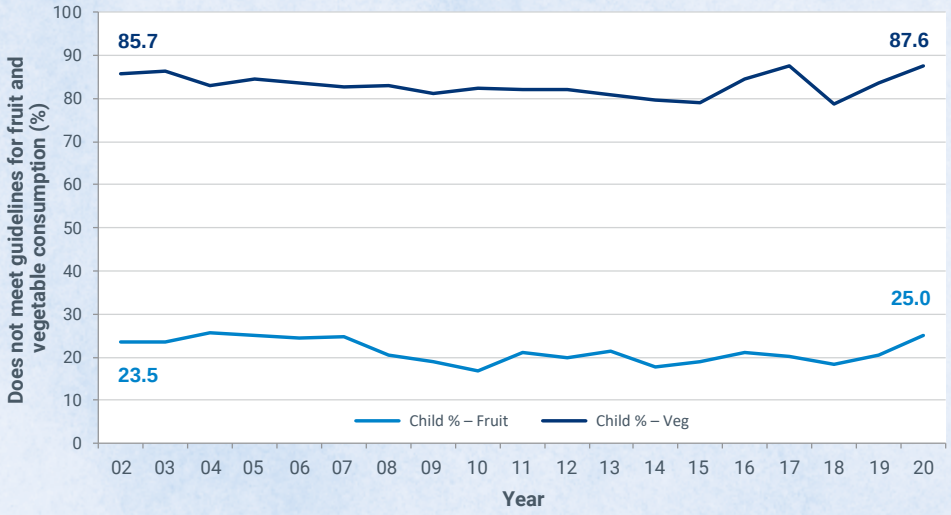
Risk factors *(continued)*

Risk Factors – Source: WA Health and Wellbeing Survey[11, 98]

Insufficient fruit and vegetable Consumption (WA Children, 2–15 years)

Interpretation: Insufficient fruit and vegetable consumption in WA children has remained the same over time

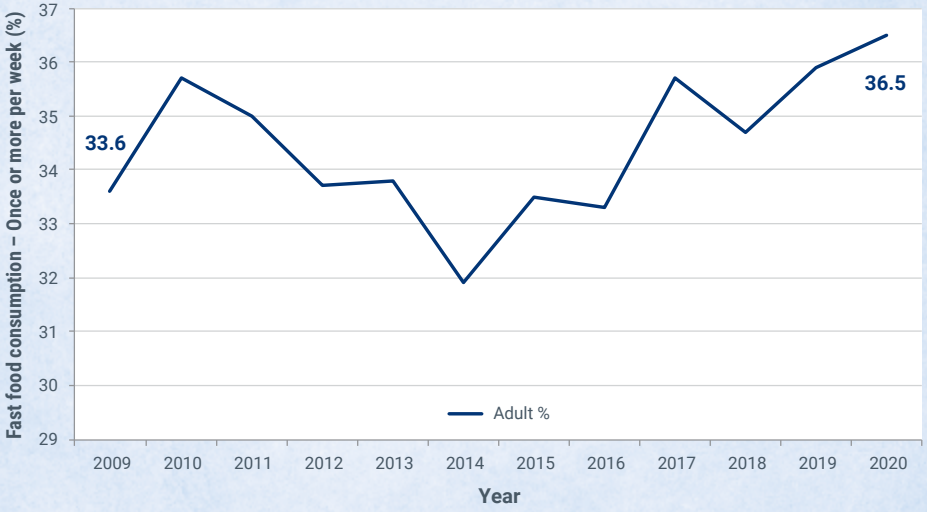
(Fruit 23.5% in 2002, 25.0% in 2020.
Vegetables 85.7% in 2002, 87.6% in 2020)



Fast food consumption (at least once per week) (WA Adults, 16 years and over)

Interpretation: WA adults who eat fast food at least once per week has increased over time

(33.6% in 2009, 36.5% in 2020)



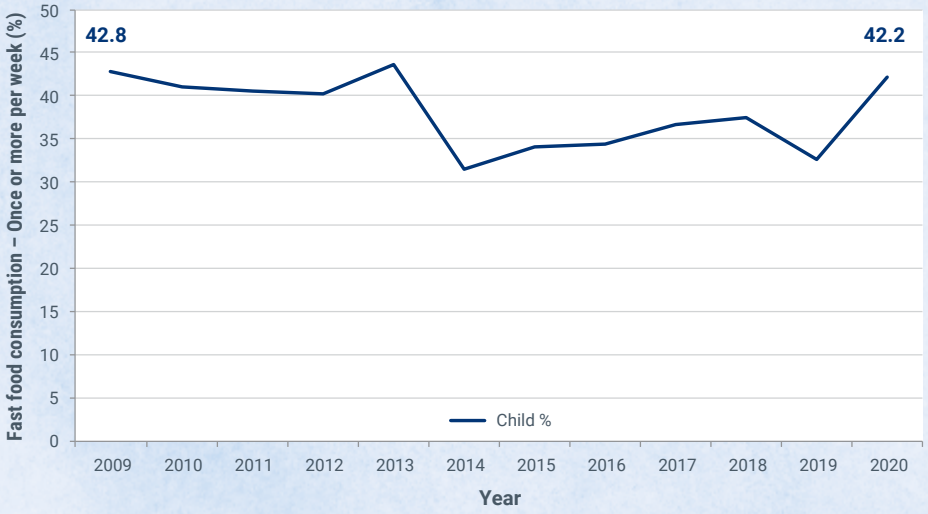
Risk factors *(continued)*

Risk Factors – Source: WA Health and Wellbeing Survey[11, 98]

