



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

WA Health Promotion Strategic Framework

2022–2026



CONSULTATION DRAFT

A 5-year plan to reduce preventable chronic disease and injury in our communities

© Department of Health, State of WA (2021)

Copyright to this material produced by the WA Department of Health belongs to the State of WA, under the provisions of the Copyright Act 1968 (Commonwealth of Australia). Apart from any fair dealing for personal, academic, research or non-commercial use, no part may be reproduced without written permission of the Chronic Disease Prevention Directorate, WA Department of Health. The WA Department of Health is under no obligation to grant this permission. Please acknowledge the WA Department of Health when reproducing or quoting material from this source.

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.

The *Consultation Draft of the Health Promotion Strategic Framework 2022-2026* is produced for discussion.

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 Mental Health Commission has provided advice on and contributed to relevant sections of the *Consultation Draft of the Health Promotion Strategic Framework 2022-2026*.

Contents

	Page
Foreword.....	3
Executive summary.....	4
1. Introduction	10
2. Our state of health	17
3. A framework for action	26
4. The 5-year plan.....	35
4.1 Reducing tobacco use and making smoking history	36
4.2 Halting the rise in obesity	42
4.3 Reducing harmful alcohol use.....	53
4.4 Preventing injury and promoting safer communities	60
5. Monitoring progress	66
6. Appendices	72
Appendix 1: Complementary WA Health and Government policies and strategies	73
Appendix 2: State, Commonwealth and International frameworks and policies	75
Appendix 3: Common policy areas, strategies and initiatives among State Government departments and agencies	81
Appendix 4: Broad indicator set for chronic disease and injury prevention in WA.....	83
7. References	84

Foreword

To be inserted in final document

Executive summary

The *Western Australian Health Promotion Strategic Framework 2022-2026* (HPSF) sets out a plan for reducing the prevalence of chronic disease and injury over the next 5 years, within the policy context provided by the *Final Report of the Sustainable Health Review 2019*.

Goal and scope of the HPSF

The goal of the HPSF is to lower the incidence of preventable chronic disease and injury in WA by facilitating improvements in health behaviours and environments.

The target populations of the HPSF are people who are currently well, and those who are at risk of developing disease or being injured due to common risk factors.

The HPSF focusses on the most common modifiable risk factors for preventable chronic disease and injury in WA. These risk factors are smoking, being overweight or obese, and harmful use of alcohol. Making lifestyle changes and creating safer environments also helps to reduce the risk of injury, so strategies to prevent chronic diseases and injury are included in the HPSF.

Understanding 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'.¹

The HPSF takes a primary prevention approach. The goal of primary prevention is to prevent diseases and injuries in the population before they happen.

The HPSF is complementary to, and does not duplicate, other WA health system strategic frameworks and guidelines which operate in other settings.

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

The HPSF is intended to guide WA health system priorities and policies for chronic disease and injury prevention, but the prevention of chronic diseases and injury requires involvement from many partners to positively influence the broader causes of health and wellbeing. All agencies

with an interest in protecting and promoting the health and wellbeing of Western Australians are encouraged to use the HPSF, particularly those that work in partnership with Government.

Understanding chronic disease and injury

Chronic diseases are health conditions that usually have a number of contributing factors, develop gradually over time, and have long-lasting effects.^{2, 3} Chronic diseases are the leading cause of illness, disability and early death in our community.^{2, 4} Common chronic diseases include cardiovascular disease, type 2 diabetes, kidney disease, some cancers, respiratory diseases, musculoskeletal conditions and mental health issues.²⁻⁵

Many chronic diseases share risk factors that can be prevented or modified.⁶ Modifying these risk factors can reduce the risk of developing chronic diseases.⁶

Chronic disease and injury have a heavy impact on individuals, the health system and the community more broadly. Putting aside the current COVID-19 pandemic, preventing chronic disease and injury is Australia's biggest health challenge. In 2015, it was estimated that nearly 40 per cent of the total burden of disease in WA could have been prevented by reducing or avoiding exposure to modifiable risk factors.⁷

Our state of health

Western Australians are living longer, healthier and more injury-free lives due to a range of factors, including effective health promotion campaigns, better living and working conditions, and advances in medicine and healthcare.

However, WA faces challenges as well. For example, obesity is increasingly prevalent in WA adults, and this will have significant consequences for the health system in coming years if the trend is not halted and eventually reversed. Our ageing population will put increased demands on health and other services in the community.⁸ Some population groups in WA are at greater risk of chronic disease and injury due to increased prevalence of risk factors. These include Aboriginal people, people who live in regional and remote areas of WA,⁹ people living with a disability,¹⁰ people who identify as lesbian, gay, bisexual, transgender or intersex¹¹ and some CaLD communities.¹²

In Australia, people with mental health issues experience a 20-year gap in life expectancy compared to the general population, in large part due to preventable chronic conditions.¹³ People who have a mental health issue or a drug addiction are more likely to have one or more risk factors for chronic disease and injury, and in turn people living with a chronic disease or who have been injured are more likely to experience a mental health issue.

The global pandemic has shown the importance of having a healthy lifestyle, as smoking¹⁴ and overweight and obesity¹⁵ are strongly associated with worse health outcomes from COVID-19. Community lockdowns that have limited how far people can travel have demonstrated the benefits of having close access to liveable neighbourhoods and open public space for physical activity and recreation.^{16, 17} Responding to the COVID-19 pandemic has also highlighted the need for all Western Australians to have easy access to reliable, easily-understood and culturally-appropriate health information.

Climate change will have an impact on chronic diseases and injury in WA.¹⁸ Extreme weather events increase the risk of injury, physical and mental illness, and death.¹⁸ Climate change also has important implications for the sustainability of our food systems. Measures to address the impact of climate change in WA can also improve population health.¹⁸ For example, urban design that encourages more people to use active transport will have the added benefit of reducing emissions and creating more liveable and sustainable environments.¹⁸

In 2015-16 in WA, it is estimated that common modifiable risk factors cost the WA health system a total of \$1.96 billion in hospital, non-hospital medical care and pharmaceutical costs for the treatment of associated chronic diseases and injuries.¹⁹ Injuries cost the health system \$909 million; around 9 per cent (\$181 million) of which was attributable to common modifiable risk factors.²⁰ The overall burden of chronic disease and injury is much higher when the impacts on personal lives, families, the workforce and the broader community are considered.

Prevention works. Keeping people well reduces demand on the health system, and helps it become more sustainable.²¹

WA has well-established health promotion programs that are effective in influencing behaviours, however behaviours that put people at risk of chronic disease and injury are complex and entrenched, and closely connected with the social determinants of health and our environments. Overcoming this challenge means that prevention needs to be comprehensive and sustained over the long term.

A framework for action

The priority areas for the HPSF are:

- reducing tobacco use and making smoking history
- halting the rise in overweight and obesity
- reducing harmful alcohol use
- preventing injury and promoting safer communities.

As strategies to halt the rise in overweight and obesity include measures to address nutrition and physical activity, they are considered together in the HPSF.

The HPSF is guided by 4 principles.

1. A comprehensive, whole-of-population approach
2. Intervening early and throughout life
3. Promoting equity and inclusivity
4. Strategic partnerships and workforce development

Domains for action

A comprehensive approach to health promotion needs a combination of strategies to address the causes of chronic disease and injury. The HPSF is guided by 9 domains for action.

1. Healthy policies
2. Legislation and regulation
3. Economic interventions
4. Supportive environments
5. Public awareness and engagement
6. Community development
7. Targeted interventions
8. Collaborative partnerships and building capacity
9. Research and evaluation

The 5-year plan

The 5-year plan sets out the strategic priorities for reducing tobacco use, halting the rise in overweight and obesity, reducing harmful alcohol use and preventing injury and promoting safer communities.

Monitoring progress

The WA Department of Health reports regularly against a range of chronic disease indicators specified in state and government-endorsed Australian and international frameworks. The SHR also calls for regular monitoring and reporting on a range of indicators, and these are included in the Department of Health's Public Health Indicator Set.

Research and evaluation are essential steps in the development, planning, implementation and assessment of robust evidence-based health promotion programs and policies. They ensure that health promotion programs are effective and that government resources are wisely invested. The WA Department of Health, with Edith Cowan University, has developed the Research and Evaluation Framework Implementation Guide to assist stakeholders that deliver health promotion programs to conduct research and evaluation.

The Department of Health tracks health promotion initiatives in WA in the Health Promotion Inventory. 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.

Monitoring progress in chronic disease and injury prevention is a complex task. The HPSF provides a conceptual framework of the steps in identifying and addressing a health problem that is caused by behavioural risk factors for chronic disease and injury.

The WA Health Promotion Strategic Framework 2022–2026

Goal: To lower the incidence of preventable chronic disease and injury in WA by facilitating improvements in health behaviours and environments		Target population: People who are currently well, and those who are at risk of developing disease or being injured due to common risk factors	
Guiding principles: <ul style="list-style-type: none">Comprehensive, whole-of-population approachIntervening early and throughout lifePromoting equity and inclusivityStrategic partnerships and workforce development			
Domains for action: <ul style="list-style-type: none">Healthy policiesLegislation and regulationEconomic interventionsSupportive environmentsPublic awareness and engagementCommunity developmentTargeted interventionsCollaborative partnerships and building capacityResearch and evaluation			
Priority areas:			
Reducing tobacco use and making smoking history <ul style="list-style-type: none">Reduce tobacco use in WA, particularly among populations at higher risk of harm due to tobacco useEliminate exposure to second-hand tobacco smoke where the health of others can be affectedStrengthen regulation to reduce supply of and access to tobacco productsStrengthen regulation of alternative nicotine and non-nicotine delivery products, including e-cigarettes		Halting the rise in overweight and obesity <ul style="list-style-type: none">Promote environments that support healthy eating and greater physical activity, to enable people to achieve and maintain a healthy weightPrevent and reverse childhood obesityMotivate behaviour to achieve and maintain a healthy weight among adultsIncrease availability and accessibility of quality, affordable and nutritious food for allIncrease the knowledge and skills necessary to choose healthy food and drinksEncourage and support increased levels of physical activity at all stages of life	
Reducing harmful alcohol use <ul style="list-style-type: none">Increase community awareness and prevent and delay uptake of alcohol by children and young peopleDevelop supportive environments to reduce demand for alcoholManage the supply and availability of alcohol		Preventing injury and promoting safer communities <ul style="list-style-type: none">Protect children and young people from injuryPrevent falls in older peopleImprove safety in, on and around waterReduce road crashes and road traumaPromote a safer built environment	
Monitoring progress: <ul style="list-style-type: none">Monitoring and reporting frameworksResearch and evaluationTracking health promotion activity in WATracking the benefits of prevention			

1. Introduction

1.1 The WA Health Promotion Strategic Framework 2022-2026

The *Western Australian Health Promotion Strategic Framework 2022-2026* (HPSF) sets out a plan for reducing the prevalence of chronic disease and injury over the next 5 years, within the policy context provided by 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.²²

Sustainable Health Review (SHR)^{22, 23}

A sustainable health system is one that is strongly focussed on and invested in prevention. With 8 Enduring Strategies and 30 Recommendations, the SHR seeks to drive a cultural shift away from a predominantly reactive, acute and hospital-based health system to one with a 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. To achieve this, the WA health system needs to reallocate funding and reorientate its services to prevention.

The SHR Final Report and Interim Report have identified priority public health areas for increased funding, which include halting the rise in obesity, reducing harmful alcohol use, continuing efforts to reduce the prevalence of smoking, and reducing health inequity for priority groups. 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 evidence-based policy priorities and areas for action to improve the health and wellbeing of Western Australians. The first HPSF was developed in 2007. This HPSF builds on the achievements of the past 15 years and looks towards the next 5 years, with policies aligned to the SHR and other key State and Australian preventive health frameworks.

1.2 Goal and scope of the HPSF

The goal of the HPSF is to lower the incidence of preventable chronic disease and injury in WA by facilitating 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 disease or being injured due to common risk factors.

These risk factors are smoking, being overweight or obese, and harmful alcohol use. What we eat, and our physical activity levels are also important risk factors for health and wellbeing. Strategies to improve nutrition and increase physical activity are considered together in the HPSF.

Making lifestyle changes and creating safer environments also helps to reduce the risk of injury, which is a major cause of preventable disability and death. For this reason, injury prevention is included in the HPSF.

The HPSF is complementary to, and does not duplicate, other WA health system strategic frameworks and guidelines.

1.3 Understanding health promotion and prevention

What do we mean by health promotion and prevention?

Health Promotion

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.'¹

Prevention

The HPSF takes a primary prevention approach.

The goal of primary prevention is to prevent diseases and injuries in the population before they happen. 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 (which aims to detect, and to reduce the impact of a disease or injury that has already occurred) and tertiary prevention (which manages the long-term impact of an ongoing illness or injury) are not within the scope of the HPSF. These settings for prevention are important, and are included in other state frameworks and policies in Appendix 1.

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

The HPSF provides broad strategic guidance to achieve the greatest gains in health and wellbeing for the WA population, and is used to guide WA health system priorities and policies for chronic disease and injury prevention.

However, the prevention of chronic diseases and injury is not limited to the health sector and requires involvement from many partners to positively influence the broader causes of health and wellbeing. All agencies with an interest in protecting and promoting the health and wellbeing of Western Australians are encouraged to use the HPSF, particularly those that work in partnership with government.

Organisations or groups which refer to the HPSF include:

- government departments and agencies
- local governments
- health professionals
- health peak bodies
- public and private sector workplaces
- trade and industry groups
- educational and research institutions
- not-for-profit organisations
- community groups
- the general public
- the media

Each risk factor section in the HPSF provides examples of evidence-based strategies that will help to improve health and wellbeing. How individual organisations choose to implement the HPSF's priorities will vary according to their responsibilities, priorities, settings and the population that they serve.

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.^{2, 3} Chronic diseases are the leading cause of illness, disability and early death in our community.^{2, 4} Examples of 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.²⁻⁵

Injury is a leading cause of preventable disability and death and is among the highest contributors to healthcare expenditure.²⁰ People who suffer minor injuries often recover completely,²⁴ but people who sustain serious injuries may experience lasting health problems including life-long disability.²⁴ Injuries have many causes, including falls, transport accidents, violence, burns, poisonings, drownings and intentional self-harm and suicide.²⁴

Many chronic diseases and injuries share common risk factors that can be prevented or modified.^{6,25} Common risk factors for chronic diseases, such as poor nutrition, physical inactivity and smoking, also increase the risk of injury by weakening the musculoskeletal system. Alcohol is also a major risk factor for injuries through alcohol-related falls, transport accidents, assaults and violence. Most people have at least one risk factor for chronic disease and injury, and many have several risk factors.²⁶ Having more risk factors is usually associated with higher levels of chronic disease.²⁷ Modifying these risk factors can reduce the risk of developing disease.⁶ Table 1 summarises the association between common risk factors and selected conditions.

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

Risk Factors	Conditions ^{3, 7, 28-35}									
	Cardiovascular diseases	Type 2 diabetes	Mental illness	Chronic kidney disease	Some cancers	Injury	Musculoskeletal	Respiratory infections and diseases	Oral diseases	Neurological conditions [†]
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.

NOTE: There are some minor inconsistencies between Tables 1 and 2. Table 1 shows the associations between the full range of known risk factors and health outcomes. Table 2 shows results from the WA Burden of Disease Study 2015 which quantifies a selection of risk factors and health outcomes.

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, preventing chronic disease and injury is Australia's biggest health challenge. Around half of all Australians are estimated to live with at least one common chronic condition, and around one in 5 have 2 or more common chronic conditions.³⁶ 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.⁷

Table 2 summarises the proportion of years of life lost prematurely to disease, disability or death (also called the burden of disease and injury) attributable to selected behavioural and biomedical risk factors.⁷ Tobacco use is the leading risk factor for disease, disability and death in WA, contributing to 9 per cent of total years of life lost prematurely.⁴ Tobacco use causes 39 separate diseases, including 19 cancers, 7 kinds of cardiovascular disease, chronic obstructive pulmonary disease (emphysema), musculoskeletal conditions, and asthma.^{4, 31}

Overweight and obesity comes a close second, contributing to 8 per cent of total years of life lost prematurely in WA. Overweight and obesity is linked to at least 35 diseases, including 13 cancers, cardiovascular conditions, type 2 diabetes, chronic kidney diseases, liver disease, and a range of musculoskeletal conditions.³⁷

Poor nutrition accounts for 7 per cent of total years of life lost prematurely in WA and is associated with a range of cardiovascular diseases, cancers, type 2 diabetes, chronic kidney disease, musculoskeletal conditions, vision disorders, and poor oral health.⁷

Alcohol use is the fourth leading risk factor, causing 5 per cent of preventable years of life lost in WA. Alcohol use causes cancer and contributes to a number of other health conditions including cardiovascular disease, mental health conditions, oral disease, and liver disease. Alcohol use is also a significant contributor to disability and premature death due to injury.⁷ 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.⁴

Table 2. Proportion (percentage) of burden of disease and injury attributable to selected risk factors, WA, 2015⁷

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

* Type 1 diabetes, Type 2 diabetes, other diabetes mellitus, other endocrine disorder.

NOTE: There are some minor inconsistencies between Tables 1 and 2. Table 1 shows the associations between the full range of known risk factors and health outcomes. Table 2 shows results from the WA Burden of Disease Study 2015 which quantifies a selection of risk factors and health outcomes.

Mental health issues are also a cause of illness in WA. One in 5 people aged between 16 and 85 will experience one of the common forms of mental illness (anxiety, affective or mood disorders, and substance use disorders) in any given year.³⁸ 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](#).

2. Our state of health

2.1 Our state of health

The final version of this section will include infographics

The majority of Western Australians enjoy good health

Western Australians are living longer and healthier lives due to a range of factors. Effective health promotion campaigns, safer and cleaner conditions for living and working, vaccinations for infectious disease, and advances in medicine and healthcare technology have all contributed to safer, healthier environments and lifestyles.

In WA, the average life expectancy at birth is 85 years for females and 81 years for males, in line with the Australian average.³⁹ The self-reported health of WA adults has continued to improve and 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.²⁵ This is the highest of any Australian state or territory.⁴⁰

WA adults also have a higher level of health literacy than adults in other Australian states or territories. 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.⁴¹

However, WA faces challenges as well

The prevalence of smoking in WA adults and teenagers has never been lower,^{25, 42} but new devices for inhalation of nicotine with appealing flavourings are now becoming popular. These products could addict a new generation to nicotine and provide a gateway to smoking tobacco, reversing decades of successful public health measures.⁴³

The number of adults living with obesity is increasing in WA. In 2002, 21 per cent of adults were estimated to be living with obesity.²⁵ In 2019, this had risen to 31 per cent.²⁵ During this period the number of WA adults who are overweight (but not obese) has remained constant. Overall, this indicates a shift by a significant number of WA adults, from being a healthy weight, to becoming overweight, and then obese, over time. If this trend is not halted and reversed, there will be implications for the health of Western Australians and the sustainability of the health system.³⁷ Although levels of harmful alcohol use in WA are decreasing, WA adults are lagging behind their counterparts from other states and territories.²⁵ The percentage of the population that consumes alcohol at harmful levels in WA is the second highest in the country, behind the Northern Territory.⁴⁴

Our population is ageing, and the proportion of older people relative to younger people is growing

Longer life expectancy, combined with WA's growing population, will bring new challenges. Between 2000 and 2021, the population of WA increased by 41 per cent from 1.9 million to 2.7 million.⁴⁵ It is estimated that WA's population will increase by a further 21 per cent to 3.25 million people by 2031.⁸

The proportion of older adults is increasing in WA relative to the rest of the population because of longer life expectancy and a decline in birth rates.⁸ The proportion of persons aged 60 years and over is projected to increase from 19 per cent in 2016 to 24 per cent in 2031.⁸ Between 2011 and 2016, the age group of people 65 years and older was growing faster than any other age group in WA.⁸

People aged 65 and over are more likely than the rest of the population to suffer from more than one chronic condition and are at a higher risk of falls-related injuries, with the trauma and disability they can cause.²⁵ The increase in numbers of older Western Australians will raise demand for health and aged care services, and the community and social support sectors.⁸

Some groups are at greater risk than others

Aboriginal people have higher rates of chronic diseases and injury and develop these diseases at a younger age compared to the general population. In WA, nearly 3 quarters (73 per cent) of the health gap between Aboriginal people and non-Aboriginal people is due to overweight and obesity (20 per cent), tobacco use (19 per cent), dietary risks (17 per cent) and alcohol use (17 per cent).⁹

Higher proportions of people who live in regional and remote areas of the state smoke, are overweight or obese, or drink at risky levels compared to people living in metropolitan areas. They are also more likely to suffer an injury. 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.³³

In Australia, only one in 4 people living with a disability think of themselves as being in 'very good' or 'excellent' health, compared to nearly 2 in 3 people without a disability.¹⁰ 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),¹⁰ and tend to have a higher prevalence of risk factors for chronic disease and injury.¹⁰

People who identify as lesbian, gay or bisexual are more likely to smoke and consume alcohol at risky levels than heterosexual people.⁴⁶ Transgender and intersex people are likely to have similar increased risks, however data for these groups are lacking. Some lesbian, gay, or bisexual, transgender or intersex (LGBTI) people 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.⁴⁶

Some culturally and linguistically diverse communities have a higher prevalence of risk factors for chronic disease and injury. This may be due to cultural and social reasons related to their country of origin; because they may be at greater risk of being disadvantaged; or due to psychological and social impacts on health relating to migration and settlement.¹² This has important implications for ensuring effective communication of health messages.

Mental health and wellbeing are closely connected to 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. In 2019, nearly one in 5 (17 per cent) of adults in WA reported having a mental health issue or a behavioural condition, up from 13 per cent in 2002.²⁵ In 2017-18, about one in 8 adults reported experiencing high or very high psychological distress.⁴⁴ 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.⁴⁷ Developing chronic disease and being injured also have an impact on mental health.

People who smoke are more likely to report suffering from high or very high psychological distress.⁴⁸ People living with obesity are at an increased risk of poor mental health, including depression and anxiety.^{49, 50} Alcohol plays a complex role in the development and progression of mental health outcomes.⁵¹⁻⁵³ Harmful alcohol use is associated with worse outcomes in terms of depression, self-harm and suicide risk, social functioning and health care use.⁵¹ 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.^{52, 53} In those who are alcohol dependent, the risk of depression doubles.⁵⁴ People with anxiety and depressive disorders are more than 4 times as likely to experience alcohol dependence, compared to people who do not experience these disorders.^{52, 53}

Being injured can cause significant mental health impacts, with depression, anxiety and post-traumatic stress disorder commonly reported post-injury.⁵⁵ Conversely, some people may engage in self-harm as a way to deal with mental distress.⁵⁶

In Australia, people with mental health issues experience a 20-year gap in life expectancy compared to the general population.¹³ 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.¹³

The [*Western Australian Mental Health Promotion, Mental Illness, Alcohol and Other Drug Prevention Plan 2018-2025*](#)⁵⁷ and the [*State Public Health Plan for Western Australia 2019-2024*](#)⁵⁸ 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*](#)⁵⁹ identifies the need to continue to build on and partner with programs that support healthy lifestyles and injury prevention.

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

The global pandemic has shed a new light on the importance of promoting healthy lifestyles, as smoking^{14, 60} and overweight and obesity⁶¹ are strongly associated with worse health outcomes and increased risk of mortality from COVID-19.^{14, 60, 61} Community lockdowns that have limited how far people can travel 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.^{16, 17}

The WA Department of Health monitored the [lifestyle impacts of COVID-19](#) throughout the WA community lockdown.⁶² Despite some variation in lifestyle impacts, in general, people who were in good or excellent health were less likely to take up unhealthy behaviours during the lockdown than people who were in 'fair' or 'poor' health.⁶² These findings reinforce the importance of maintaining healthy habits to protect against sudden changes in circumstances and environment with the potential to adversely affect health and wellbeing.

The WA Department of Health found that in WA, significant population level increases psychological distress during COVID-19 were not evident, which may be a result of WA avoiding significant community-based transmission and prolonged lockdowns during 2020.⁶³ However, this does not mean that individuals did not experience significant impact or distress, or that ongoing mental health impacts due to the pandemic will not be seen over the longer term. A drop in mental health-related presentations to emergency departments was observed in the early stage of the pandemic at some of WA's hospitals, which is more likely to have been due to patients wishing to avoid possible exposure to the virus in a hospital setting than any decline in need. Calls to mental health helplines increased by 30 per cent.⁶⁴

During lockdown periods in the early stages of the pandemic in 2020, the Government of WA provided advice and links to physical and mental health and wellbeing online (<https://www.wa.gov.au/organisation/departments/covid-19-coronavirus-community-advice>).

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

Climate change is described by the World Health Organization as the single biggest health threat facing humanity.⁶⁵ Climate change affects health and wellbeing through the increased intensity and frequency of extreme weather events, disruptions to the supply of critical goods and services such as food, water, electricity and sanitation, increases in infectious diseases, and pressures on mental health.¹⁸

Climate projections for WA show that the average annual temperature will continue to increase, and that annual rainfall will decline in the south-west and remain relatively unchanged in northern and central parts of the state. 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.⁶⁶

Extreme weather events (including heatwaves, more dangerous bushfire conditions, and cyclones) place people at increased risk of injury, illness and death.¹⁸ Heatwaves result in significant increases in heat-related deaths and injury, especially among people who work outdoors or who are otherwise at greater risk (particularly the young and the old, and people living with chronic health conditions).⁶⁷⁻⁶⁹ Air pollution and bushfire smoke linked to a hotter climate cause asthma and other respiratory symptoms.¹⁸

The trauma and stress of experiencing extreme weather events such as bushfires have been directly linked to mental health issues including post-traumatic stress disorder, depression and anxiety.¹⁸ The impact of long-term drought on the mental wellbeing of those living in rural and remote areas is well documented.⁷⁰

Climate change can affect food systems and worsen food insecurity by disrupting agricultural outputs and practices, food processing, and supply chains. In turn, these impacts can push up food prices, increase transport costs and reduce food production and delivery frequency.¹⁸ Higher prices for fresh and healthy foods may drive consumers towards increased consumption of cheaper, processed energy-dense and nutrient-poor foods.¹⁸ Developing a local sustainable food supply, can promote health and wellbeing and builds a more resilient food system.⁷¹ Additionally, encouraging the food supply and demand for food choices more in line with the *Australian Dietary Guidelines* would be more sustainable than current practices and would lower the risk of a range of chronic diseases.¹⁸

Most of WA's population lives in urban settings, which are hotter than surrounding countryside due to the heat-retaining qualities of buildings and paved surfaces.¹⁸ Developing sustainable, climate-resistant cities and suburbs by protecting and increasing the tree canopy, providing green public spaces, and facilitating active transport to reduce private transport use (and emissions), are among the planning and design elements that can help mitigate the effects of climate change.¹⁸ These changes to the built environment also have the benefit of making neighbourhoods and cities more liveable, and supporting the community's health and wellbeing more broadly by improving air quality, encouraging physical activity and active transport, improving mental health and community connectedness, and reducing road crash trauma.¹⁸

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. The WA Department of Health's [*Climate Health WA Inquiry: Final Report*](#)¹⁸ was prepared in response to the SHR, and has made recommendations to ready WA for outcomes expected to arise from climate change, and to reduce the health system's impact on the environment. The [*Western Australian Climate Change Policy*](#)⁷² sets out the State Government's wider plan for a climate-resilient community.

Health system costs of treating chronic disease and injury caused by common preventable risk factors are unsustainable

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, it is estimated that common modifiable risk factors cost the WA health system a total of \$1.96 billion in hospital, non-hospital medical care and pharmaceutical costs. The risk factors with the highest financial impact on the WA health system were overweight and obesity (\$510 million), high blood sugar (\$336 million), and high blood pressure (\$324 million).¹⁹ The WA health system spent a further \$306 million on treating diseases associated with tobacco use, and \$164 million on alcohol-related conditions.¹⁹ Diseases caused by dietary risks cost the WA health system \$286 million, and physical inactivity cost \$96 million to treat.¹⁹ In the same year, injuries cost the WA health system \$909 million, \$181 million of which was attributable to preventable risk factors such as alcohol use, child abuse and neglect, and intimate partner violence.¹⁹

The overall 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 considered. For example, while healthcare costs attributed to tobacco use in Australia 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.⁷³ 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.⁷³

2.2 The benefits of prevention

Prevention works. The SHR calls for increased and sustained focus on investment in public health, with prevention rising to at least 5 per cent of the total health budget by 2029.²² Helping people stay well reduces demand on the health system and makes it more sustainable.²¹ In addition to healthcare savings, prevention also delivers positive impacts for physical and mental health and wellbeing, social and health equity, social connection and workforce productivity. Evidence-based preventive measures generate cost savings over time that outweigh the costs of implementation.²¹ It is estimated that for every \$1 invested in preventive health interventions, \$14 is returned in savings for the health and social care sector.⁷⁴ Investment in legislative interventions can bring higher returns, with \$47 in health and social care savings per \$1 spent.⁷⁴ WA has well-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 need to be run and funded at levels, and over time periods, that 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 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, based on the assumption that they are 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



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 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 showed a 15 per cent increase in positive behaviour change among high-risk drinkers during the campaign.⁷⁸ As a conservative estimate, this equates to around 267,000 Western Australians taking some action. The campaign was very cost effective, at \$1.29 per person.⁷⁸

Taking a longer-term view, tobacco control shows how lives have been saved through effective legislation, policies and programs put in place over the past 5 decades. Without tobacco control measures as we know them in Australia, there would have been an estimated 392,116 lung cancer deaths between 1956 and 2015. Of these, 20 per cent (78,925 deaths) have been averted due to tobacco control. If past and current measures continue to have the expected effect, an estimated 1.9 million deaths or 67 per cent of predicted lung cancer deaths will be averted between 2016 and 2100. If smoking prevalence is reduced to 10 per cent by 2025, an additional 97,432 deaths could be averted from 2016 to 2100. With a decline in prevalence to 5 per cent by 2025, an additional 208,714 deaths could be averted between 2016 and 2100.⁷⁹ The figure below shows the annual number of cigarettes smoked per person in Australia since the 1920s, and how this has been influenced by a range of tobacco control measures introduced since the 1970s. Even with these advances, tobacco remains the leading cause of preventable death and disease in WA.

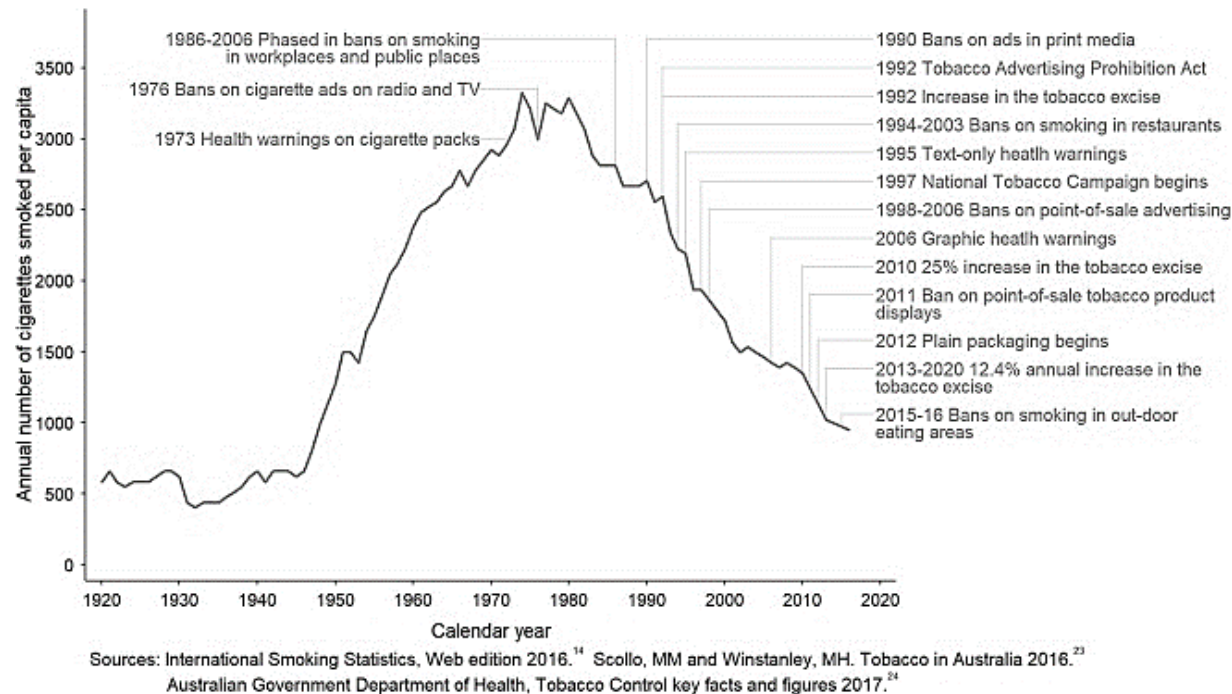


Figure 1. Timeline for tobacco control and annual number of cigarettes smoked per capita 1920-2016 in Australia⁷⁹

3. A framework for action

3.1 Priorities

The priorities of the HPSF are:

- making smoking history
- halting the rise in overweight and obesity
- reducing harmful alcohol use
- preventing injury and promoting safer communities.

3.2 Guiding principles

Four evidence-based principles underpin the HPSF.

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

A comprehensive, whole-of-population approach is fundamental to achieving the goal of lowering the incidence of chronic disease and injury in WA. Influencing issues and behaviours such as overweight and obesity, poor nutrition, and insufficient physical activity cannot occur through single interventions. The domains for action that make up a comprehensive approach are outlined later in this section.

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.⁸⁰

Principle 2: Intervening early and throughout life

A life course approach to health promotion recognises the opportunity to prevent 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 and in some cases, even before birth.^{81, 82} For example, maternal health during pregnancy, including weight, alcohol use and smoking, can affect child development and health later in life.^{81, 82} 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.⁸¹

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, pregnancy and parenthood provide signposts for behaviour change. Other opportunities arise as we approach mid-life and as the risk of developing a chronic disease increases with age. Moving into older age provides opportunities for promoting active and healthy ageing.⁸³

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.

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.⁸⁴

Figure 2 shows how an individual's physical and psychological factors (at the base of the diagram) are influenced by their socio-economic situation, their attitudes and health risk behaviours, and biomedical factors. Broader influences of society, access to health services, social support, and the built and natural environments can strengthen or undermine individual and community health.⁵

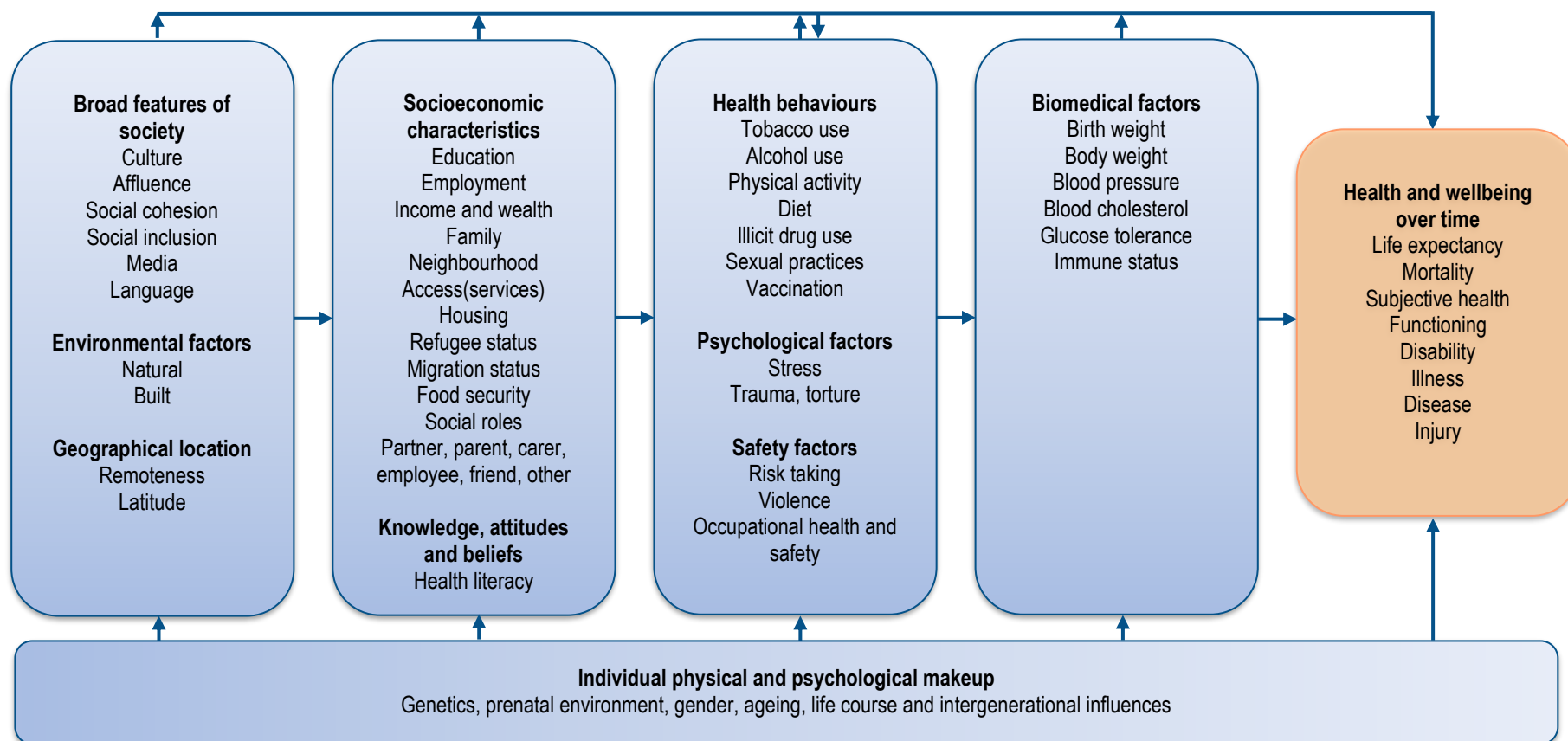


Figure 2. Determinants of health (Source: Australian Institute of Health and Welfare²⁶)

Some Western Australians face more barriers to achieving good health and wellbeing than others.^{5, 85} In general, people living in low socio-economic conditions, people living in regional and remote areas, people living with disabilities or mental health issues, and some CaLD communities are more likely to experience significantly poorer health than the general population.