Fast food consumption (at least once per week) (WA Children, 1–15 years)

Interpretation: WA children who eat fast food at least once per week has remained the same over time

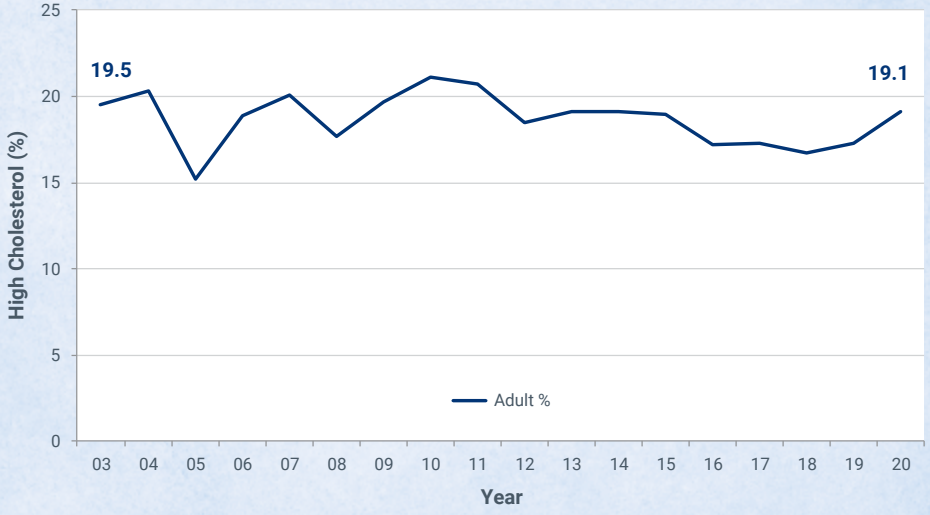
(42.8% in 2009, 42.2% in 2020)



High cholesterol (WA Adults, 25 years and over)

Interpretation: The prevalence of WA adults with high cholesterol has remained the same over time

(19.5% in 2003, 19.1% in 2020)



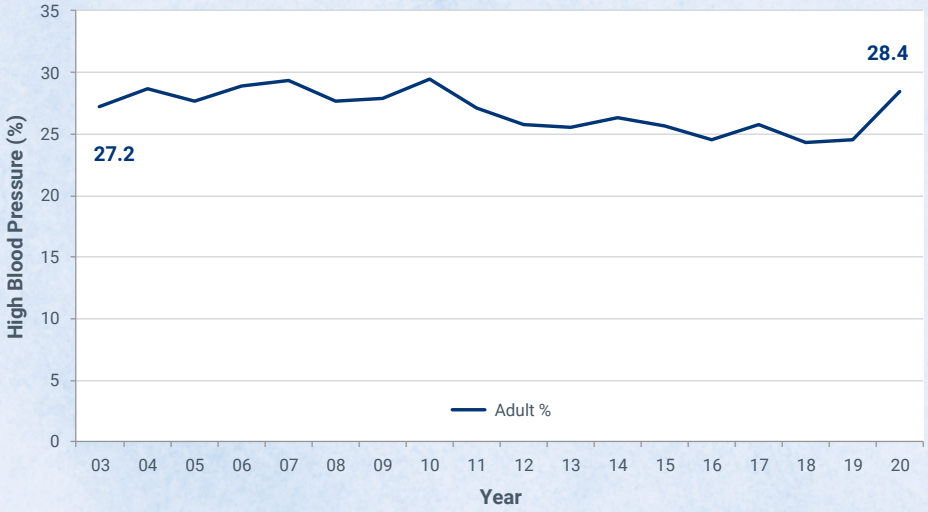
Risk factors *(continued)*

Risk Factors – Source: WA Health and Wellbeing Survey[11, 98]

High blood pressure (WA Adults, 25 years and over)

Interpretation: The prevalence of WA adults with high blood pressure has increased over time

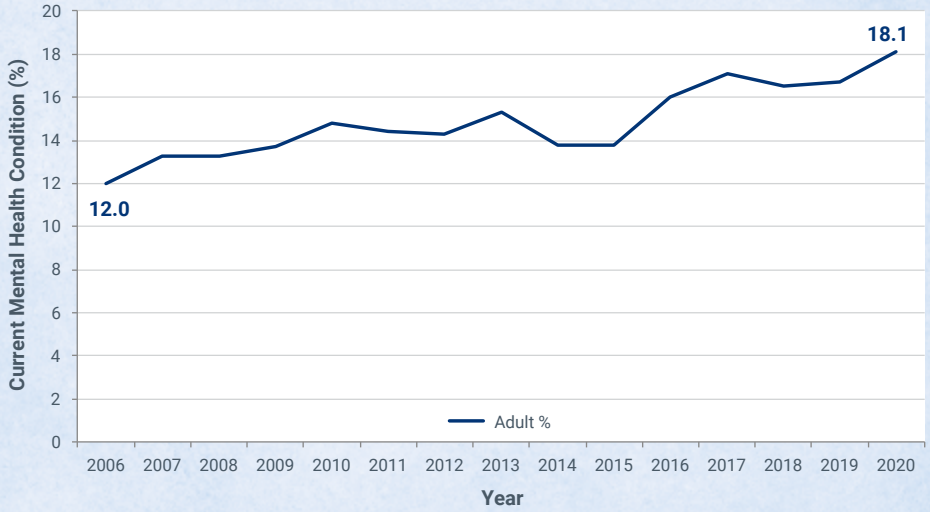
(27.2% in 2003, 28.4% in 2020)