The SHR has identified the need for the WA health system to work towards reducing inequity in health outcomes and access to care with a focus on Aboriginal people and families, CaLD people, and people living in low socio-economic conditions.²²

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, in some cases it may be necessary to develop additional programs to meet the needs of particular target groups.

Principle 4: Strategic partnerships and workforce development

Developing partnerships across the public sector and with local governments, as well as with organisations and agencies including not-for-profit organisations, peak professional organisations, workplaces and the research community are 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 WA Department of Health is well-positioned to act as a coordinating agency to assist in aligning policies and developing productive cross-sector partnerships. Appendix 3 provides an overview of key policy areas, strategies and initiatives across WA Government departments and agencies that contribute to chronic disease and injury prevention.

Building and maintaining a workforce with specialist skills in health promotion and chronic disease prevention is crucial for improving health in Western Australia. 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.²² The SHR also recommends a clearer orientation of workforce models towards community health needs, and interdisciplinary models of care,²² which provides scope for the better embedding of health promotion messaging in community and clinical care settings. This has already 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.

3.3 Domains for Action

A comprehensive approach to health promotion needs a combination of strategies to address the causes of chronic disease and injury. 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 real change.

- Healthy policies
- Legislation and regulation
- Economic interventions
- Supportive environments
- Public awareness and engagement
- Community development
- Targeted interventions
- Collaborative partnerships and building capacity
- Research and evaluation

Healthy policies

The WA Department of Health has a leading role in developing policies to improve health in WA, but as already noted, many important influences on health do not fall within its direct control. This means it is vital to ensure that health and wellbeing are considered in relevant public policy across Government, as well as in non-government sectors. Industry, 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 positively influences social norms about health behaviours.

Legislation and regulation

Laws and regulations are the cornerstone for protecting and improving public health.⁸⁰ Laws can be used to restrict the sale, promotion and use of harmful or potentially harmful substances such as tobacco or alcohol, or to protect public safety such as seatbelts in cars. The production, processing, transport, labelling and sale of food are all subject to regulations intended 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.

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 bringing down the prevalence of smoking, particularly in young people.⁸⁶ 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.^{22, 87, 88} This type of intervention can be introduced by states and territories, and is in place in the Northern Territory.⁸⁷ The SHR also supports the introduction of a levy on sugar-sweetened drinks which, like tobacco taxes, would need to be introduced by the Australian Government.

Supportive environments

Many environments, including our homes, neighbourhoods, 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 choices the easier or more attractive choices; by ensuring safe and equitable access to nutritious food; by providing safe and accessible active transport options; 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.

The role of local governments in public health planning

WA's *Public Health Act 2016* is the State's legislative framework 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 are 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.

Public awareness and engagement

Raising public awareness about chronic disease and injury can educate, prompt and motivate people to think about their lifestyles and behaviour. Engaging the public by providing reliable, consistent and motivating messages that are relevant at a personal, family, organisational or community level increases the effectiveness of complementary health promotion activities. Mass media campaigns can deliver public health

gains when they are well-designed and delivered with appropriate reach, intensity and over long enough to support and maintain behaviour changes.⁸⁹

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 important ways of increasing knowledge and awareness. Professional groups, health organisations and the media also have a vital role in disseminating information and contributing to the public conversation about health issues.

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 may work in partnership with communities, participating in decision-making and helping to control implementation of initiatives. In other settings, communities may prefer to set their own course, with health professionals acting as co-facilitators.⁹⁰ 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 need to include or be part of a larger suite of activities that consider the environmental and social determinants of health. They also need to consider and support the improvement of health literacy. Effective and targeted interventions are designed in consultation with the intended populations to ensure relevance and appropriateness.

Collaborative partnerships and building capacity

As noted in Principle 4, a partnership approach to tackling chronic disease and injury prevention is essential to ensure that the reach and impact of health-promoting policies and programs are as effective as possible. The need for developing partnerships is clear throughout the HPSF.

To ensure that interventions are effectively implemented and are able to be sustained over time, a capacity-building approach is adopted by the HPSF. In the context of health promotion, capacity building is the process of developing sustainable skills, resources and commitment to health improvement to prolong and multiply health gains.⁹¹ Successful capacity building supports the building of partnerships and environments

that will enable programs (and health gains) to be sustained over time.⁹¹ 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 (SIM)

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 thirty 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.

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.

Research and evaluation

Research and evaluation are central to the development of well-conducted health promotion policy and programs. High-quality 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

Tobacco control in WA is often referred to as a public health and prevention success story. 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.⁷ Sustained, comprehensive, and population-wide tobacco control efforts are needed to reduce the serious impact of tobacco use now and in the coming decades. 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

Tobacco use: key statistics

The final version of this section will include infographics

- The prevalence of WA adults aged 18 years and over who were daily smokers declined significantly between 2002 (17 per cent) and 2019 (9 per cent).⁹²
- In 2018/19, there were 13,087 tobacco-related hospitalisations; in 2017/18, 1,484 tobacco-related deaths in WA. ⁹³
- Between 2015-2019, 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).⁹⁴
- In 2018/19, 41 per cent of Aboriginal people (aged 15 years and over) were current smokers.⁹⁵
- In 2019, 9 per cent of WA adults aged 18 years and over were daily smokers (males 10 per cent, females 7 per cent).⁹²
- In 2019, nearly all WA children lived in a smoke-free home (99.6 per cent).²⁵
- In 2017, 5 per cent of WA school students (aged 12 to 17) smoked in the last week.⁴²
- In 2020, 22 per cent of audited tobacco retailers sold cigarettes to children.⁹⁶
- In 2019, daily smoking was higher in people living in low (18 per cent) compared to high socio-economic areas (5 per cent).⁴⁸

MORE INFORMATION

[Make Smoking History](#)

[WA Quitline](#)

[Quitline Aboriginal Liaison Team \(QALT\)](#)

Strategies

[National Tobacco Strategy \(years\) \(in development\)](#)

[National Preventive Health Strategy 2021-2030 \(in development\)](#)

[World Health Organization Framework Convention on Tobacco Control](#)

[WA Aboriginal Health and Wellbeing Framework 2020-30](#)

Resources

[Quit support](#)

[Quit toolkit](#)

[Resources for local governments](#)

[E-cigarettes – WA health website](#)

Data

[ABS - Smoking](#)

[AIHW – Tobacco Smoking](#)

[WA Health and Wellbeing](#)

[National Drug Strategy Household Survey 2019 - WA](#)

[Australian Secondary Students' Alcohol and Drug Survey 2017 - WA](#)

- In 2015, 10 per cent of WA women smoked while pregnant.⁹⁷ Smoking during pregnancy was the 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.⁹⁸
- In 2017, 14 per cent of WA school students (12 to 17 years) had tried an e-cigarette.⁴²
- On average current smokers die 10 years earlier than non-smokers.⁹⁹

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

In WA, the higher rate of tobacco use in some population groups contributes to significant health, social and financial inequalities. These include Aboriginal people, people living in lower socio-economic conditions, people who live in regional and remote areas, people with mental health issues, people who are homeless, people who identify as lesbian, gay and bisexual, older people, and prisoners.^{48, 95, 100, 101} There are also some population groups which are more vulnerable to the harms of use or exposure to tobacco use, such as pregnant women, infants and children, and people living with a chronic health condition.^{102, 103} 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.^{104, 105}

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 there has been a decline in tobacco use by Aboriginal people in WA, smoking rates remain high in comparison to other Western Australians. Smoking is estimated to cause of 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.¹⁰⁶ While evidence suggests that social norms in Aboriginal communities may contribute to high smoking rates, most Aboriginal people who smoke (70 per cent) want to quit.¹⁰⁷

Maintaining commitment to comprehensive, population-wide tobacco control approaches, with initiatives tailored to Aboriginal people is the most effective means of reducing tobacco use. Messaging that takes a family and community approach and encourages a change in social norms about quitting, and raises awareness about protecting children from second-hand smoke may have particular relevance, along with practical advice and support for quitting.¹⁰⁷ Aboriginal people should be involved in the development, implementation and evaluation of culturally appropriate tobacco control programs.¹⁰⁸

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.¹⁰⁹ There is strong evidence that smoke-free legislation and regulations have contributed to improvements in health outcomes for smokers and non-smokers.¹¹⁰ The introduction of smoke-free laws has also led to a significant shift in social norms regarding smoking in public places and has had a flow-on effect to people's homes and cars.^{25, 111} However in populations with higher risk of tobacco use, smoking in the home remains high.¹¹²

While enclosed public places have been smoke free for some time, many outdoor shared public places and spaces in WA are also becoming smoke free, whether through State legislation, or by local governments as part of their public health planning.^{113, 114} There is generally strong compliance with smoke-free legislation and it is well supported by the public.^{110, 115} 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, maintains smoking behaviour and undermines quit attempts.¹¹⁶⁻¹¹⁸ It also perpetuates the idea that tobacco is a normal and acceptable consumer product¹¹⁶⁻¹¹⁸ rather than a dangerous product that kills 2 out of 3 long-term users.⁹⁹ 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.^{102, 108, 117, 119} These can include regulatory approaches that prohibit or limit sale and supply of tobacco products in certain places, or through means such as 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 facilitate the effective operation of state tobacco laws relating to sale and supply of tobacco products.¹¹³

The supply of tobacco products to children remains a concern. Most WA children aged 12 to 17 years who smoke get their cigarettes from their friends,⁴² but some tobacco retailers sell cigarettes to people aged under 18, although this has improved over time.^{96, 120} In 2020, 22 per cent of audited tobacco retailers in WA sold cigarettes to teenagers under 18 years.⁹⁶ Continuing to monitor and enforce tobacco control legislation that prohibits the sale of tobacco to children remains a priority.

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

In recent years a range of alternative nicotine and non-nicotine delivery products have been developed, advertised and sold widely. E-cigarettes are the most common alternative nicotine and non-nicotine delivery device, but they can exist in other forms such as heat-not-burn products and pouches which release nicotine for absorption through the lining of the mouth. E-cigarette devices use battery-powered heating-systems to heat e-liquids which may or may not contain nicotine to produce an aerosol (often called a vapour) for inhalation. There is currently insufficient evidence to support claims that e-cigarettes assist smokers to quit, or are a safe alternative to tobacco cigarettes.¹²¹

In WA, sale of e-cigarette devices with or without nicotine by tobacco or general retailers is prohibited. People wishing to obtain nicotine for use in e-cigarettes for smoking cessation may only do so with a prescription from a registered medical practitioner. In the USA the surge in use of e-cigarettes by teenagers has been described as an epidemic. This underlines the urgency of preventing the uptake of e-cigarettes by children and young people in WA.^{102, 122} Using e-cigarettes provides a gateway to nicotine addiction, increases the likelihood of starting to smoke tobacco, and exposes users and bystanders to harmful chemicals.¹²³ E-cigarettes also renormalise smoking, increase nicotine dependence and encourage dual tobacco and e-cigarette use.¹²³ Nicotine is also a highly toxic poison even in small amounts.¹²³

There is strong support for in WA for restricting the use of e-cigarettes in public places similar to the current restrictions for tobacco cigarettes (69 per cent).¹²⁴ Policies 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. Healthy policies

- Support and encourage the development and implementation of smoke-free policies (including restrictions on the use of e-cigarettes), particularly in health and community settings accessed by groups at higher risk of tobacco use and environments where children and people vulnerable to the harmful effects of smoking are exposed to tobacco smoke.
- Develop and implement measures to protect public health policy, including tobacco control policies, from tobacco industry interference.
- 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 2021–2030* (to be released) and the *WHO Framework Convention on Tobacco Control*.

2. Legislation and regulation

- 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 are present and accessed by groups at higher risk of tobacco use.
- Support further regulatory initiatives by the Australian Government, in alignment with the *WHO Framework Convention on Tobacco Control*, including initiatives to protect tobacco control policies from industry interference, and initiatives to address ingredients disclosure, regulation of ingredients, additives and cigarette design features.

3. Economic interventions

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

4. Supportive environments

- Encourage evidence-based smoking cessation support to be embedded in routine clinical care in health and community settings.
- Eliminate exposure to second-hand smoke (including to aerosols from use of e-cigarettes) in health and community settings, workplaces and public places, especially those accessed 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.

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. Strategic coordination, building partnerships 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 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.

4.2 Halting the rise in obesity

Obesity is a chronic, relapsing, progressive condition that leads to physiological changes and ill health over time.¹²⁵ Obesity is the result of many complex systems, including food supply, transport, urban design, marketing, communication, education, health, trade, legal and economic factors.¹²⁶ All could be re-oriented for better population and environmental outcomes.¹²⁶

The SHR notes that obesity is having an increasing impact on population health and is undermining the long-term sustainability of the WA health system.²²

4.2.1 A snapshot of obesity, nutrition and physical activity in WA

A person is considered overweight if they have a body mass index (BMI) of 25.0 to 29.9 kg/m², and obese if they have a BMI of 30.0 kg/m² or more.¹²⁷

Overweight and obesity: Key statistics

The final version of this section will include infographics

- Almost 3 in 4 WA adults (72 per cent) are overweight or obese.²⁵
- One in 4 WA children (23 per cent) aged 5-15 years are overweight or obese,¹²⁸ placing them at increased risk of premature chronic disease.¹²⁹
- The proportion of WA adults living with obesity has risen from 21 per cent in 2002 to 31 per cent in 2019.²⁵
- Just over one third of WA adults and children's daily energy intake comes from unhealthy food and drinks, such as fast food and sugary drinks.¹³⁰
- In 2019, 91 per cent of adults and 84 per cent of children in WA did not consume sufficient serves of vegetables per day for good health.^{25, 128}
- In 2019, 54 per cent of adults and 21 per cent of children in WA did not consume sufficient serves of fruit per day for good health.^{25, 128}
- 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.¹³¹

Strategies

[WHO – Obesity and Overweight](#)

[National Preventive Health Strategy 2021-2030](#) (in development)

[National Obesity Strategy](#) (in development)

Resources

[Australian dietary guidelines](#)

[Physical activity and exercise guidelines](#)

[LiveLighter®](#)

[LiveLighter® resources-physical activity and healthy eating](#)

Data

[ABS – Overweight and obesity](#)

[AIHW – Overweight and obesity](#)

[WA Health and Wellbeing Surveillance System](#)

[ASSAD WA Physical Activity and Sedentary Behaviour](#)

- WA secondary school students are exposed to an average of 37 advertisements for unhealthy discretionary food or drink while travelling one-way on public transport to school each day.¹³²
- In 2019, 42 per cent of WA adults and 62 per cent of WA children (5 to 15 years) did not engage in enough physical activity for good health.^{25, 128}
- In 2019, 35 per cent of WA children did not meet the guidelines for limiting sedentary screen time.¹²⁸
- Two-thirds of WA adults spent 14 or more hours per week (2 hours per day) on sedentary screen time activities in 2019.²⁵
- 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)^{7, 37}

5.1.2 Priorities for halting the rise in obesity in WA

The prevalence of overweight and obesity is not equally distributed in the community. People living with low incomes, disabilities, in regional and remote areas, and Aboriginal people, are more likely to be affected by overweight and obesity.¹³³ Obesity prevention therefore requires partnerships across the health system, all levels of government, non-government organisations, industry, and the community, to address social determinants of health such as access to education, employment, affordable housing, food and health care.¹³⁴

Approaches for preventing overweight and obesity should also recognise that increasing physical activity and healthier eating may improve health outcomes, including mental wellbeing, independent of weight loss.^{135, 136}

Many factors combine to cause overweight and obesity. This means that there is some overlap between priorities and strategic directions.

Promote environments that support healthy eating and active living, to enable people to achieve and maintain a healthy weight

Overweight and obesity are closely linked with the environments in which people are born, live, work, learn, play, and age.¹³⁷ Today's environment has been referred to as obesity-promoting or 'obesogenic' as it encourages people to consume more energy than their bodies need, and to be less physically active.¹³⁸

Food environments

Our food environments are shaped by the food supply, food composition, food prices and affordability, nutrition labelling, marketing and promotions, and access to healthy and unhealthy food retail outlets.¹³⁹

Our current food environments promote excess energy intake from cheap, widely available and heavily promoted energy-dense, nutrient-poor, and/or highly processed products referred to as discretionary food and drinks, that should be limited or avoided in a healthy diet.¹⁴⁰ 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 food groups, such as vegetables, fruit and wholegrain cereals.^{141, 142}

Globally, food supply systems do not support the consumption of healthy diets and the transformation of our food systems is recommended to avert continued increases in chronic disease burden and environmental degradation, in keeping with the UN Sustainable Development Goals.^{71, 143} A food supply that supports healthy dietary patterns for all members of society requires combined efforts across all segments of the food system, including food production, processing, trade, distribution, food service, marketing and retail.

Increased consumer demand for discretionary and convenience food and drinks is driven by highly resourced industry advertising campaigns that use multiple platforms to effectively influence purchasing behaviours and dietary intakes, including children's preferences and intakes.¹⁴⁴⁻¹⁴⁶

The *National Interim Guide to Reduce Children's Exposure to Unhealthy Food and Drink Promotion*¹⁴⁷ 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.¹⁴⁸

Supermarkets influence consumer purchasing behaviours by applying established marketing techniques such as product positioning and price discounting. In Australian supermarkets, food and drink promotions are overwhelmingly for unhealthy discretionary items.¹⁴⁹ 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 *Australian Dietary Guidelines*.¹⁴⁰

Unhealthy food and drink sport sponsorship undermines the health promoting benefits of sport.¹⁵⁰ A majority of parents report feeling that elite sports sponsorship influences their children, and that most children want to buy their sponsor's products.^{151, 152}

The COAG Health Council has published recommendations for healthy food environments in sport and recreation and hospital and health care settings.^{153, 154}

Active living

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 provides many benefits to physical and mental health. Creating environments that support physical activity 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); and
- creating more public open space and green space to facilitate social connectedness and recreational activity, including tree canopy urban greening on transport corridors).¹⁵⁵

Local governments, being closest to their communities, have a vital role in creating healthy and equitable spaces and places.^{156, 157} As recommended by the SHR²² and elsewhere,¹⁵⁸ it is important that health and wellbeing are considered in regulations, policies and local planning decisions that affect land use. Built environments that support and encourage incidental movement and physical activity by all members of the community regardless of age, gender, ability and cultural background, are critical to providing whole of population benefits in preventing chronic disease and injury.

Prevent and reverse childhood obesity

Childhood obesity affects all aspects of child development, physical health, social and emotional wellbeing¹⁵⁹ and is associated with an increased risk of obesity in adulthood.^{160, 161} 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.¹⁶²

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.¹⁶³ Following birth, the first 1,000 days of life are also a critical time that can have lifelong impacts on child health and wellbeing.^{22, 164}

Infant and early feeding practices determine a child's growth trajectory and can shape the development of a child's longer term food preferences.^{165, 166} Breastfeeding provides social and health benefits for the child and mother, including a reduced risk of child obesity.¹⁶⁷ Breastfeeding initiation rates in WA are high (86 per cent in 2019)¹²⁸ but environmental strategies and supports are needed to encourage and enable mothers to continue to breastfeed for longer.^{140, 168}

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.¹⁶⁹

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 provide important opportunities to facilitate healthy eating and physical activity through the development of policies, education, and resource support.¹⁷⁰ Schools are effective settings for nutrition education and promotion in children and young people.^{171, 172} 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.¹⁷¹

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. 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.^{172, 173}

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.^{174, 175} 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 educating the public on healthy lifestyle behaviours.

The concept of people living with obesity but being 'metabolically healthy' is misleading. 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 healthy weight.¹⁷⁶ The risk of chronic illness 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.¹⁷⁷

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.⁵⁰ 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.⁵⁰ Weight bias can translate into discrimination and inequities in educational settings, workplaces, health care settings 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, to support respectful conversations about weight. Depictions or images of people living with overweight or obesity must be positive and supportive.^{50, 178}

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.¹⁷⁹ Nationally, between 4 and 13 per cent of the population are estimated to be food insecure, although in some populations this is much higher, with as many as one third of Aboriginal and Torres Strait Islander people reporting food insecurity, depending on location.¹⁸⁰⁻¹⁸²

The causes of food insecurity are systemic, with poverty being the major determinant. Addressing food insecurity requires efforts across multiple sectors and tiers of Government including but not limited to social support services, housing, education, training, employment, agriculture, and transport.¹⁸³

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.¹⁸³

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

Australians are increasingly exposed to conflicting nutrition messages and misinformation, particularly with the rise of social media and influencers. The *Australian Dietary Guidelines*¹⁴⁰ are based on extensive scientific evidence,¹⁸⁴ take account of Australian eating patterns¹⁸⁵ and recommend the best approach to eating for a longer and healthier life.¹⁴⁰ However, most Australians' eating patterns do not meet these Guidelines.⁴⁴

Socio-economic differences in nutrition knowledge can contribute to inequalities in food purchasing choices, including a greater consumption of highly-processed foods.^{186, 187} Lower levels of food literacy are more common among men, the unemployed, and people who have completed less formal education.¹⁸⁸ 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.¹⁸⁹ Increasing food literacy skills such as food planning, shopping, meal preparation and confidence in cooking may assist in improving dietary choices.¹⁹⁰

Providing credible, easily-understood nutrition information, for example in the media, on menus and on food labels, can support people to make 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,¹⁹¹ as recommended by the World Health Organization.¹⁹²

Encourage and support increased levels of physical activity at all stages of life

A substantial number of Western Australians are not sufficiently active for good health.^{25, 128}

People of all ages, cultures, and abilities need to be encouraged and supported to increase physical activity in line with *Australia's physical activity and sedentary behaviour guidelines*.¹⁹³ Increasing levels of physical activity in people who are currently inactive is also an important goal for public health.^{194, 195}

Sedentary behaviour is associated with poor health outcomes, independent of physical activity levels.¹⁹⁶ 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 with movement throughout the day. This may include incidental physical activity while travelling, working, playing, or carrying out household chores; by walking or cycling for leisure, or through structured exercise.¹⁹³

Physical activity requirements change over the life course. During childhood it is critical to develop basic 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 over the lifecourse.¹⁹⁷ Ongoing physical activity is important for maintaining and improving mobility, strength, balance, and protecting against falls as we age.¹⁹⁸

There are many potential barriers to participation in physical activity including cost, lack of access to appropriate facilities, long working hours, perceived or real threats to safety, a lack of social support, and insufficient 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 engaging in physical activity than others.¹⁹⁹

Interventions should support all members of the community have equitable, accessible, safe, convenient and affordable options to incorporate physical activity into their daily routines.²⁰⁰ The design of neighbourhoods and cities is an important influence on whether and how people can lead healthy lifestyles. Supportive environments, particularly the built environment, play a critical role in enabling physical activity.

4.2.3 Strategic directions for halting the rise in obesity in WA

1. Healthy policies

- Support and encourage the development and implementation of policies that support achievement of the Australian Dietary Guidelines 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 health services, 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 physical activity and reduce sedentary behaviour.

2. 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 Australian Dietary Guidelines, 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 physical activity and sedentary behaviour, including those that address planning, transport, land use and the built environment.

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 dietary patterns 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 planning to ensure urban design and infrastructure promotes and supports healthy dietary patterns, increases local access to healthy food and drink, and reduces children's exposure to unhealthy food outlets.
- Facilitate the creation of health-promoting environments that support development of fundamental movement skills, increase physical activity, and reduce sedentary behaviours.
- Work across government, key sectors, and the community to encourage and support changes to the environment that facilitate and increase intentional and incidental physical activity.
- Work with key food system stakeholders to improve the production, availability, relative affordability, acceptability and promotion of healthier food and drinks.

5. Public awareness and engagement

- Invest in sustained, evidence-based state-wide 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 dietary patterns.
- 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 dietary patterns, 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 healthy dietary patterns 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.
- 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 engage in physical activity, 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. Strategic coordination, building partnerships 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, increasing physical activity levels and reducing sedentary behaviour.
- Strengthen, upskill and support relevant parts of the workforce (for example, allied health, nutrition, child health, child care, public health, 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 physical activity 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 activity, 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 dietary patterns, physical activity 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 healthy pre-natal booking weight, and breastfeeding.

4.3 Reducing harmful alcohol use

Alcohol consumption in WA is high by national and world standards.^{54, 57} 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.⁵⁷ 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.^{22, 57}

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 is lead 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 have different contributing responsibilities, such as the Department of Local Government, Sport and Cultural Industries through its administration of the *Liquor Control Act 1988*, and WA Police, which leads enforcement activities.

The SHR includes a recommendation to reduce harmful alcohol use by 10 per cent by July 2024.²² This will require sustained focus and investment in evidence-based strategies and policies, supported by strong cross-sector collaboration and partnerships.

4.3.1 A snapshot of alcohol use in WA

Alcohol Use: Key Statistics

The final version of this section will include infographics

- Harmful levels of alcohol use have also decreased over time, from approximately 1 in 3 adults in consuming more than 2 standard drinks on any given day in 2002 to 1 in 4 adults in 2019.²⁵
- In 2019, 3 in 4 WA adults consumed alcohol in the last 12 months⁹⁸ with 2 in 5 drinking to get drunk.²⁰¹
- From 1984 (80 per cent) to 2017 (42 per cent) the number of young people (12 to 17 years) who consumed alcohol in the past year significantly reduced.²⁰²

MORE INFORMATION

[Action on Alcohol in WA](#)

[FASD Hub](#)

Strategies

[2020 Australian Guidelines to Reduce Health Risks from Drinking Alcohol - Summary](#)

[WA Mental Health Promotion, Mental Illness, Alcohol and Other Drug Prevention Plan 2018-25](#)

[Working Together: Mental Health, Alcohol and Other Drug Engagement Framework 2018 – 25 and Toolkit](#)

[National Alcohol Strategy 2019–28](#)

[WA Alcohol and Drug Interagency Strategy 2018-2022](#)

Resources

[Alcohol Think Again](#)

[Strong Spirit Strong Mind](#)

[SDERA Resources](#)

[Managing Alcohol in Our Communities: A Guide for Local Government](#)

Data

[ABS – Alcohol Consumption](#)

[AIHW – Alcohol Risk and Harm](#)

[National Drug Strategy Household Survey - WA](#)

- In 2019, people living in regional and remote areas were more likely than people in major cities to drink alcohol at risky levels.⁴⁸
- In 2019, WA males were significantly more likely than WA females to drink at risky levels (long-term harm 38 per cent compared to 15 per cent; short-term harm 19 per cent compared to 6 per cent).¹²⁸
- In 2019, more than 1 in 4 (26 per cent) Western Australians drank alcohol in quantities that placed them at risk of injury.²⁰¹
- In 2019, Aboriginal people (29 per cent) were more likely to abstain from alcohol than other Australians (23 per cent).⁴⁸
- Between 2007 and 2019 the proportion of pregnant women abstaining from alcohol increased from 40 per cent to 65 per cent.⁴⁸ Of those who consumed alcohol, most (96 per cent) usually consumed one to 2 standard drinks on a typical day they drank.⁴⁸
- 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).²⁰³
- 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.^{201, 204}
- Some people, including young 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.¹⁰¹

Alcohol use and injury

Alcohol use is the most significant risk factor for injuries, increasing the risk of falls, assaults and road crashes. One in 4 (25.9 per cent) Western Australians drank alcohol in quantities that placed them at risk of injury, at least once a month in 2019.⁴⁸ In Australia in 2017, 1,646 people died as a result of an injury related to alcohol.²⁰⁵ 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 is involved in up to 65 per cent of family violence incidents reported to the police.²⁰⁶ Harmful alcohol use is a contributing factor to the prevalence and severity of family and domestic violence, and adds to the burden on community, health and other frontline systems. From 2010 to 2019, 44 per cent of domestic and family violence trauma admissions to Royal Perth Hospital, involved documented alcohol use.²⁰⁷ 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 reducing harmful alcohol use in WA

Increase community awareness and prevent and delay uptake of alcohol by children and young people

The risks associated with alcohol are often underestimated. People often do not recognise when they are consuming alcohol in quantities damaging to their health, or to identify themselves as problem drinkers.²⁰⁸ However, the greatest number of alcohol-related problems occur in relation to people who drink at risky levels only occasionally.²⁰⁹ A large proportion of the general drinking population has this pattern of use.

Sustained, population-wide public education strategies are a key part of a comprehensive approach to increasing community awareness of 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.⁵⁷ Population-wide public education is a cost-effective strategy within a demand, supply and harm reduction framework.

Drinking behaviours are shaped by attitudes and perceived cultural and social norms regarding alcohol use.²¹⁰ The widespread presence of alcohol advertising, and inclusion of alcohol in everyday activities and settings establishes social norms, values and expectations.²¹¹ 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 increases positive attitudes to alcohol use, and influences the establishment of alcohol-related behaviours in youth and early adulthood.^{212, 213} Early initiation to alcohol use can be a risk factor for future harmful drinking, increasing the risk of physical, social and mental health problems over the lifespan.²¹⁴ Evidence shows that exposure to alcohol-related prompts has a cumulative effect which increases the likelihood of underage drinking and consuming larger amounts of alcohol compared to those who are exposed less frequently.^{215, 216} Initiatives to reduce harmful alcohol use in all ages and prevent uptake of alcohol consumption by children and young people would benefit from policies that aim to limit cumulative exposure to alcohol-related reminders in the community.

Develop supportive environments to reduce demand for alcohol

A comprehensive approach to reducing the demand for alcohol requires effective policy, supportive action and creating systems and environments that reinforce positive health behaviours, as well as addressing the broader social determinants of health

Supportive environments can be created in a number of ways. The introduction of health warning labels on alcohol beverage containers about drinking in pregnancy provides clear information to consumers about some of the health risks of drinking. Economic policy to standardise alcohol pricing and restricting exposure to alcohol advertising also reduce demand for alcohol, particularly in more vulnerable population groups. Local governments and communities have an important role in shaping an environment that supports healthy behaviours.

There is strong international and Australian evidence to show that controls on price, such as a minimum unit floor price on alcohol, are among the most cost-effective measures for reducing alcohol consumption and harm.^{212, 213} Minimum unit floor pricing, which was adopted in the Northern Territory in 2018, works by setting a minimum price for alcohol based on the number of standard drinks it contains.^{215, 216} Increasing the cost of cheap alcohol by having a minimum unit price mainly affects those who drink at harmful levels, while having little impact on moderate drinkers.^{87, 88} The introduction in WA of a minimum unit floor price for alcohol with regular adjustments for inflation has been recommended by the SHR. In a 2019 survey, 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.^{48, 203}

Establishing supportive settings that reinforce healthy cultural norms is part of a comprehensive approach to reducing harmful alcohol consumption. The recent removal of alcohol advertising from WA's public transport infrastructure is an important initiative to reduce exposure of young people and the wider community in a setting that large numbers of Western Australians interact with on a daily basis.²¹⁷ 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 consumption and related harms.^{87, 88}

Under the *Public Health Act 2016*, local governments will be required to produce local public health plans to promote health in their district, in alignment with the *State Public Health Plan*, which identifies reducing harmful alcohol use as a state-wide priority. 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, town planning to create safer environments, engaging in liquor licensing processes, 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.²¹⁸ Effective management and control of alcohol availability is therefore a vital component of a comprehensive approach to reduce alcohol-related harm and ill-health.

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. The WA system has a variety of licence types, each with different conditions about how alcohol can be traded or served (such as opening hours, or the requirement to sell alcohol with a meal). These features of a liquor licence can either increase or minimise the risk of harm. 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 home, have shown rapid growth 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.^{219, 220}

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

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

1. 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.
- 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 sports, arts and community events, on social media and government-owned infrastructure including public transport.
- Support the development and implementation of policies that prevent children's exposure to alcohol use and promotion of alcohol.

2. 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 adolescents 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.

3. Economic interventions

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

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 state-wide 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.
- Increase public awareness and understanding of the 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, CaLD people, youth and women who are pregnant or breastfeeding.
- Implement strategies to increase community and stakeholder awareness of, demand and support for evidence-based alcohol-related harm prevention strategies, including legislation, policies and community-based health promotion initiatives.
- Promote equitable access to reliable, practical and culturally-appropriate 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 alcohol use and alcohol-related harm.

7. Targeted interventions

- Complement population-based approaches with targeted interventions that are culturally-appropriate and address the needs of people at higher risk of alcohol-related harm.
- Promote the adoption of a whole-of-school approach to preventing alcohol use among children and young people.
- 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 alcohol use.

8. Strategic coordination, building partnerships 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 alcohol-related harm.
- Strengthen, upskill and support relevant parts of the public health, broader health and non-health workforce to include strategies 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 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.

[Know INJURY](#)**Strategies**[National Injury Prevention Strategy 2020–2030](#)[Injury Matters Guide to Promoting Safety and Preventing Injury for Local Governments](#)[Australian Water Safety Strategy 2030](#)**Resources**[Kidsafe WA](#)[Royal Life Saving WA](#)[Injury Matters](#)[Heart Foundation - Healthy Active by Design](#)**Data**[AIHW – Injury](#)[WA Health and Wellbeing](#)

4.4 Preventing injury and promoting safer communities

Most injuries are predictable and preventable. 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 the life course.

The WA Department of Health works with a range of injury prevention stakeholders to promote safer communities. The Department takes a lead role in policy development for child safety, falls prevention and water safety. In areas led by other agencies, including road safety, mental health, family and domestic violence, occupational health and safety and product safety, the Department provides support by offering a skill base, 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. Know Injury provides ongoing networking, learning and development opportunities to in injury prevention in WA.

4.4.1 A snapshot of injury in WA

The final version of this section will include infographics

- The prevalence of WA adults sustaining 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 5 in 2019.²⁵
- In WA each year, injuries cause almost 1000 deaths, 70,000 hospitalisations and 250,000 emergency department visits.²²¹⁻²²⁴
- In 2018, injury was the leading cause of death for Western Australians under 45 years.²²⁵
- The top 5 causes of injury-related death in WA in 2014 to 2018 were suicide and self-inflicted injuries, poisoning, transport, falls, and other unintentional injuries.²²⁶
- The leading cause of injury related death by age group was transport injuries for children 0 to 14 years, suicide and self-inflicted injuries for people 15 to 64 years, and falls for people 65 years and over.²²⁶

- The top 5 causes of injury-related hospitalisations in WA in 2015 to 2019 were falls, other unintentional injuries, transport, self-harm, and interpersonal violence and assault.²²⁷
- The leading cause of injury related hospitalisations for all age groups was falls.²²⁷ In 2018, falls accounted for 42,384 emergency department admissions.²²⁸
- In WA, Aboriginal people are 3 times more likely than non-Aboriginal people to be hospitalised or to die because of an injury.^{229, 230}

Alcohol consumption 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.²²⁴ In 2015 in Australia, alcohol was responsible for 22 per cent of the burden of injury due to road traffic crashes, and 14 per cent of the burden of injury due to suicide and self-inflicted injuries.²³¹ Introducing effective strategies to reduce harmful drinking in the community with a have a positive impact on the amount of injury caused by alcohol use. Section 4.3 of the HPSF discusses priorities and strategic directions for reducing harmful alcohol use.

The SHR calls for the development of a health system action plan for alcohol-related violence, aligned to other relevant State strategies including the [WA Alcohol and Drug Interagency Strategy 2018–2022](#).

Suicide and self-harm

Suicide is the leading cause of death in people aged between 15 and 44.²³² Three-quarters (75 per cent) of people who take their own life are male,²³² and in WA the suicide rate for Aboriginal people is 3 times higher than for non-Aboriginal people.²³³ The Mental Health Commission has developed the [Western Australian Suicide Prevention Framework 2021 – 2025](#), which sets directions for action to reduce the rate of suicide attempts and death by suicide in Western Australia.²³⁴ The Framework calls for an integrated, cross-sectoral, evidence-informed approach to suicide prevention activity. The Framework recognises the need for a mix of state-wide and locally tailored activities, programs and services that are culturally-appropriate, compassionate and consider the lived experience of individuals and their families.

Interpersonal violence

Interpersonal violence, including assault, family and domestic violence, and sexual violence are leading causes of injury in WA.²²⁷ [Path to Safety: Western Australia's strategy to reduce family and domestic violence 2020–2030](#),²³⁵ led by the Department of Communities WA, has a goal of reducing family and domestic violence in Western Australia. The strategy calls for partnerships at all levels of government, and with not-for-profit organisations, justice services, industry, and the community. The strategy prioritises Aboriginal family safety.²³⁵

4.4.2 Priorities for preventing injury and promoting safer communities in WA

Protect children and young people (from birth to 17) from injury

Injury is a leading cause of disability and death in children and young people.⁴ Children have a right to be safe and protected from being injured. The main causes of injury-related death for children and young people are transport accidents, suicide and self-inflicted injuries, assault and drowning.²²⁶ A variety of age-appropriate strategies are needed to prevent injuries across from infancy to early adulthood, due to the very wide range of developmental changes that occur in this age group (including increasing levels of independence), and the need to enable children to explore the world around them to build awareness of risks and potential dangers.

Parents, guardians, grandparents, teachers and carers should be engaged early and often to raise awareness of common risks and protective strategies, especially around the home, in outdoor play areas, recreation areas, and on the road as a pedestrian, passenger or young driver.²³⁶ Other initiatives such as urban design to provide safe recreation environments, safe design and regulation of products, education about road rules, and strategies to support good mental health are important ways to protect children and young people from harm.

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.²²⁶ Falls commonly occur in the home, in hospitals and residential aged care facilities.²²⁸ There are a number of effective strategies to reduce the risk of falls in older people. Activities to improve leg strength and balance, managing health conditions and removing tripping hazards all help reduce the risk of a fall.²³⁷ These strategies can be modified depending on age and physical ability and put into practice independently or with the help of a health professional. Good nutrition and physical activity are also vital in supporting the maintenance of strong bones and muscles needed for healthy ageing.^{198, 228} 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.