Current mental health condition (WA Adults, 16 years and over)

Interpretation: WA adults reporting a current mental health condition has increased over time

(12.0% in 2007; 18.1% in 2020)



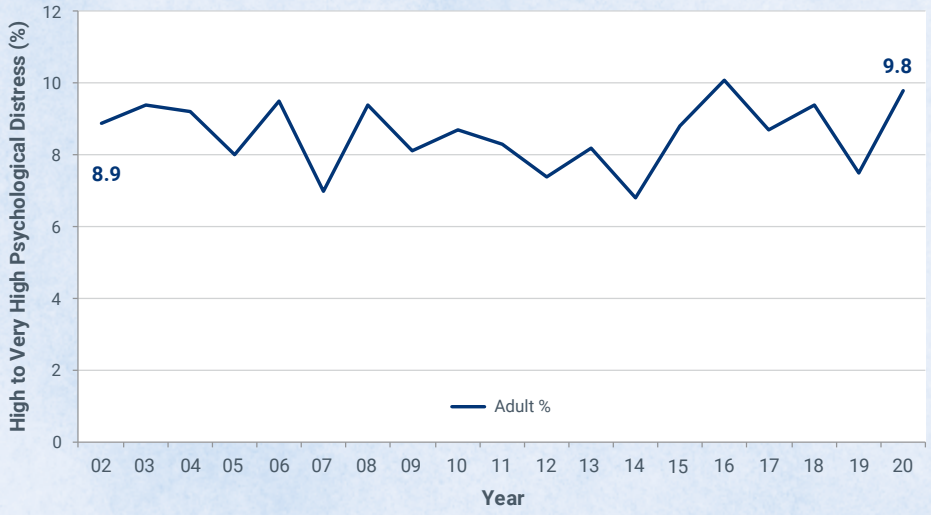
Risk factors *(continued)*

Risk Factors – Source: WA Health and Wellbeing Survey[11, 98]

High or very high psychological distress (WA Adults, 16 years and over)

Interpretation: The prevalence of WA adults experiencing high or very high psychological distress has remained the same over time

(8.9% in 2002, 9.8% in 2020)



Mental health – emotional, concentration or behavioural (WA Children 1–15 years)

Interpretation: The prevalence of WA children who have an emotional, concentration or behavioural problem has increased over time

(20.6% in 2002, 40.5% in 2020)

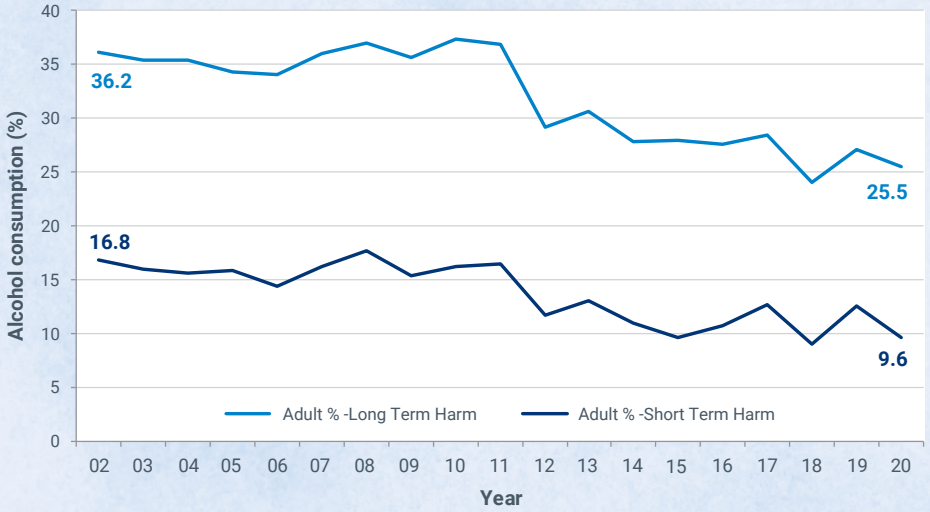
Risk factors *(continued)*

Risk Factors – Source: WA Health and Wellbeing Survey[11, 98]

Alcohol consumption (WA Adults, 16 years and over)

Interpretation: Alcohol consumption causing long and short term harm in WA adults has decreased over time (based on 2009 NHMRC alcohol guidelines)

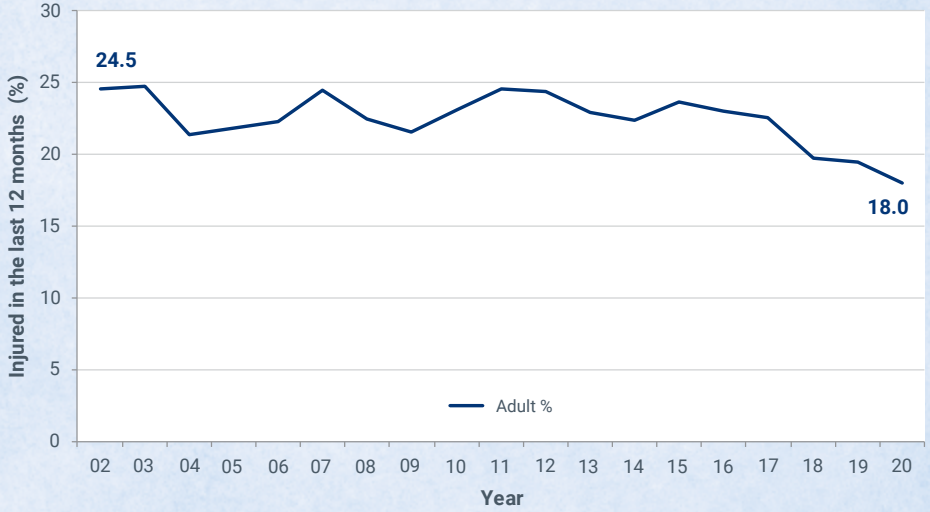
(Short term 16.8% in 2002, 9.6% in 2020,
Long term 36.2% in 2002, 25.5% in 2020)



Injury (WA Adults, 16 years and over)

Interpretation: The prevalence of WA adults sustaining an injury in the last 12 months has decreased over time

(24.5% in 2002, 18.0% in 2020)

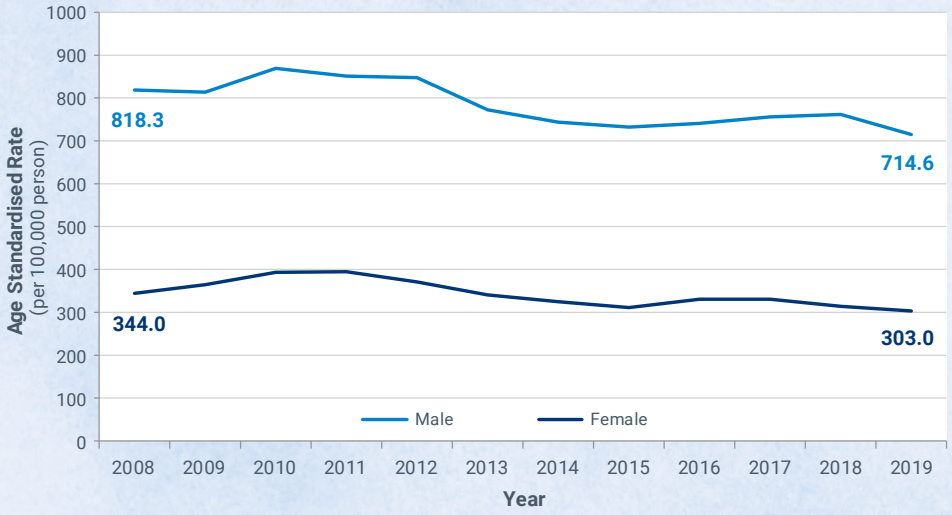


Disease and Biomedical

Disease and Biomedical – Source: Health Tracks Reporting v1.4, Epidemiology Branch, WA Department of Health (WA Hospital Morbidity Data Collection and WA Cancer Registry)[35]

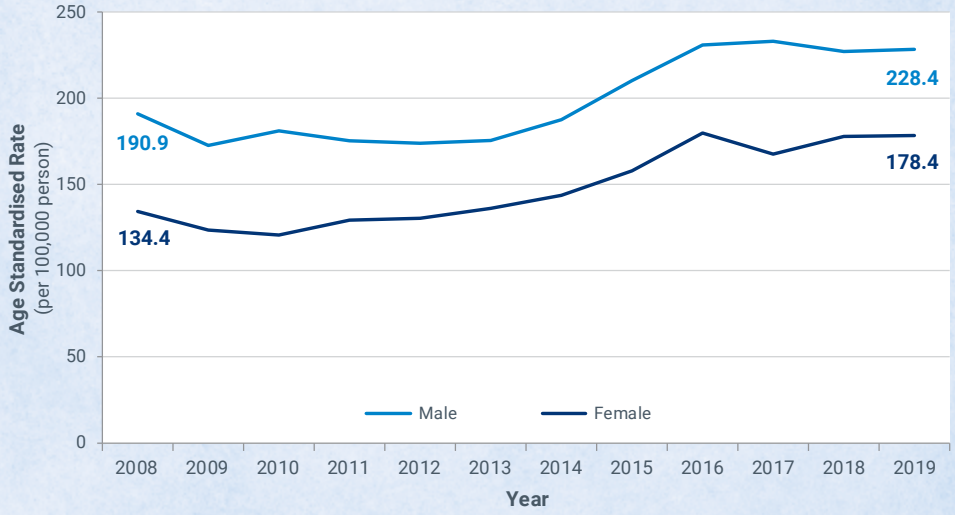
Ischaemic heart disease hospitalisations (ICD-10-AM: I20-I25)

Interpretation: From 2015–2019 the age-standardised rate of hospitalisations due to Ischaemic heart diseases for WA males and females did not change significantly. The age group most affected by Ischaemic heart diseases were people aged 65+ years.