Improve safety in, on and around water

Water-based recreational activities including swimming, surfing, diving and sailing at beaches, swimming pools, rivers, lakes and dams are a part of life in WA. As a result, these locations are also 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. For young children, home swimming pools and bath tubs are the most common drowning locations. A lack of adult supervision contributes to most toddler

drownings. For young people aged 15 to 24, risky behaviours, such as cliff jumping, and alcohol consumption are major drowning risk factors. In older adults, factors including reduced fitness, poorer health, an overconfidence in abilities, and greater opportunities for participation in water-based recreation in retirement contribute to a greater risk of drowning. Males, people living in regional areas, Aboriginal people and people born overseas (who may be less likely to have learned water safety or be experienced swimmers) are at greater risk of drowning compared to other population groups.²³⁸

The [*Australian Water Safety Strategy 2030*](#)²³⁹ has a goal of reducing drowning and building water safe communities. Programs to reduce drowning should follow the guiding principles of inclusion, safe participation, targeted advocacy, empowering communities and taking action.²³⁹

Reduce road crashes and road trauma

The WA Department of Health actively supports the Road Safety Commission's [*Driving Change - Road Safety Strategy 2020-2030*](#).

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.^{226, 227} Contributing factors include distractions, speed, fatigue, and alcohol and other drug use.²⁴⁰⁻²⁴²

[*Driving Change: Road Safety Strategy for Western Australia 2020 – 2030*](#)²⁴¹ aims to reduce the number of people killed or seriously injured by 50 to 70 per cent, and prioritises road users, safe roads, vehicles, speed, and timely post-crash response. To implement change, the strategy focuses on leadership; positive behaviours and road safety culture; evidence-based actions, outcomes, and improved data collection.²⁴¹ The growing popularity of eRideable devices including electric scooters, skateboards, and self-balancing wheels is becoming an important issue in injury prevention.

Promote a safer built environment

Good urban design can help to reduce the risk of injury while also encouraging and supporting a healthy and active lifestyle. For example, transport networks that consider traffic calming and speed reduction make travel safer for all road users, and more enjoyable for cyclists and pedestrians. Connected streets and active travel networks encourage walking, bike riding and using public transport. Adequate street lighting and other design measures can be adopted to deter antisocial behaviour and violence, which can be a major barrier to physical activity and active travel. Parks and other shared open spaces can offer shade and shelter from the weather, and be designed with safety, accessibility and inclusivity in mind. The *National Injury Prevention Strategy 2020-2030* (to be released) recognises that a well-designed built environment can reduce the risk of many types of injury for all population groups.³⁴ Measures to create liveable neighbourhoods that promote health and wellbeing are also discussed in Section 4.2.

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

1. 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.

2. 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.

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 the design and planning of protection of environments that promote community safety and reduce the risk of injury.

5. Public awareness and engagement

- Invest in sustained, high-quality state-wide public education campaigns to promote a culture that injuries are preventable and reduce the incidence of injury.
- Implement strategies to increase community and stakeholder awareness of, demand and support for safe design to prevent injury.
- 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.

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, and develop links between programs and services that are targeted at populations at higher risk of injury.

8. Strategic coordination, building partnerships 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.

Monitoring and Reporting

[WA Department of Health Annual Reports](#)

Public Health Indicator Set (to be released)

SHR Outcomes Reporting Framework (to be released)

[National Healthcare Agreement Performance Reporting Dashboard](#)

Resources

[Research & Evaluation Framework Implementation Guide \(REFIG\)](#)

[WA Health Promotion Inventory](#)

5. Monitoring progress

5.1 Monitoring and reporting frameworks

The WA Department of Health reports regularly against a range of chronic disease indicators specified 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 assessed 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.²⁴³ The most recent data reported is 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 deaths from the Australian Bureau of Statistics.

Table 3. Age standardised years of life lost to premature death 2009 to 2018²⁴³

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)

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.²²

Table 4. Sustainable Health Review Indicators

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 Branch (to be released late 2021).

National Healthcare Agreement

All Australian state and territory Governments are signatories to the *National Healthcare Agreement*.²⁴⁴ 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.²⁴⁴ The National Healthcare Agreement sets performance benchmarks, some of which 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](#).

Table 5. National Healthcare Agreement 2021 performance benchmarks²⁴⁴

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

Targets to be included when finalised/strategy released.

WHO 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 6). The WA Department of Health reports against these indicators to the Australian Government, which in turn reports to the WHO.

Table 6. Selected WHO Global Action Plan voluntary targets¹⁶⁹

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*.¹⁰⁸ 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.²⁴⁵ In health promotion, research is useful for collecting evidence on the most effective ways to tackle problem; specifically, 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 is 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 with changing circumstances 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, with Edith Cowan University, has developed the Research and Evaluation Framework Implementation Guide (REFIG). The REFIG is designed to assist stakeholders that deliver health promotion programs commissioned by the WA Department of Health to conduct research and evaluation. The REFIG is a publicly-available resource 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.

Information on programs is collected by a survey that includes programs delivered or funded by the WA health system, state government agencies, and selected non-government 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 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 region and Local Government Areas.

5.4 Tracking the benefits of prevention

Monitoring progress in chronic disease and injury prevention is a complex task. The most widely-used measures of progress typically 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 considerable delay 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 twenty to thirty 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 population level.

A conceptual framework of the steps in identifying and addressing a health issue that is caused by behavioural risk factors for chronic disease and injury is outlined below. Tracking progress in prevention involves monitoring changes across these stages, to the extent possible within resources. As part of their evaluation, 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 views on potential policy options to influence behaviour change.

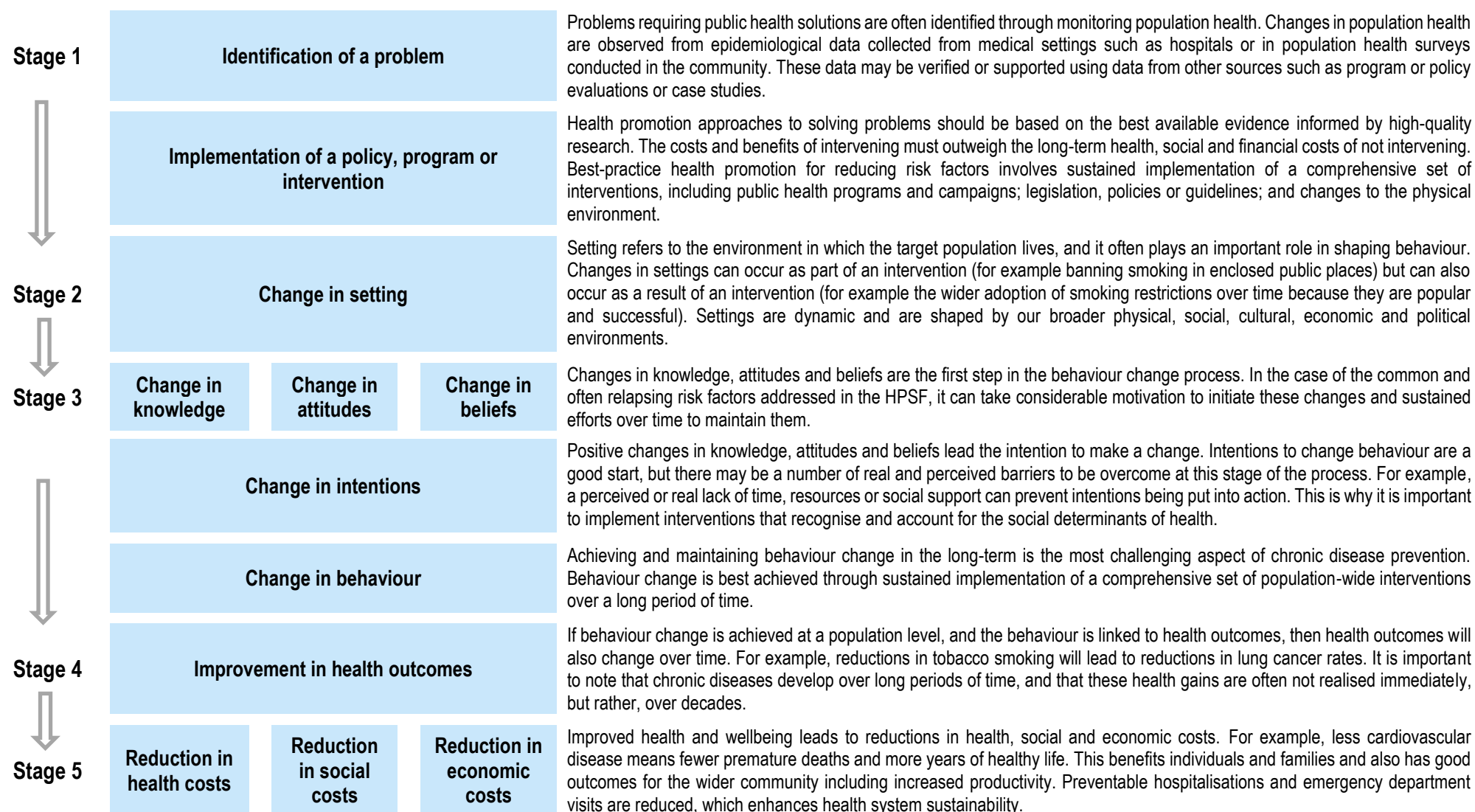


Figure 3. How health promotion leads to a reduction in risk factors, change in chronic disease outcomes and benefits the community, the health system and the economy

6. Appendices

Appendix 1: Complementary WA Health and Government policies and strategies

Web addresses correct as of November 2021.

The WA HPSF is complementary to and does not duplicate or replace the range of policies that address other aspects of health in WA. These include:

- **The WA Department of Health's overarching policy**, the [WA Health Strategic Intent 2015 – 2020](#), supports the WA community to become healthier, with a focus on promoting healthy habits and behaviours, and supporting people to make healthy lifestyle choices for mind and body.
- The [Sustainable Health Review Final Report](#) sets out 8 Enduring Strategies and 30 Recommendations seeking to drive a cultural and behavioural shift across the health system, including specific recommendations for preventive health.
- **The health of Aboriginal people** is addressed in the [WA Aboriginal Health and Wellbeing Framework 2015–2030](#)
- The [Climate Health WA Inquiry: Final Report](#) is guiding the WA Department of Health's action on **climate change and a sustainable health system**.
- The [Western Australian Men's Health and Wellbeing Policy](#) provides direction and strategies to improve the physical, mental, social and emotional wellbeing of **men and boys living in WA**.
- The [Western Australian Women's Health and Wellbeing Policy](#) provides a strategic, coordinated, and gender-responsive approach to drive equitable, accessible and appropriate services that optimise the health, safety and wellbeing of **women and girls in WA**.
- **Communicable (infectious) diseases**, including **sexual health** and associated chronic diseases that may arise from infectious diseases, are addressed in plans and policies managed by the Communicable Disease Control Directorate within the Public Health Division of the WA Department of Health. This includes the [WA Sexual Health and Blood-borne Virus Strategies 2019–2023](#).
- **Prevention and management of cancer** is discussed in the [WA Cancer Plan 2020-2025](#).
- **Prevention in the primary health care setting** is addressed in the [WA Primary Health Alliance Strategic Plan 2020-2023](#).
- **Oral health promotion, prevention and treatment of oral health conditions** are addressed in the [State Oral Health Plan 2016–2020](#).

- **Health and wellbeing of people living with disability** is addressed in the [WA Disability Health Framework 2015–2025](#).
- The health and wellbeing of **LGBTI** populations are addressed in the [WA Lesbian, Gay, Bisexual, Transgender, Intersex \(LGBTI\) Health Strategy 2019 – 2024](#)

Other 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](#), and the [Western Australian Suicide Prevention Framework 2021 – 2025](#).
- **Healthway's Strategic Plan**, [Active Healthy People: 2018-2023](#), provides direction and information for organisation 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.
- **Monitoring and advocacy to strengthen the wellbeing of WA children and young people** is one of the 3 key platforms of the **Commissioner for Children and Young People** and addressed in [Strategic Directions 2021–2026](#).

WA Government Departments of [Biodiversity, Conservation and Attractions](#); [Communities](#); [Education](#); [Jobs, Tourism, Science and Innovation](#); [Justice](#); [Local Government, Sport and Cultural Industries](#); [Planning, Lands and Heritage](#); [Primary Industries and Regional Development](#); [Transport](#); [Water and Environmental Regulation](#); [Fire and Emergency Services](#); and other leading State Government agencies such as Main Roads WA; [Road Safety Commission](#); [Mental Health Commission](#); [Disability Services Commission](#) and [Healthway](#) develop policies and strategies that provide for the support and promotion of healthier lifestyles for Western Australians.

At the national level, the WA HPSF aligns with the [National Healthcare Agreement](#) and the [National Strategic Framework for Chronic Conditions](#). Links to other important Commonwealth and State policies and relevant international frameworks are included in Appendix 2.

Appendix 2: State, Commonwealth and International frameworks and policies

Web addresses correct as of November 2021.

General

State

[WA Health Strategic Intent 2015 – 2020](#)

[Sustainable Health Review Final Report](#)

[WA Aboriginal Health and Wellbeing Framework 2015–2030](#)

[WA Disability Health Framework 2015–2025](#)

[State Oral Health Plan 2016–2020](#)

[WA Charter of Multiculturalism](#)

[WA Multicultural Policy Framework](#)

[WA Climate Policy](#)

National

[National Aboriginal and Torres Strait Islander Health Plan 2013–2023](#)

[National Arts and Health Framework](#)

[National Strategic Framework for Chronic Conditions](#)

[National Healthcare Agreement \(2022\)](#)

[National Preventive Health Strategy 2021-2030](#) (in development)

[National Action Plan for the Health of Children and Young People](#)

[Healthy, Safe and Thriving: National Strategic Framework for Child and Youth Health](#)

[Healthy Mouths, Healthy Lives: Australia's National Oral Health Plan 2015–2024](#)

International

[WHO Global Action Plan for the Prevention and Control of Noncommunicable Diseases 2013–2020](#)

[WHO Sustainable Development Goals](#)

[Tackling NCDs: 'best buys' and other recommended interventions for the prevention and control of noncommunicable diseases](#)

Reducing tobacco use and making smoking history

National

[National Drug Strategy 2017-2026](#)

[National Tobacco Strategy 2012-2018](#)

National Tobacco Strategy 2021-2030 (in development)

International

[WHO Framework Convention on Tobacco Control](#)

Halting the rise in obesity

State

[WA Healthy Weight Action Plan](#)

[Liveable Neighbourhoods](#)

[Western Australian Bicycle Network Plan 2014-2031](#)

[Public Transport Plan for Perth 2031](#)

[State Planning Strategy 2050](#)

[Foundations for a Stronger Tomorrow: State Infrastructure Strategy Draft for public comment](#)

[Directions 2031 and Beyond: Metropolitan planning beyond the horizon](#)

National

[Australian Dietary Guidelines](#)

[Australian Guide to Healthy Eating](#)

[National Obesity Strategy](#) (in development)

[Physical activity and exercise guidelines for all Australians](#)

[National Interim Guide to Reduce Children's Exposure to Unhealthy Food and Drink Promotion](#)

[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](#)

[Good Practice Guide: supporting healthy eating and drinking in schools](#)

[Australian National Breastfeeding Strategy: 2019 and Beyond](#)

[Infant Feeding Guidelines for Health Workers](#)

[Blueprint for an Active Australia \(3rd edition\), 2019](#)

[2021 Australian Infrastructure Plan](#)

[Australia's Food Environment Dashboard](#)

[Food Policy Index Australia](#)

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](#)

Reducing harmful levels of alcohol use

State

[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](#)

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

[Western Australian Methamphetamine Action Plan](#)

National

[National Alcohol Strategy 2019-2028](#)

[National Drug Strategy 2017-2026](#)

[National Aboriginal and Torres Strait Islander Peoples Drug Strategy 2014-2019](#)

[National Alcohol and Other Drug Workforce Development Strategy 2015-2018](#)

[Australian Guidelines to Reduce Health Risks from Drinking Alcohol](#)

Injury prevention and promoting safer communities

State

[Driving Change – Road Safety Strategy for Western Australia 2020-2030](#)

[Western Australian Suicide Prevention Framework 2021-2025](#)

[Path to Safety: Western Australia's strategy to reduce family and domestic violence 2020-2030](#)

National

[National Injury Prevention Strategy 2020-2030: Draft for consultation](#)

[National Falls Prevention for Older People Plan 2004 onwards](#)

[National Aboriginal and Torres Strait Islander Safety Promotion Strategy](#)

[Australian Water Safety Strategy 2030](#)

[Draft National Road Safety Strategy 2021-2030](#)

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 Communities	DevelopmentWA	Education	Finance	Fire and Emergency Services	Health	Jobs, Tourism, Science and	Justice	Local Govt, Sport and Cultural Industries	Lotterywest and Healthway	Mental Health Commission	Mines, Industry Regulation and Safety	Planning, Lands and Heritage	Primary Ind. and Regional	Public Sector Commission	Road Safety Commission	Training and Workforce	Transport	Treasury	VenuesWest	Water and Environmental
Healthy People and Communities	Community support	✓	✓		✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓
	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						✓	✓		✓	✓				✓		✓		✓		✓	
	Workplaces		✓		✓	✓	✓			✓		✓	✓			✓		✓	✓	✓	✓	
	Schools			✓	✓	✓	✓		✓	✓	✓	✓			✓		✓		✓			
	Tobacco, alcohol and other drugs						✓		✓	✓	✓	✓	✓				✓		✓			

		Biodiversity, Conservation and Communities	DevelopmentWA	Education	Finance	Fire and Emergency Services	Health	Jobs, Tourism, Science and	Justice	Local Govt, Sport and Cultural Industries	Lotterywest and Healthway	Mental Health Commission	Mines, Industry Regulation and Safety	Planning, Lands and Heritage	Primary Ind. and Regional	Public Sector Commission	Road Safety Commission	Training and Workforce	Transport	Treasury	VenuesWest	Water and Environmental
Healthy Food and Drinks	Local produce (regulation, promotion, use)									✓					✓							✓
	Drinking water — management														✓							✓
	Community support			✓			✓			✓	✓										✓	
	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
- disease and biomedical indicators
- injury events

Updated indicator set to include HWSS 2020 data will be inserted in final document

7. References

1. World Health Organization. About Us. 2021 [Available from: <http://www.emro.who.int/about-who/public-health-functions/health-promotion-disease-prevention.html>].
2. World Health Organization. Noncommunicable diseases. 2021 [Available from: <https://www.who.int/news-room/fact-sheets/detail/noncommunicable-diseases>].
3. Australian Institute of Health and Welfare. Chronic disease. 2021 [Available from: <https://www.aihw.gov.au/reports-data/health-conditions-disability-deaths/chronic-disease/overview>].
4. Epidemiology Directorate. Western Australian Burden of Disease Study 2015 - Summary Report. Perth, Western Australia: Department of Health; 2020 [Available from: <https://ww2.health.wa.gov.au/Reports-and-publications/Western-Australian-Burden-of-Disease-Study-2015>].
5. Australian Institute of Health and Welfare. Australia's Health 2020. Canberra, Australia: AIHW; 2020 [Available from: <https://www.aihw.gov.au/reports-data/australias-health>].
6. Australian Institute of Health and Welfare. Australia's health 2014. Cat. no. AUS 178. Canberra, Australia: AIHW; 2014 [Available from: <https://www.aihw.gov.au/reports/australias-health/australias-health-2014>].
7. Epidemiology Directorate. Western Australian Burden of Disease Study 2015 - Contribution of risk factors to burden. Perth, Western Australia: Department of Health; 2020 [Available from: <https://ww2.health.wa.gov.au/Reports-and-publications/Western-Australian-Burden-of-Disease-Study-2015>].
8. Department of Lands, Planning and Heritage; WA Planning Commission. WA Tomorrow Population Report No. 11 Medium-Term Age-Sex Population Forecasts 2016 to 2031. 2019 [Available from: <https://www.wa.gov.au/sites/default/files/2021-07/LSD-WAT-Population-Report-No-11.pdf>].
9. Epidemiology Directorate. Western Australian Burden of Disease Study 2015 - Contribution of risk factors to burden in Aboriginal Western Australians. Perth, Western Australia: Department of Health; 2021 [Available from: <https://ww2.health.wa.gov.au/-/media/Corp/Documents/Reports-and-publications/WA-Burden-of-Disease-Study-2015-Summary-report/Aboriginal-risk-factors-bulletin.pdf>].