Cerebrovascular disease hospitalisations (ICD-10-AM: I60-I69)

Interpretation: From 2015–2019 the age-standardised rate of hospitalisations due to cerebrovascular disease for WA males and females did not change significantly. The age group most affected by cerebrovascular disease were people aged 65+ years.

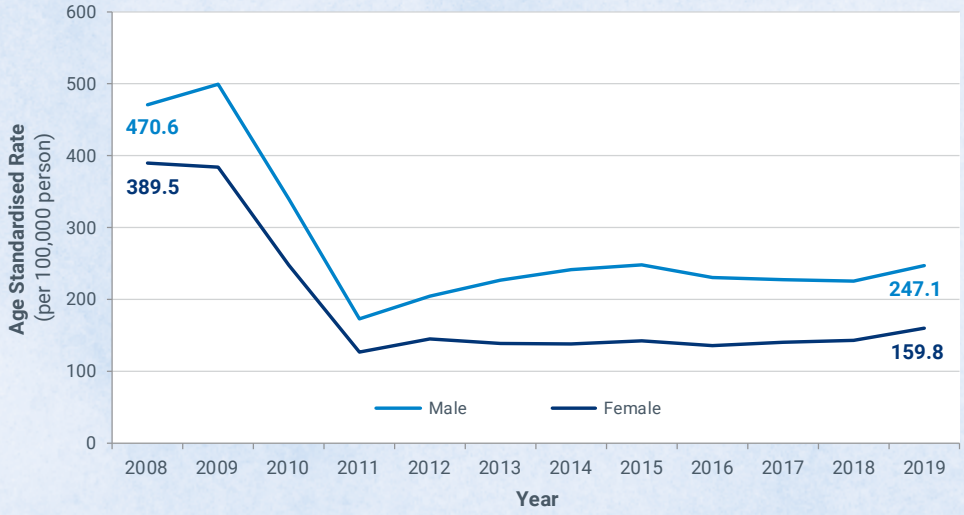


Disease and Biomedical *(continued)*

Disease and Biomedical – Source: Health Tracks Reporting v1.4, Epidemiology Branch, WA Department of Health (WA Hospital Morbidity Data Collection and WA Cancer Registry)[35]

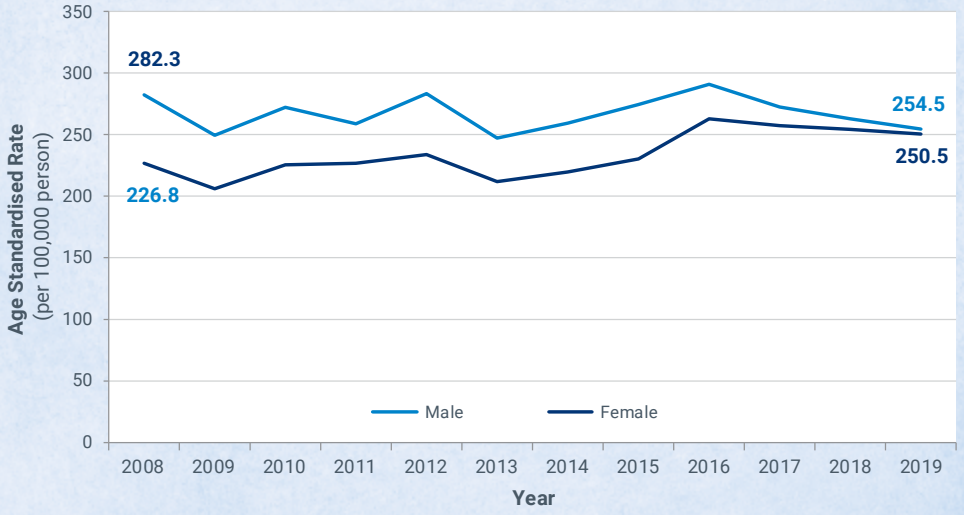
Diabetes and intermediate hyperglycaemia hospitalisations (ICD-10-AM: E09-E14)

Interpretation: From 2015–2019 the age-standardised rate of hospitalisations due to diabetes and intermediate hyperglycaemia did not change for WA males but increased significantly for WA females. The age group most affected by diabetes and intermediate hyperglycaemia were people aged 65+ years.



Chronic obstructive pulmonary disease hospitalisations (ICD-10-AM:J40-J44,J47)

Interpretation: From 2015–2019 the age-standardised rate of hospitalisations due to COPD did not change for WA females but decreased significantly for WA males. The age group most affected by COPD were people aged 65+ years.