10. Australian Institute of Health and Welfare. People with disability in Australia. Canberra, Australia. : AIHW; 2020 [Available from: <https://www.aihw.gov.au/getmedia/ee5ee3c2-152d-4b5f-9901-71d483b47f03/aihw-dis-72.pdf.aspx?inline=true>].
11. Australian Institute of Health and Welfare. Australia's health 2018: 5.5 Lesbian, gay, bisexual, transgender and intersex people. Canberra, Australia: AIHW; 2018 [Available from: <https://www.aihw.gov.au/getmedia/61521da0-9892-44a5-85af-857b3eef25c1/aihw-aus-221-chapter-5-5.pdf.aspx>].
12. Department of Health. CCSM – Chronic conditions. From cure to care. Perth, Western Australia: Department of Health; 2021 [Available from: https://ww2.health.wa.gov.au/Articles/A_E/CCSM-Chronic-conditions].
13. Firth J, Siddiqi N, Koyanagi A, Siskind D, Rosenbaum S, Galletly C, et al. The Lancet Psychiatry Commission: a blueprint for protecting physical health in people with mental illness. *Lancet Psychiatry*. 2019;6(8):675-712.
14. Patanavanich R, Glantz SA. Smoking is associated with worse outcomes of COVID-19 particularly among younger adults: a systematic review and meta-analysis. *BMC Public Health*. 2021;21(1):1554.
15. Stefan N, Birkenfeld AL, Schulze MB. Global pandemics interconnected — obesity, impaired metabolic health and COVID-19. *Nature Reviews Endocrinology*. 2021;17(3):135-49.
16. Honey-Rosés J, Anguelovski I, Chireh VK, Daher C, Konijnendijk van den Bosch C, Litt JS, et al. The impact of COVID-19 on public space: an early review of the emerging questions – design, perceptions and inequities. *Cities & Health*. 2020:1-17.
17. Mell I, Whitten M. Access to Nature in a Post Covid-19 World: Opportunities for Green Infrastructure Financing, Distribution and Equitability in Urban Planning. *International Journal of Environmental Research and Public Health*. 2021;18(4):1527.
18. Weeramanthri T, Joyce S, Bowman F, Bangor-Jones R, Law C. Climate Health WA Inquiry: Final Report. Perth, Western Australia: Western Australian Department of Health; 2020 [Available from: <https://ww2.health.wa.gov.au/climate-health-wa-final-report>].
19. Epidemiology Directorate. Western Australian Burden of Disease Study 2015: Health care spending attributable to modifiable risk factors in WA Perth, Western Australia: Department of Health; 2021 [Available from: <https://ww2.health.wa.gov.au/~media/Corp/Documents/Reports-and-publications/WA-Burden-of-Disease-Study-2015-Summary-report/Healthcare-spending-attributable-to-modifiable-risk-factors-in-WA.pdf>].
20. Epidemiology Directorate. Western Australian Burden of Disease Study 2015: Healthcare costs of disease groups and conditions Perth, Western Australia: Department of Health; 2021 [Available from:]

<https://ww2.health.wa.gov.au/~media/Corp/Documents/Reports-and-publications/WA-Burden-of-Disease-Study-2015-Summary-report/Healthcare-costs-of-disease-groups-and-conditions.pdf>].

21. Howse E, Crosland P, Rychetnik L, Wilson A, Members of the Evidence for Action division - the Sax Institute. The value of prevention: A rapid review. 2021 [Available from: <https://preventioncentre.org.au/resources/evidence-reviews/the-value-of-prevention-an-evidence-check-rapid-review/>].
22. Sustainable Health Review. Sustainable Health Review Final Report to the Western Australian Government. Perth, Western Australia: Western Australian Department of Health; 2019 [Available from: <https://ww2.health.wa.gov.au/Improving-WA-Health/Sustainable-health-review/Final-report>].
23. Sustainable Health Review. Sustainable Health Review Interim Report to the Western Australian Government. Perth, Western Australia: Western Australian Department of Health; 2017 [Available from: <https://ww2.health.wa.gov.au/~media/Files/Corporate/general-documents/Sustainable-Health-Review/sustainable-health-review-interim-report.pdf>].
24. Australian Institute of Health and Welfare. Injury. In 'Australia's Health 2020'. Canberra, Australia: AIHW; 2020 [Available from: <https://www.aihw.gov.au/reports/australias-health/injury>].
25. Dombrovskaya M, Landrigan T. Health and Wellbeing of Adults in Western Australia 2019 - Overview and Trends. Perth, Western Australia: Department of Health; 2020 [Available from: <https://ww2.health.wa.gov.au/Reports-and-publications/Population-surveys>].
26. Australian Institute of Health and Welfare. Risk factors contributing to chronic disease. Canberra, Australia: AIHW; 2012 [Available from: <http://www.aihw.gov.au/publication-detail/?id=10737421466>].
27. Australian Institute of Health and Welfare. Evidence for chronic disease risk factors. Canberra, Australia: AIHW; 2016 [Available from: <https://www.aihw.gov.au/reports/chronic-disease/evidence-for-chronic-disease-risk-factors>].
28. Oral Health Monitoring Group. Healthy Mouths, Healthy Lives: Australia's National Oral Health Plan 2015–2024. Canberra, Australia: COAG Health Council; 2015 [Available from: http://www.coaghealthcouncil.gov.au/Portals/0/Australia%27s%20National%20Oral%20Health%20Plan%202015-2024_uploaded%20170216.pdf].
29. World Health Organization. Injuries and violence. 2021 [Available from: <https://www.who.int/news-room/fact-sheets/detail/injuries-and-violence>].

30. Australian Institute of Health and Welfare. Health of children. In 'Australia's Health 2020'. Canberra, Australia: AIHW; 2020 [Available from: <https://www.aihw.gov.au/reports/australias-health/health-of-children>].
31. Winstanley M. Chapter 3. The health effects of active smoking. Melbourne, Australia: Cancer Council Victoria; 2019 [Available from: <http://www.tobaccoinaustralia.org.au/chapter-3-health-effects>].
32. Norton L, Harrison J, Pointer S, Lathlean T. Obesity and injury: a review of the literature. Injury research and statistics series no. 60. Cat. no. INJCAT 136. Canberra, Australia: AIHW; 2011 [Available from: <http://www.aihw.gov.au/publication-detail/?id=10737420420&tab=2>].
33. Australian Institute of Health and Welfare. Australian Burden of Disease Study: impact and causes of illness and death in Australia 2015. Australian Burden of Disease series no. 19. Cat. no. BOD 22. Canberra, Australia: AIHW; 2019 [Available from: <https://www.aihw.gov.au/getmedia/c076f42f-61ea-4348-9c0a-d996353e838f/aihw-bod-22.pdf.aspx?inline=true>].
34. Department of Health. National Injury Prevention Strategy 2020-2030 (in development). Canberra, Australia: Commonwealth of Australia; 2020 [Available from: <https://www.health.gov.au/initiatives-and-programs/national-injury-prevention-strategy-2020-2030-0>].
35. Rickwood D, Thomas K. Mental wellbeing risk and protective factors. Victoria: VicHealth; 2019 [Available from: <https://www.vichealth.vic.gov.au/-/media/ResourceCentre/PublicationsandResources/General/VicHealth-Attachment-1---Evidence-review-of-risk--protective-factors.pdf?la=en&hash=4CFF1B8DDED1E3CE257289448655A136AB5B4C16>].
36. Australian Institute of Health and Welfare. Chronic conditions and multimorbidity. Canberra, Australia: AIHW; 2020 [Available from: <https://www.aihw.gov.au/reports/australias-health/chronic-conditions-and-multimorbidity>].
37. Beswick A, Ambrosini G, Radomiljac A, Tomlin S, Chapman A, Maticevic J, et al. The burden and cost of excess body mass in Western Australian adults and children. Perth, Australia: Western Australian Department of Health; 2020 [Available from: <https://ww2.health.wa.gov.au/Reports-and-publications/The-burden-and-cost-of-excess-body-mass-in-Western-Australian-adults-and-children>].
38. Australian Bureau of Statistics. 4326.0 - National Survey of Mental Health and Wellbeing: Summary of results, 2007. Canberra, Australia: ABS; 2008 [Available from: <http://www.abs.gov.au/ausstats/abs@.nsf/Latestproducts/4326.0Main%20Features32007?opendocument&tabname=Summary&prodn=4326.0&issue=2007&num=&view=>].

39. Australian Bureau of Statistics. Life tables: Statistics about life tables for Australia, states and territories and life expectancy at birth estimates for sub-state regions. Table 2: Life tables, statistical area level 4 - 2010-2012 to 2017-2019. Canberra, Australia: ABS; 2020 [Available from: <https://www.abs.gov.au/statistics/people/population/life-tables/latest-release#states-and-territories>].
40. Australian Bureau of Statistics. Self-assessed health status. Canberra, Australia: ABS; 2018 [Available from: <https://www.abs.gov.au/statistics/health/health-conditions-and-risks/self-assessed-health-status/latest-release>].
41. Australian Bureau of Statistics. National Health Survey: Health literacy. Canberra, Australia: ABS; 2019 [Available from: <https://www.abs.gov.au/statistics/health/health-conditions-and-risks/national-health-survey-health-literacy/2018>].
42. Chronic Disease Prevention Directorate. Australian Secondary Students' Alcohol and Drug Survey 2017: Western Australian Results – Tobacco. Perth, Western Australia: Department of Health 2020 [Available from: <https://ww2.health.wa.gov.au/-/media/Files/Corporate/general-documents/Chronic-disease/ASSAD-Tobacco-Bulletin-2017.pdf>].
43. World Health Organization. WHO report on the global tobacco epidemic 2021: addressing new and emerging products. Geneva: WHO; 2021 [Available from: <https://www.who.int/publications/i/item/9789240032095>].
44. Australian Bureau of Statistics. National Health Survey: First results. Canberra, Australia: ABS; 2018 [Available from: <https://www.abs.gov.au/statistics/health/health-conditions-and-risks/national-health-survey-first-results/latest-release>].
45. Australian Bureau of Statistics. National, state and territory population. 2021 [Available from: <https://www.abs.gov.au/statistics/people/population/national-state-and-territory-population/latest-release>].
46. Australian Institute of Health and Welfare. Australia's health 2018. Canberra, Australia: AIHW; 2018 [Available from: <https://www.aihw.gov.au/reports/australias-health/australias-health-2018/contents/table-of-contents>].
47. Australian Institute of Health and Welfare. Physical health of people with mental illness. Canberra, Australia: AIHW; 2020 [Available from: <https://www.aihw.gov.au/reports/australias-health/physical-health-of-people-with-mental-illness>].
48. Australian Institute of Health and Welfare. National Drug Strategy Household Survey 2019. Canberra, Australia: AIHW; 2020 [Available from: <https://www.aihw.gov.au/reports/illicit-use-of-drugs/national-drug-strategy-household-survey-2019>].
49. Luppino FS, de Wit LM, Bouvy PF, Stijnen T, Cuijpers P, Penninx BWJH, et al. Overweight, Obesity, and Depression: A Systematic Review and Meta-analysis of Longitudinal Studies. Archives of General Psychiatry. 2010;67(3):220-9.

50. Rubino F, Puhl RM, Cummings DE, Eckel RH, Ryan DH, Mechanick JI, et al. Joint international consensus statement for ending stigma of obesity. *Nature Medicine*. 2020;26(4):485-97.
51. Sullivan LE, Fiellin DA, O'Connor PG. The prevalence and impact of alcohol problems in major depression: a systematic review. *Am J Med*. 2005;118(4):330-41.
52. Crum RM, Mojtabai R, Lazareck S, Bolton JM, Robinson J, Sareen J, et al. A prospective assessment of reports of drinking to self-medicate mood symptoms with the incidence and persistence of alcohol dependence. *JAMA Psychiatry*. 2013;70(7):718-26.
53. Hall W, Degenhardt L, Teesson M. Understanding comorbidity between substance use, anxiety and affective disorders: broadening the research base. *Addict Behav*. 2009;34(6-7):526-30.
54. World Health Organization. Global status report on alcohol and health 2018. Geneva, Switzerland: WHO; 2018 [Available from: <https://apps.who.int/iris/handle/10665/274603>].
55. Kellezi B, Coupland C, Morriss R, Beckett K, Joseph S, Barnes J, et al. The impact of psychological factors on recovery from injury: a multicentre cohort study. *Soc Psychiatry Psychiatr Epidemiol*. 2017;52(7):855-66.
56. Lifeline. Self-harm. NSW: Lifeline; 2021 [Available from: <https://www.lifeline.org.au/get-help/information-and-support/self-harm/>].
57. Mental Health Commission. Western Australian Mental Health Promotion, Mental Illness, Alcohol and Other Drug Prevention Plan 2018-2025. Perth, Western Australia: Mental Health Commission; 2018 [Available from: <https://www.mhc.wa.gov.au/about-us/strategic-direction/the-western-australian-mental-health-promotion-mental-illness-alcohol-and-other-drug-prevention-plan-2018-2025/>].
58. Department of Health. State Public Health Plan for Western Australia: Objectives and Policy Priorities for 2019-2024. Perth, Western Australia: Department of Health; 2019 [Available from: <https://ww2.health.wa.gov.au/~media/Files/Corporate/general-documents/Public-Health-Act/State-public-health-plan/State-PH-Plan-2019-2024/State-Public-Health-Plan-WA.pdf>].
59. Mental Health Commission. Better Choices. Better Lives. Western Australian Mental Health, Alcohol and Other Drug Services Plan 2015-2025. Perth, Western Australia: Mental Health Commission; 2015 [Available from: http://www.mentalhealth.wa.gov.au/Libraries/pdf_docs/The_Plan_81215_3.sflb.ashx].
60. Dorjee K, Kim H, Bonomo E, Dolma R. Prevalence and predictors of death and severe disease in patients hospitalized due to COVID-19: A comprehensive systematic review and meta-analysis of 77 studies and 38,000 patients. *PLOS ONE*. 2020;15(12):e0243191.

61. Public Health England. Excess Weight and COVID-19: Insights from new evidence. London, England: Public Health England; 2020 [Available from: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/907966/PHE_insight_Excess_weight_and_COVID-19_FINAL.pdf].
62. Epidemiology Directorate. COVID-19 in Western Australia, Bulletin 1: The impact on lifestyle. Perth, Western Australia: Department of Health; 2020 [Available from: <https://ww2.health.wa.gov.au/~/-/media/Corp/Documents/Reports-and-publications/COVID19-in-Western-Australia/COVID19-in-WA-Bulletin-1-Impact-on-Lifestyle.pdf>].
63. Epidemiology Directorate. COVID-19 in Western Australia: The impact on mental health. Perth, Western Australia: Department of Health; 2020 [Available from: <https://ww2.health.wa.gov.au/~/-/media/Corp/Documents/Reports-and-publications/COVID19-in-Western-Australia/COVID19-in-WA-Bulletin-2-Impact-on-mental-health-summary.pdf>].
64. Dragovic M, Pascu V, Hall T, Ingram J, Waters F. Emergency department mental health presentations before and during the COVID-19 outbreak in Western Australia. *Australas Psychiatry*. 2020;28(6):627-31.
65. World Health Organization. Fast Facts on Climate Change and Health. 2021 [Available from: <https://www.who.int/publications/i/item/fast-facts-on-climate-change-health>].
66. Department of Primary Industries and Regional Development. Climate projections for Western Australia. 2021 [Available from: <https://www.agric.wa.gov.au/climate-change/climate-projections-western-australia>].
67. Patel D, Jian L, Xiao J, Jansz J, Robertson A. Joint effect of heatwaves and air quality on emergency department attendances for vulnerable population in Perth, Western Australia, 2006 to 2015. *Environmental Research*. 2019;174.
68. Coates L, Haynes K, O'Brien J, McAneney J, Dimer de Oliveira F. Exploring 167 years of vulnerability: An examination of extreme heat events in Australia 1844-2010. *Environmental Science & Policy*. 2014;42:33-44.
69. State Emergency Management Committee. Heatwave. 2021 [Available from: <https://semc.wa.gov.au/Pages/Heatwave.aspx>].
70. Hayes K, Blashki G, Wiseman J, Burke S, Reifels L. Climate change and mental health: risks, impacts and priority actions. *International Journal of Mental Health Systems*. 2018;12(1):28.
71. Willett W, Rockström J, Loken B, Springmann M, Lang T, Vermeulen S, et al. Food in the Anthropocene: the EAT-Lancet Commission on healthy diets from sustainable food systems. *Lancet*. 2019;393(10170):447-92.

72. Government of Western Australia. Western Australian Climate Change Policy. Perth, Western Australia: Government of Western Australia; 2021 [Available from: <https://www.wa.gov.au/service/environment/environment-information-services/western-australian-climate-change-policy>].
73. Whetton S, Tait R, Scollo M, Banks E, Chapman J, Dey T, et al. Identifying the social costs of tobacco use to Australia in 2015/16. Perth, Australia: National Drug Research Institute, Curtin University; 2019 [Available from: <https://ndri.curtin.edu.au/NDRI/media/documents/publications/T273.pdf>].
74. Masters R, Anwar E, Collins B, Cookson R, Capewell S. Return on investment of public health interventions: A systematic review. *J Epidemiol Community Health*. 2017;71(8):827-34.
75. Dono J, Bowden J, Kim S, Miller C. Taking the pressure off the spring: the case of rebounding smoking rates when antitobacco campaigns ceased. *Tob Control* 2019;28:233-6.
76. Ananthapavan J, Tran H, Moodie M. Economic Evaluation of the Western Australia LiveLighter campaign. Perth, Western Australia: Cancer Council Western Australia; 2020 [Available from: <https://iht.deakin.edu.au/wp-content/uploads/sites/153/2021/05/Economic-Evaluation-of-the-WA-LiveLighter.pdf>].
77. Wakefield M, Brennan E, Dunstone K, Durkin S, Dixon H, Pettigrew S, et al. Features of alcohol harm reduction advertisements that most motivate reduced drinking among adults: an advertisement response study. *BMJ Open*. 2017;7(4):e014193.
78. Kantar Public. Alcohol Tracker Report (Prepared for the Mental Health Commission). Subiaco, Western Australia: Kantar Market Research; 2020.
79. 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.
80. World Health Organization. Preventing chronic diseases. A vital investment. WHO global report. Geneva, Switzerland: WHO; 2005 [Available from: http://www.who.int/chp/chronic_disease_report/contents/en/index.html].
81. Mikkelsen B, Williams J, Rakovac I, Wickramasinghe K, Hennis A, Shin H, et al. Life course approach to prevention and control of non-communicable diseases. *BMJ*. 2019;364(l257).
82. World Health Organization. The Minsk Declaration: the life-course approach in the context of health 2020. Geneva, Switzerland: WHO; 2015 [Available from: https://www.euro.who.int/_data/assets/pdf_file/0009/289962/The-Minsk-Declaration-EN-rev1.pdf].

83. World Health Organization. Global strategy and action plan on ageing and health. Geneva, Switzerland: WHO; 2017 [Available from: <https://www.who.int/ageing/WHO-GSAP-2017.pdf>].
84. VicHealth. Fair Foundations: the VicHealth framework for health equity. Melbourne, Australia: Victorian Health Promotion Foundation; 2015 [Available from: <https://www.vichealth.vic.gov.au/media-and-resources/publications/the-vichealth-framework-for-health-equity>].
85. Shill J, Büsst C, Horton K, Corben K, Demaio S. Our path to health for all: Australia in 2030. Med J Aust. 2021;214 (Sup8):S5-6.
86. Hayes L. Smokers' responses to the 2010 increase to tobacco excise; findings from the 2009 and 2010 Victorian Smoking and Health Surveys. Melbourne, Australia: Centre for Behavioural Research in Cancer, Cancer Council Victoria; 2011.
87. Taylor N, Miller P, Coomber K, Livingston M, Scott D, Buykx P, et al. The impact of a minimum unit price on wholesale alcohol supply trends in the Northern Territory, Australia. Australian and New Zealand Journal of Public Health. 2021;45(1):26-33.
88. Coomber K, Miller P, Taylor N, Livingston M, Smith J, Buykx P, et al. Investigating the introduction of the alcohol minimum unit price in the Northern Territory (Final Report). Geelong: Deakin University; 2020 [Available from: https://alcoholreform.nt.gov.au/_data/assets/pdf_file/0007/818278/investigating-introduction-of-alcohol-minimum-unit-price-nt-final-report.pdf].
89. Wakefield MA, Loken B, Hornik RC. Use of mass media campaigns to change health behaviour. The Lancet. 2010;376:1261-71.
90. Keleher H. Reframing health promotion. Melbourne, Australia: Oxford University Press; 2007.
91. Hawe P, King L, Noort M, Jordens C, Lloyd B. Indicators to help with capacity building in health promotion. Sydney, Australia: NSW Health; 2000 [Available from: <http://www.bvsde.paho.org/bvsacd/cd64/capbuild.pdf>].
92. Epidemiology Directorate. Prevalence of Smokers and E-cigarette Users (18 years and over), 2002-2019, HWSS. Perth, Western Australia: Department of Health; 2020.
93. Epidemiology Directorate. Tobacco-attributable hospitalisation, deaths and hospital costs 2009/10 to 2018/19. Perth, Western Australia: Department of Health; 2020.
94. Epidemiology Directorate, Cooperative Research Centre for Spatial Information (CRC-SI). Summary of population characteristics and the health and wellbeing of residents of the Country area. Perth, Western Australia: Department of Health; 2019.

95. Australian Bureau of Statistics. 4715.0 National Aboriginal and Torres Strait Islander Health Survey, Australia 2018-19. Canberra, Australia: ABS; 2020 [Available from: <https://www.abs.gov.au/ausstats/abs@.nsf/productsbytopic/EA88AAD175A6A5B9CA257A1B00168F0E?OpenDocument>].
96. Chronic Disease Prevention Directorate. Tobacco Retailer Compliance Survey Results 2020. Perth, Western Australia: Department of Health; 2021 [Available from: <https://ww2.health.wa.gov.au/-/media/Corp/Documents/Health-for/Tobacco/Tobacco-Retailer-Compliance-Survey-2020.pdf>].
97. Hutchinson M, Joyce A, Peirce A. Western Australia's Mothers and Babies, 2015: 33rd Annual Report of the Western Australian Midwives' Notification System. Perth, Australia: Western Australian Department of Health; 2019 [Available from: https://ww2.health.wa.gov.au/-/media/Files/Corporate/Reports-and-publications/Perinatal-infant-and-maternal/WA_Mothers_Babies_2015.pdf].
98. Australian Institute of Health and Welfare. National Drug Strategy Household Survey 2019 - Western Australia Fact Sheet. Canberra, Australia: AIHW; 2020 [Available from: <https://www.aihw.gov.au/getmedia/78cc7716-aa97-4042-9141-d476c23406ed/aihw-phe-270-fact-sheet-WA.pdf.aspx>].
99. Banks E, Joshy G, Weber M, Liu B, Grenfell R, Egger S, et al. Tobacco smoking and all-cause mortality in a large Australian cohort study: findings from a mature epidemic with current low smoking prevalence. BMC Med. 2015;13(1):38.
100. Australian Bureau of Statistics. Smoking. Canberra, Australia: ABS; 2021 [Available from: <https://www.abs.gov.au/statistics/health/health-conditions-and-risks/smoking/2017-18>].
101. Australian Institute of Health and Welfare. Alcohol, tobacco & other drugs in Australia. Canberra, Australia: AIHW; 2021 [Available from: <https://www.aihw.gov.au/reports/alcohol/alcohol-tobacco-other-drugs-australia>].
102. Department of Health. Consultation Draft National Tobacco Strategy 2021–2030 (Publications Number: 12710). Canberra: Commonwealth of Australia; 2021.
103. Greenhalgh E, Hanley-Jones S, Jenkins S, Stillman S, Ford C. Interventions for particular groups. 2020. In: Tobacco in Australia: Facts and Issues [Internet]. Melbourne, Australia: Cancer Council Victoria. Available from: <http://www.tobaccoinaustralia.org.au/chapter-7-cessation/7-19-interventions-for-special-groups>].
104. Cancer Council Victoria. Smoking and disadvantage: an evidence brief. Canberra, Australia: Australian National Preventive Health Agency; 2013 [Available from: [https://www1.health.gov.au/internet/publications/publishing.nsf/Content/smoking-disadvantage-evidence-brief/\\$FILE/Screen%20res-Smoking&Disad_ev%20brief.pdf](https://www1.health.gov.au/internet/publications/publishing.nsf/Content/smoking-disadvantage-evidence-brief/$FILE/Screen%20res-Smoking&Disad_ev%20brief.pdf)].

105. Australian Institute of Health and Welfare. Burden of tobacco use in Australia: Australian Burden of Disease Study 2015. Canberra, Australia: AIHW; 2019 [Available from: <https://www.aihw.gov.au/reports/burden-of-disease/burden-of-tobacco-use-in-australia/related-material>].
106. Thurber K, Banks E, Joshy G, Soga K, Marmor A, Benton G, et al. Tobacco smoking and mortality among Aboriginal and Torres Strait Islander adults in Australia. 2021 [Available from: <https://academic.oup.com/ije/advance-article/doi/10.1093/ije/dyaa274/6118443>].
107. Thomas D, Davey M, Briggs V, Borland R. Talking About The Smokes: summary and key findings. Med J Aust. 2015;202(10):3-4.
108. World Health Organization. Framework Convention on Tobacco Control. Geneva, Switzerland: WHO; 2003 [Available from: http://www.who.int/fctc/text_download/en/index.html].
109. US Department of Health and Human Services. The health consequences of involuntary exposure to tobacco smoke: A report of the Surgeon General. Atlanta, GA: US Department of Health and Human Services, Centers for Disease Control and Prevention, Coordinating Center for Health Promotion, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health; 2006 [Available from: <http://www.surgeongeneral.gov/library/secondhandsmoke/report/>].
110. Frazer K, Callinan J, McHugh J, van Baarsel S, Clarke A, Doherty K, et al. Legislative smoking bans for reducing harms from secondhand smoke exposure, smoking prevalence and tobacco consumption. Cochrane Database of Systematic Reviews [Internet]. 2016; CD005992. Available from: <http://onlinelibrary.wiley.com/doi/10.1002/14651858.CD005992.pub3/epdf/abstract>.
111. Queensland Health. Review of smokefree laws: discussion paper. Brisbane, Australia: Queensland Health; 2007 [Available from: <http://pandora.nla.gov.au/pan/136214/20120914-1300/www.health.qld.gov.au/tobaccolaws/documents/33161.pdf>].
112. Australian Bureau of Statistics. 4714.0 - National Aboriginal and Torres Strait Islander Social Survey, 2014-15. Canberra, Australia: ABS; 2016 [Available from: <https://www.abs.gov.au/ausstats/abs@.nsf/mf/4714.0>].
113. Government of Western Australia. Tobacco Products Control Act 2006. Perth, Western Australia: Department of Justice WA, Parliamentary Counsel's Office; 2020 [Available from: https://www.legislation.wa.gov.au/legislation/statutes.nsf/main_mrtitle_983_homepage.html].
114. Cancer Council WA. Local government, public health, and cancer prevention. Taking action to improve the health and wellbeing of our local communities. Subiaco, Western Australia: CCWA; 2020 [Available from: <https://www.cancerwa.asn.au/resources/2020-12-03-LG-PH-Cancer-Prevention-Guide-DIGITAL.pdf>].

115. Australian Institute of Health and Welfare. 2007 National Drug Strategy Household Survey: Detailed findings. Drug statistics series no. 22. Cat. no. PHE 107. Canberra, Australia: AIHW; 2008 [Available from: <http://www.aihw.gov.au/publication-detail/?id=6442468195>].
116. Hastings G, Angus K. Forever cool: the influence of smoking imagery on young people. London, England: British Medical Association, Board of Science; 2008 [Available from: <https://www.stir.ac.uk/media/stirling/services/faculties/management/documents/Angus---Forever-Cool-the-influence-of-smoking-imagery.pdf>].
117. Wood L, Gazey A. Tobacco mythbusting—tobacco is not a major driver of foot traffic in low socio-economic small retail stores Tob Control [Internet]. 2021; Online: 8 April 2021. Available from: <https://tobaccocontrol.bmj.com/content/early/2021/04/07/tobaccocontrol-2020-056310>.
118. Watts C, Burton S, Phillips F, Kennington K, Scollo M, Lindorff K, et al. Understanding why some Australian retailers have stopped selling tobacco, some might and some are unlikely. Tob Control. 2020;29(e1):e63-e70.
119. Smith E, Malone R. An argument for phasing out sales of cigarettes. Tob Control. 2020;29:703-8.
120. Tobacco Control Branch. Tobacco Retailer Compliance Survey 2020. Perth, Western Australia: Department of Health; 2021 [Available from: https://ww2.health.wa.gov.au/Articles/S_T/Tobacco-Retailer-Compliance-Survey].
121. National Health and Medical Research Council (NHMRC). NHMRC CEO Statement: Electronic Cigarettes (E-Cigarettes). NHMRC 2017 [Available from: file:///C:/Users/he160174/Downloads/statement-electronic-cigarettes.pdf].
122. Centers for Disease Control and Prevention. Surgeon General's Advisory on E-cigarette Use Among Youth. Atlanta GA: CDC; 2019 [Available from: https://www.cdc.gov/tobacco/basic_information/e-cigarettes/surgeon-general-advisory/index.html].
123. Department of Health. Policy and regulatory approach to electronic cigarettes (e-cigarettes) in Australia. Canberra: Australian Government; 2019 [Available from: <https://www.health.gov.au/resources/publications/policy-and-regulatory-approach-to-electronic-cigarettes-e-cigarettes-in-australia>].
124. Australian Institute of Health and Welfare. Data tables: National Drug Strategy Household Survey 2019 - State and territory fact sheet supplementary tables. Canberra, Australia: AIHW; 2020 [Available from: <https://www.aihw.gov.au/getmedia/349a03e5-0e55-4c18-8cea-e38420d50dcb/aihw-phe-270-S-State-fact-sheet-tables.xlsx.aspx>].
125. Bray GA, Kim KK, Wilding JPH. Obesity: a chronic relapsing progressive disease process. A position statement of the World Obesity Federation. Obes Rev. 2017;18(7):715-23.

126. World Obesity Federation. Lancet Commission on Obesity. London, England: Lancet; 2015 [Available from: <http://www.worldobesity.org/what-we-do/lancetcommission/lancet-background/>].
127. Centers for Disease Control and Prevention. About Adult BMI. Atlanta GA: CDC; 2020 [Available from: https://www.cdc.gov/healthyweight/assessing/bmi/adult_bmi/index.html].
128. Dombrovskaya M, Landrigan T, Patterson C. Health and Wellbeing of Children in Western Australia in 2019 - Overview and Trends. Perth, Western Australia: Department of Health 2020 [Available from: <https://ww2.health.wa.gov.au/Reports-and-publications/Population-surveys>].
129. World Health Organization. World Obesity Day: Understanding the social consequences of obesity. Geneva, Switzerland: WHO; 2017 [Available from: <https://www.euro.who.int/en/health-topics/noncommunicable-diseases/mental-health/news/news/2017/10/world-obesity-day-understanding-the-social-consequences-of-obesity>].
130. Australian Bureau of Statistics. Australian Health Survey 2011-12: Nutrition - State and Territory results. Canberra, Australia: ABS; 2015 [Available from: <https://www.abs.gov.au/statistics/health/health-conditions-and-risks/australian-health-survey-nutrition-state-and-territory-results/2011-12#about-the-national-nutrition-and-physical-activity-survey>].
131. Miller M, Miller S. Nutrition Monitoring Survey Series 2015 Key Findings. Perth, Australia: Western Australian Department of Health; 2017 [Available from: https://ww2.health.wa.gov.au/Articles/N_R/Nutrition-Monitoring-Survey-Series].
132. Trapp G, Hooper P, Thornton LE, Kennington K, Sartori A, Wickens N, et al. Exposure to unhealthy food and beverage advertising during the school commute in Australia. J Epidemiol Community Health. 2021;75(12):1232-35.
133. Australian Institute of Health and Welfare. A picture of overweight and obesity in Australia. Canberra, Australia: AIHW; 2017 [Available from: <https://www.aihw.gov.au/reports/overweight-obesity/a-picture-of-overweight-and-obesity-in-australia>].
134. Australian Institute for Health and Welfare. Social determinants of health. Australia's Health Snapshots. Canberra, Australia: AIHW; 2020 [Available from: <https://www.aihw.gov.au/reports/australias-health/social-determinants-of-health>].
135. Firth J, Gangwisch JE, Borsini A, Wootton RE, Mayer EA. Food and mood: how do diet and nutrition affect mental wellbeing? BMJ. 2020;369:m2382.
136. Department of Health. 24-hour movement guidelines - adults (18 to 64 years). Canberra, Australia: Commonwealth of Australia; 2014 [Available from: <https://www.health.gov.au/health-topics/physical-activity-and-exercise/physical-activity-and-exercise-guidelines-for-all-australians/for-adults-18-to-64-years>].

137. Australian Institute of Health and Welfare. Built environment and health. Canberra, Australia: AIHW; 2020 [Available from: <https://www.aihw.gov.au/reports/australias-health/built-environment-and-health>].
138. Egger G, Swinburn B. An "ecological" approach to the obesity pandemic. *BMJ*. 1997;315(7106):477-80.
139. Swinburn B, Sacks G, Vandevijvere S, Kumanyika S, Lobstein T, Neal B, et al. INFORMAS (International Network for Food and Obesity/non-communicable diseases Research, Monitoring and Action Support): overview and key principles. *Obesity Reviews*. 2013;14(S1):1-12.
140. National Health and Medical Research Council. Eat for health: Australian Dietary Guidelines. Providing the scientific evidence for healthier Australian diets. Canberra, Australia: NHMRC; 2013 [Available from: <http://www.nhmrc.gov.au/guidelines-publications/n55>].
141. Lee A, Baker P, Stanton R, Friel S, Weightman A. Scoping study to inform the development of the new national nutrition policy for Australia. Queensland, Australia: Queensland University of Technology; 2013 [Available from: <http://eprints.qut.edu.au/93234/>].
142. Moubarac J-C, Parra DC, Cannon G, Monteiro CA. Food classification systems based on food processing: significance and implications for policies and actions: a systematic literature review and assessment. *Curr Obes Rep*. 2014;3(2):256-72.
143. Parsons K, Hawkes C. Connecting food systems for co-benefits: How can food systems combine diet-related health with environmental and economic policy goals? (Policy Brief 31). Copenhagen, Denmark: European Observatory on Health Systems and Policies, WHO Regional Office for Europe; 2018 [Available from: https://www.euro.who.int/data/assets/pdf_file/0007/387070/policy-brief-31-austria-eng.pdf].
144. Boyland E, Nolan S, Kelly B, Tudur-Smith C, Jones A, Halford J, et al. Advertising as a cue to consume: a systematic review and meta-analysis of the effects of acute exposure to unhealthy food and nonalcoholic beverage advertising on intake in children and adults. *Am J Clin Nutr*. 2016;103(2):519-33.
145. Boyland E, Halford J. Television advertising and branding. Effects on eating behaviour and food preferences in children. *Appetite*. 2013;62(Mar):236-41.
146. World Health Organization. Set of recommendations on the marketing of foods and non-alcoholic beverages to children. Geneva, Switzerland: WHO; 2010 [Available from: <http://www.who.int/dietphysicalactivity/publications/recsmarketing/en/>].
147. Council of Australian Governments Health Council. National Interim Guide to Reduce Children's Exposure to Unhealthy Food and Drink Promotion. Canberra, Australia COAG Health Council; 2018 [Available from:]

<https://www.coaghealthcouncil.gov.au/Portals/0/National%20Interim%20Guide%20to%20Reduce%20Children%27s%20Exposure%20to%20Unhealthy%20Food%20and%20Drink%20Promotion.pdf>].