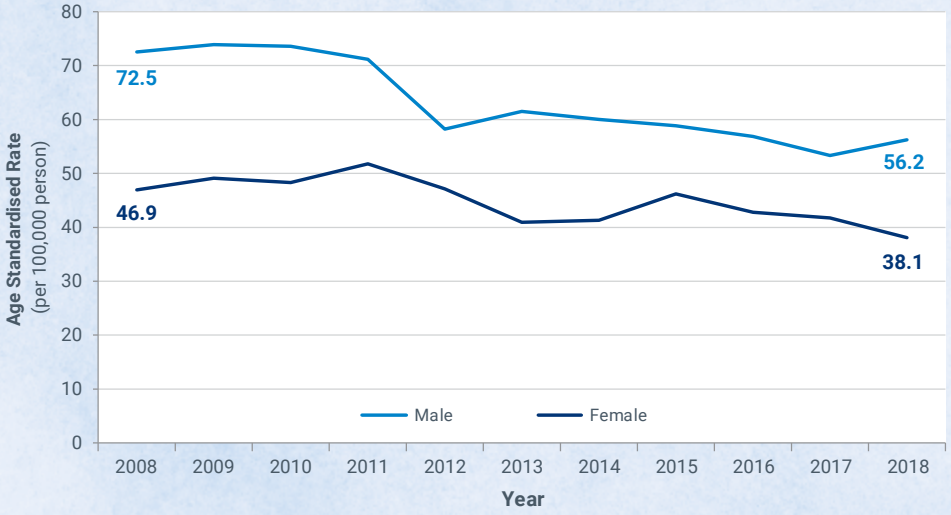


Disease and Biomedical *(continued)*

Disease and Biomedical – Source: Health Tracks Reporting v1.4, Epidemiology Branch, WA Department of Health (WA Hospital Morbidity Data Collection and WA Cancer Registry)[35]

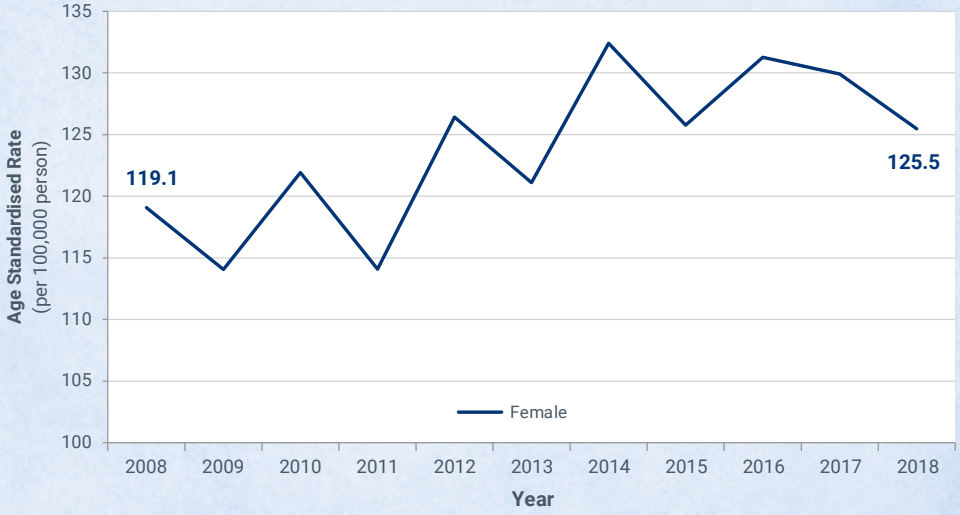
Colorectal cancer incidence (ICD-10-AM: C18-C20, C21.8)

Interpretation: From 2014–2018 the age-standardised rate of colorectal cancer did not change significantly for WA males and decreased for WA females. The age group most affected by colorectal cancer were people aged 65+ years.



Breast cancer incidence (ICD-10-AM: C50)

Interpretation: From 2014–2018 the age-standardised rate of breast cancer did not change significantly for WA females. The age group most affected by breast cancer were people aged 65+ years.

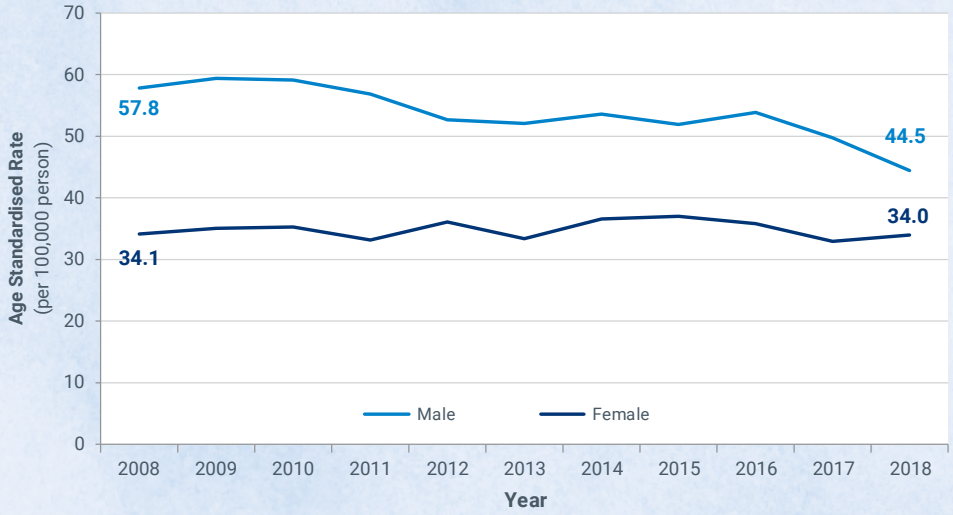


Disease and Biomedical *(continued)*

Disease and Biomedical – Source: Health Tracks Reporting v1.4, Epidemiology Branch, WA Department of Health (WA Hospital Morbidity Data Collection and WA Cancer Registry)[35]

Lung, bronchus and trachea cancer incidence (ICD-10-AM: C33, C34)

Interpretation: From 2014-2018 the age-standardised rate of lung, bronchus and trachea cancers for WA males and females decreased significantly. The age group most affected by lung, bronchus and trachea cancers were people aged 65+ years.

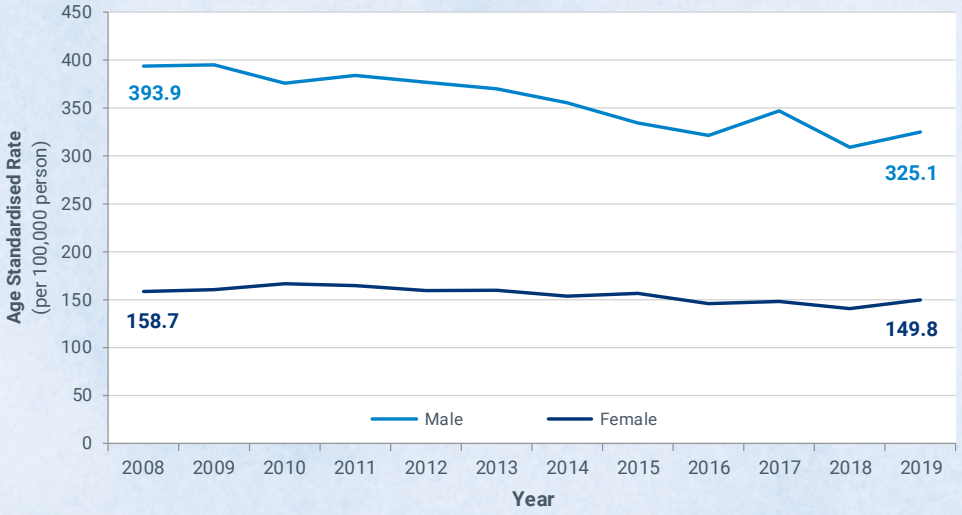


Selected causes of injury *(continued)*

Injury – Source: Health Tracks Reporting v1.4, Epidemiology Branch, WA Department of Health (WA Hospital Morbidity Data Collection)

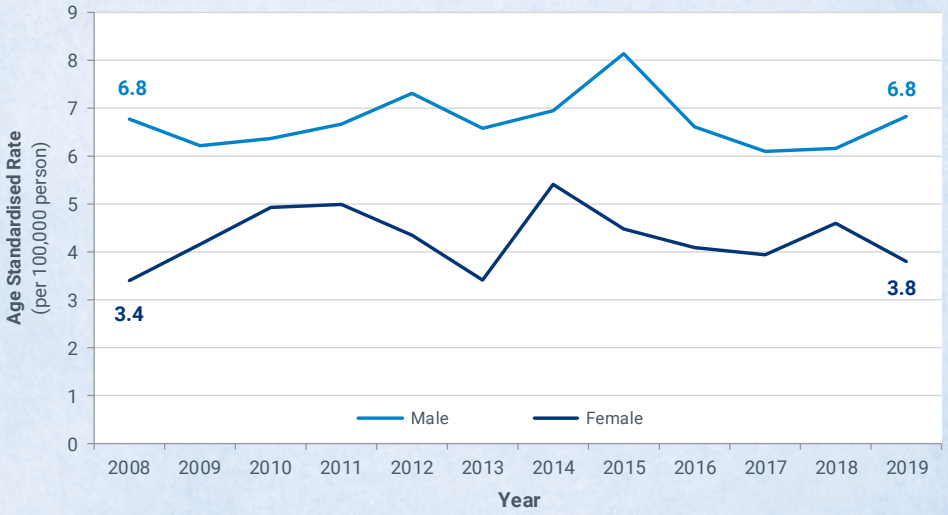
Transport incident hospitalisations (ICD-10-AM: V00-V99)

Interpretation: From 2015–2019 the age-standardised rate of hospitalisations due to transport incidents for WA males and females did not significantly change. The age group most affected by transport incidents was people aged 25–44 years.



Accidental drowning, submersion and threats to breathing hospitalisations (ICD-10-AM: W65-W84)

Interpretation: From 2015–2019 the age-standardised rate of hospitalisations due to accidental drowning, submersion and threats to breathing for WA males and females did not significantly change. The age group most affected by hospitalisations due to accidental drowning, submersion and threats to breathing was children aged 0–4 years.

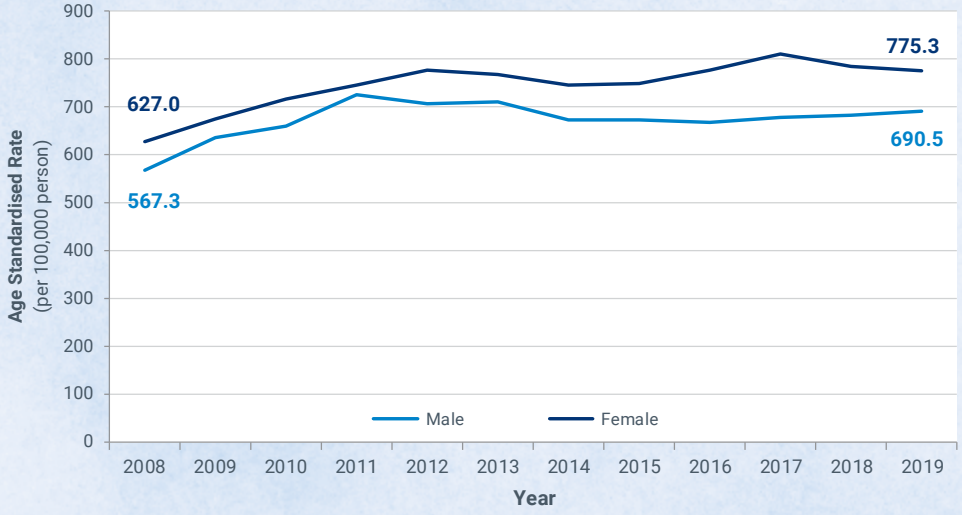


Selected causes of injury *(continued)*

Injury – Source: Health Tracks Reporting v1.4, Epidemiology Branch, WA Department of Health (WA Hospital Morbidity Data Collection)

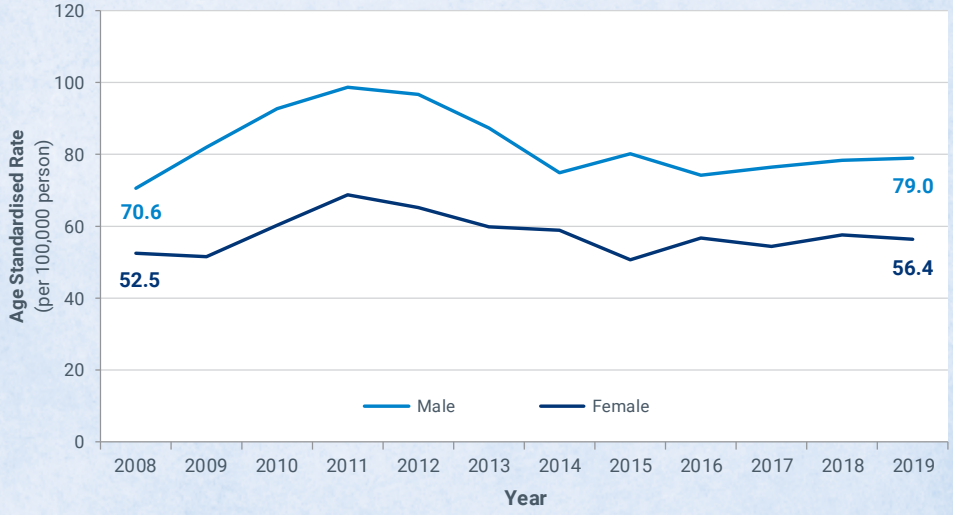
Falls hospitalisations (ICD-10-AM: W00-W19)

Interpretation: From 2015–2019 the age-standardised rate of hospitalisations due to falls for WA males and females increased significantly. The age group most affected by hospitalisations due to falls was people aged 65+ years.



Accidental poisoning hospitalisations (ICD-10-AM: X20-X49)

Interpretation: From 2015–2019 the age-standardised rate of hospitalisations due to accidental poisoning for WA males and females did not significantly change. The age group most affected by hospitalisations due to accidental poisoning was people aged 25-44 years.

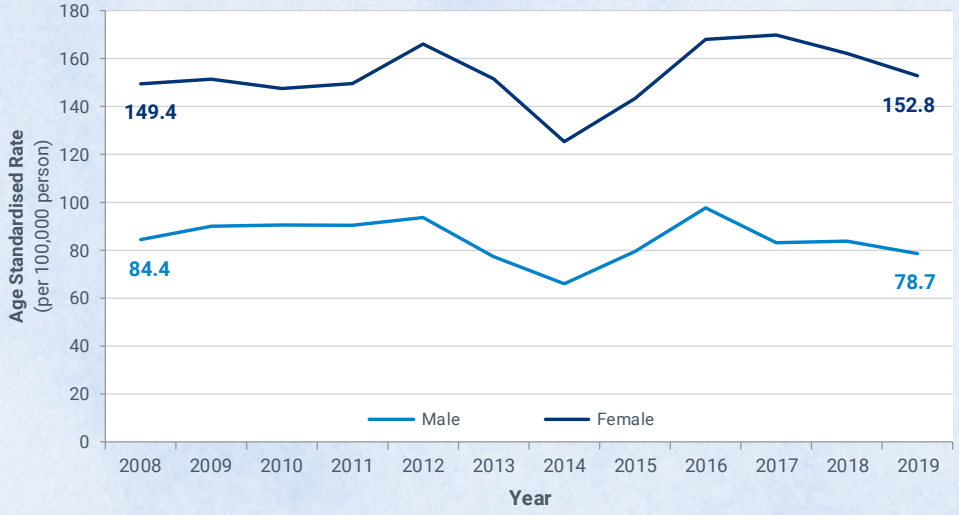


Selected causes of injury *(continued)*

Injury – Source: Health Tracks Reporting v1.4, Epidemiology Branch, WA Department of Health (WA Hospital Morbidity Data Collection)

Intentional self-harm hospitalisations (ICD-10-AM: X60-X84)

Interpretation: From 2015–2019 the age-standardised rate of hospitalisations due to intentional self-harm for WA males and females did not significantly change. The age group most affected by intentional self-harm was people aged 25–44 years.



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