148. Watson WL, Khor PY, Hughes C. Defining unhealthy food for regulating marketing to children—What are Australia's options? *Nutrition & Dietetics*. 2021;78(4):406-14.
149. Sacks G, Schultz S, Grigsby-Duffy L, Robinson E, Orellana L, Marshall J, et al. Inside our supermarkets: assessment of the healthiness of Australian supermarkets, Australia 2020. Melbourne, Australia: Deakin University 2020 [Available from: <https://preventioncentre.org.au/wp-content/uploads/2020/05/Inside-our-supermarkets-Assessment-of-the-healthiness-of-Australian-supermarkets.pdf>].
150. Dixon H, Scully M, Wakefield M, Kelly B, Pettigrew S, Chapman K, et al. The impact of unhealthy food sponsorship vs. pro-health sponsorship models on young adults' food preferences: a randomised controlled trial. *BMC Public Health*. 2018;18(1):1399.
151. Kelly B, Baur LA, Bauman AE, King L, Chapman K, Smith BJ. "Food company sponsors are kind, generous and cool": (mis)conceptions of junior sports players. *Int J Behav Nutr Phys Act*. 2011;8:95-.
152. Kelly B, Baur LA, Bauman AE, King L, Chapman K, Smith BJ. Restricting unhealthy food sponsorship: Attitudes of the sporting community. *Health Policy*. 2012;104(3):288-95.
153. Council of Australian Governments Health Council. Promoting and supporting healthy food and drink choices hospital and healthcare facilities. Canberra, Australia COAD Health Council; 2020 [Available from: <https://www.coaghealthcouncil.gov.au/Portals/0/Documents/Childhood%20Obesity/Nutritional%20Standards%20in%20healthcare.pdf?ver=2020-09-16-132349-867>].
154. Council of Australian Governments Health Council. Promoting and supporting healthy food and drink choices in sport and recreation. South Australia: COAG Health Council; 2020 [Available from: <https://www.coaghealthcouncil.gov.au/Portals/0/CHC%20Action%202%20-%20Sports%20-%20National%20Statement.pdf>].
155. Healthy Streets. What is Healthy Streets? UK: Healthy Streets Ltd; 2021 [Available from: <https://www.healthystreets.com/what-is-healthy-streets>].
156. Browne G, Davern M, Giles-Corti B. 'Punching above their weight': a qualitative examination of local governments' organisational efficacy to improve the social determinants of health. *Aust N Z J Public Health*. 2019;43(1):81-7.

157. Gibbs L, Peeters A. Where do we go next with prevention? Adopting a transilient approach as we learn from coronavirus. Melbourne, Australia: VicHealth; 2020 [Available from: [https://www.vichealth.vic.gov.au/-/media/Life-and-Health-Re-imagined---Where-do-we-go-next-with-prevention-\(1\)/Life-and-Health-Re-imagined---Where-do-we-go-next-with-prevention-Jul2020.pdf?la=en&hash=5E6A6EF32B98E1D4506B811C6A94D1329CB1EAF](https://www.vichealth.vic.gov.au/-/media/Life-and-Health-Re-imagined---Where-do-we-go-next-with-prevention-(1)/Life-and-Health-Re-imagined---Where-do-we-go-next-with-prevention-Jul2020.pdf?la=en&hash=5E6A6EF32B98E1D4506B811C6A94D1329CB1EAF)].
158. Harris P, Kent J, Sainsbury P, Marie-Thow A, Baum F, Friel S, et al. Creating 'healthy built environment' legislation in Australia: a policy analysis. *Health Promot Int* 2018;33(6):1090-100.
159. Sahoo K, Sahoo B, Choudhury A, Sofi N, Kumar R, Bhadoria A. Childhood obesity: causes and consequences. *Family Med Prim Care*. 2015;4(2):187-92.
160. Singh A, Mulder C, Twisk J, van Mechelen W, Chinapaw M. Tracking of childhood overweight into adulthood: a systematic review of the literature. *Obesity Reviews*. 2008;9:474-88.
161. World Health Organization. Noncommunicable diseases: Childhood overweight and obesity. Geneva, Switzerland: WHO; 2020 [Available from: <https://www.who.int/news-room/q-a-detail/noncommunicable-diseases-childhood-overweight-and-obesity>].
162. World Health Organization. Report of the Commission on Ending Childhood Obesity. Geneva, Switzerland: WHO; 2016 [Available from: http://apps.who.int/iris/bitstream/10665/204176/1/9789241510066_eng.pdf].
163. Rhee K, Phelan S, McCaffery J. Early determinants of obesity: genetic, epigenetic, and in utero influences. *Int J Pediatr* 2012;2012:463850.
164. World Health Organization. Nurturing care for early childhood development: A framework for helping children survive and thrive to transform health and human potential. Geneva, Switzerland: WHO; 2018 [Available from: <https://apps.who.int/iris/handle/10665/272604>].
165. Council of Australian Governments Health Council. The Australian National Breastfeeding Strategy: 2019 and Beyond. Canberra, Australia COAG Health Council; 2019 [Available from: <http://www.coaghealthcouncil.gov.au/Portals/0/Australian%20National%20Breastfeeding%20Strategy%20-%20FINAL%20.pdf>].
166. Ventura AK. Does Breastfeeding Shape Food Preferences Links to Obesity. *Annals of Nutrition and Metabolism*. 2017;70 (Suppl 3):8-15.
167. World Health Organization. Infant and young child feeding. Geneva, Switzerland: WHO; 2021 [Available from: <https://www.who.int/news-room/fact-sheets/detail/infant-and-young-child-feeding>].

168. Smith J, Cattaneo A, Iellamo A, Javanparast S, Atchan M, Gribble K, et al. Review of effective strategies to promote breastfeeding: an Evidence Check rapid review brokered by the Sax Institute for the Department of Health. NSW: Sax Institute 2018 [Available from: <https://www.saxinstitute.org.au/publications/review-effective-strategies-promote-breastfeeding/>].
169. World Health Organization. Global action plan for the prevention and control of noncommunicable diseases 2013-2020. Geneva, Switzerland: WHO; 2013 [Available from: http://www.who.int/nmh/events/ncd_action_plan/en/].
170. Centers for Disease Control and Prevention. Strategies to Prevent and Manage Obesity: Early Care and Education. Atlanta GA: CDC; 2020 [Available from: <https://www.cdc.gov/obesity/strategies/childcareeece.html>].
171. Council of Australian Governments Health Council, Council of Australian Governments Education Council. The Good Practice Guide: Supporting healthy eating and drinking at school. Canberra, Australia COAG Health Council; 2019 [Available from: <https://www.coaghealthcouncil.gov.au/Portals/0/Reports/Good%20Practices%20to%20Support%20Healthy%20Eating%20and%20Drinking%20at%20School%20Updated%20Dec%202020.pdf>].
172. World Health Organization. Report of the commission on ending childhood obesity. Geneva, Switzerland: WHO; 2016 [Available from: http://apps.who.int/iris/bitstream/10665/204176/1/9789241510066_eng.pdf?ua=1].
173. Kleinert S, Horton R. Rethinking and reframing obesity. The Lancet. 2015;385:2326-8.
174. Donath S. Who's overweight? Comparison of the medical definition and community views. Med J Aust. 2000;172:375-7.
175. Merema MR, Sullivan DL, Pollard CM, Abraham JA, Tomlin SM, Radomiljac AL. Parents' perception of their child's weight status and intention to intervene: a Western Australian cross-sectional population survey, 2009-12. Aust N Z J Publ Health. 2015;40:68-70.
176. Zhou Z, Macpherson J, Gray SR, Gill JMR, Welsh P, Celis-Morales C, et al. Are people with metabolically healthy obesity really healthy? A prospective cohort study of 381,363 UK Biobank participants. Diabetologia. 2021.
177. Grima M, Dixon J. Obesity Recommendations for management in general practice and beyond. Australian Family Physician. 2013;42:532-41.
178. World Obesity Federation. Weight Stigma London, UK: World Obesity Federation; 2019 [Available from: <https://www.worldobesity.org/what-we-do/our-policy-priorities/weight-stigma>].
179. Food and Agriculture Organization. The State of Food Insecurity in the World. Rome, Italy: FAO; 2002 [Available from: <http://www.fao.org/3/y7352e/y7352e00.htm>].

180. Australian Bureau of Statistics. 4364.0.55.009 - Australian Health Survey: Nutrition - State and Territory results, 2011-12. Canberra, Australia: ABS; 2015 [Available from: <http://www.abs.gov.au/AUSSTATS/abs@.nsf/DetailsPage/4364.0.55.0092011-12?OpenDocument>].
181. Australian Bureau of Statistics. 4727.0.55.005 - Australian Aboriginal and Torres Strait Islander Health Survey: nutrition results - food and nutrients, 2012-13. Canberra, Australia: ABS; 2015 [Available from: <http://www.abs.gov.au/ausstats/abs@.nsf/Lookup/4727.0.55.005main+features12012-13>].
182. Bowden M. Understanding food insecurity in Australia (CFCA Paper No. 55). VIC, Australia: Australian Institute of Family Studies; 2020 [Available from: <https://aifs.gov.au/cfca/publications/understanding-food-insecurity-australia>].
183. Western Australian Council of Social Service. WA Food Relief Framework Report 2019. West Leederville, WA: WACOSS; 2019 [Available from: <https://wacoss.org.au/wp-content/uploads/2019/10/Food-Relief-Framework-report-sml.pdf>].
184. Department of Health and Ageing, National Health and Medical Research Council. A review of the evidence to address targeted questions to inform the revision of the Australian Dietary Guidelines. Canberra, Australia: NHMRC; 2011 [Available from: https://www.eatforhealth.gov.au/sites/default/files/content/The%20Guidelines/n55d_dietary_guidelines_evidence_report_2011.pdf].
185. Department of Health and Ageing, National Health and Medical Research Council. A modelling system to inform the revision of the Australian Guide to Healthy Eating. Canberra, Australia: NHMRC; 2011 [Available from: https://www.eatforhealth.gov.au/sites/default/files/files/the_guidelines/n55c_australian_dietary_guidelines_food_modelling_140121.pdf].
186. Hendrie GA, Coveney J, Cox D. Exploring nutrition knowledge and the demographic variation in knowledge levels in an Australian community sample. Public Health Nutr. 2008;11(12):1365-71.
187. McKinnon L, Giskes K, Turrell G. The contribution of three components of nutrition knowledge to socio-economic differences in food purchasing choices. Public health nutr. 2014;17(8):1814-24.
188. Pollard C, Harray A, Daly A, Kerr D. Nutrition Monitoring Survey Series 2012: Key Findings. Perth, Western Australia: Department of Health; 2015 [Available from: https://ww2.health.wa.gov.au/Articles/N_R/Nutrition-Monitoring-Survey-Series].
189. Thomson L, McFeeter J. What's for Dinner? An exploration of changes in eating habits and dietary acculturation among new migrants to Australia. Australia: AMES Australia 2016 [Available from: <https://www.ames.net.au/-/media/files/research/ames-australia-migrants-and-food-survey.pdf?la=en>].

190. Vidgen HA, Gallegos D. Defining food literacy and its components. *Appetite*. 2014;76:50-9.
191. Pollard C, Daly A, Moore M, Binns C. Public say food regulatory policies to improve health in Western Australia are important: population survey results. *Aust NZ J Publ Health*. 2013;37(5):475-82.
192. World Health Organization. Tackling NCDs. Best buys and other recommended interventions for the prevention and control of noncommunicable diseases. Geneva, Switzerland: WHO; 2017 [Available from: <https://www.who.int/ncds/management/best-buys/en/>].
193. Department of Health. Physical activity and exercise guidelines for all Australians. Canberra, Australia: Commonwealth of Australia 2021 [Available from: <https://www.health.gov.au/health-topics/physical-activity-and-exercise/physical-activity-and-exercise-guidelines-for-all-australians>].
194. World Health Organization. Physical activity fact sheet. Geneva, Switzerland: WHO; 2015 [Available from: <http://www.who.int/entity/mediacentre/factsheets/fs385/en/index.html>].
195. World Health Organization. Global action plan on physical activity 2018-2030: more active people for a healthier world. Geneva, Switzerland: WHO; 2018 [Available from: <https://apps.who.int/iris/bitstream/handle/10665/272722/9789241514187-eng.pdf?sequence=1&isAllowed=y>].
196. Brown W, Bauman A, Bull F, Burton N. Development of evidence-based physical activity recommendations for adults (18-64 years). Canberra, Australia: Commonwealth of Australia; 2012 [Available from: [http://www.health.gov.au/internet/main/publishing.nsf/Content/health-pubhlth-strateg-phys-act-guidelines/\\$File/DEB-PAR-Adults-18-64years.pdf](http://www.health.gov.au/internet/main/publishing.nsf/Content/health-pubhlth-strateg-phys-act-guidelines/$File/DEB-PAR-Adults-18-64years.pdf)].
197. Australian Institute of Health and Welfare. Australia's children. Canberra, Australia: AIHW; 2020 [Available from: <https://www.aihw.gov.au/reports/children-youth/australias-children>].
198. World Health Organization. Falls. Geneva, Switzerland: WHO; 2021 [Available from: <https://www.who.int/news-room/fact-sheets/detail/falls>].
199. Australian Institute of Health and Welfare. Australia's health 2016. Australia's health series no. 15. Cat. no. AUS 199. Canberra, Australia: AIHW; 2016 [Available from: <http://www.aihw.gov.au/publication-detail/?id=60129555544>].

200. National Heart Foundation of Australia. Blueprint for an active Australia, 2nd edition. Melbourne, Australia: National Heart Foundation of Australia; 2014 [Available from: <http://heartfoundation.org.au/images/uploads/publications/Blueprint-for-an-active-Australia-second-edition.pdf>].
201. Cancer Council WA. Alcohol use in Western Australia: Drinking patterns and harms. Subiaco, Western Australia: CCWA; 2021 [Available from: <https://www.cancerwa.asn.au/resources/2021-03-04-Factsheet-Alcohol-use-in-WA-drinking-patterns-and-harms.pdf>].
202. Mental Health Commission. Alcohol trends in Western Australia: Australian School Students Alcohol and Drug Survey. Perth, Western Australia: MHC; 2020 [Available from: <https://www.mhc.wa.gov.au/media/3276/assad-2017-bulletins-2020-update-bulletin-publication-ibn-attachment-2-alcohol-bulletin.pdf>].
203. Foundation for Alcohol Research and Education. 2019 Annual Alcohol Poll: Attitudes and Behaviours. Canberra, Australia: FARE; 2019 [Available from: <https://fare.org.au/wp-content/uploads/FARE-Annual-Alcohol-Poll-2019-FINAL.pdf>].
204. McCusker Centre for Action on Alcohol and Youth, St John Ambulance WA. More young WA men requiring ambulances for alcohol than women. 2018 [Available from: <https://news.curtin.edu.au/media-releases/young-wa-men-requiring-ambulances-alcohol-women/>].
205. Australian Bureau of Statistics. Causes of Death, Australia, 2017: Deaths due to harmful alcohol consumption in Australia. Canberra, Australia: ABS; 2018 [Available from: <https://www.abs.gov.au/ausstats/abs@.nsf/Lookup/by%20Subject/3303.0~2017~Main%20Features~Deaths%20due%20to%20harmful%20alcohol%20consumption%20in%20Australia~4>].
206. Foundation for Alcohol Research and Education. The hidden harm: Alcohol's impact on children and families. 2015 [Available from: <https://fare.org.au/the-hidden-harm-alcohols-impact-on-children-and-families/>].
207. Royal Perth Hospital. Royal Perth Hospital admissions related to domestic and family violence. Perth, Western Australia: East Metropolitan Health Service; 2019 [Available from: <https://knowinjury.org.au/wp-content/uploads/sites/4/2020/03/Royal-Perth-Hospital-Domestic-Family-Violence-Report-2020.pdf>].
208. Department Health. National Alcohol Strategy 2019-2028. Canberra, Australia: Commonwealth of Australia; 2019 [Available from: <https://www.health.gov.au/sites/default/files/documents/2020/11/national-alcohol-strategy-2019-2028.pdf>].
209. Kreitman N. Alcohol consumption and the preventive paradox. Br J Addict. 1986;81(3):353-63.

210. Cooke R, Dahdah M, Norman P, French DP. How well does the theory of planned behaviour predict alcohol consumption? A systematic review and meta-analysis. *Health Psychol Rev.* 2016;10(2):148-67.
211. Roche A, Bywood P, Borlagdan J, Lunnay B, Freeman T, Lawton L, et al. Young people and alcohol: the role of cultural influences. [Report]. National Centre for Education and Training; 2008 [Available from: <https://apo.org.au/node/2079>].
212. Smit K, Voogt C, Hiemstra M, Kleinjan M, Otten R, Kuntsche E. Development of alcohol expectancies and early alcohol use in children and adolescents: A systematic review. *Clin Psychol Rev.* 2018;60:136-46.
213. Voogt C, Beusink M, Kleinjan M, Otten R, Engels R, Smit K, et al. Alcohol-related cognitions in children (aged 2-10) and how they are shaped by parental alcohol use: A systematic review. *Drug Alcohol Depend.* 2017;177:277-90.
214. National Health and Medical Research Council. Australian guidelines to reduce health risks from drinking alcohol. Canberra, Australia: Commonwealth of Australia; 2020 [Available from: <https://www.nhmrc.gov.au/about-us/publications/australian-guidelines-reduce-health-risks-drinking-alcohol>].
215. The Lancet Child Adolescent Health. Hard measures needed to tackle youth drinking. *Lancet Child Adolesc Health.* 2018;2(11):765.
216. Siegel M, Ross CS, Albers AB, DeJong W, King C, 3rd, Naimi TS, et al. The relationship between exposure to brand-specific alcohol advertising and brand-specific consumption among underage drinkers--United States, 2011-2012. *Am J Drug Alcohol Abuse.* 2016;42(1):4-14.
217. Government of Western Australia. End in sight for alcohol advertising on public transport. Perth, Western Australia: Government of Western Australia; 2018 [Available from: <https://www.mediastatements.wa.gov.au/Pages/McGowan/2018/06/End-in-sight-for-alcohol-advertising-on-public-transport.aspx>].
218. Babor T, Caetano R, Casswell S, Edwards G, Giesbrecht N, K G, et al. Alcohol: No Ordinary Commodity: Research and Public Policy. Oxford University Press, New York. 2003.
219. Colbert S, Thornton L, Richmond R. Content analysis of websites selling alcohol online in Australia. *Drug and Alcohol Review.* 2020;39(2):162-9.
220. Mojica-Perez Y, Callinan S, Livingston M. Alcohol home delivery services: An investigation of use and risk. Canberra, Australia: FARE, CAPR; 2019 [Available from: <https://fare.org.au/wp-content/uploads/Alcohol-home-delivery-services.pdf>].

- 221. Epidemiology Branch. Injury hospitalisations, deaths, and emergency department presentations, HMDS. Perth, Western Australia: Department of Health; 2016.
- 222. Epidemiology Directorate. Comparison of all-cause hospitalisations by external cause (injury and poisoning) - Western Australia State. Perth, Western Australia: Department of Health; 2021.
- 223. Epidemiology Directorate. External cause of mortality deaths - Western Australia State. Perth, Western Australia: Department of Health; 2021.
- 224. Hendrie D, Miller T, Randall S, Brameld K, Moorin R. Incidence and costs of injury in Western Australia 2012. Perth, Western Australia: Department of Health; 2016 [Available from: <https://ww2.health.wa.gov.au/Reports-and-publications/Incidence-and-costs-of-injury-in-wa>].
- 225. Parker E, Sun W. Trends in fatal burden of disease in Western Australia 2014–2018. Perth, Western Australia: Department of Health; 2020 [Available from: https://ww2.health.wa.gov.au/-/media/Corp/Documents/Reports-and-publications/Trends-in-fatal-burden-of-disease-in-Western-Australia-2014-to-2018/Trends_in_fatal_burden_WA_2014-2018.pdf].
- 226. Epidemiology Directorate. Top fifteen causes of avoidable death for Western Australia State residents. Perth, Western Australia: Department of Health; 2021.
- 227. Epidemiology Directorate. Top fifteen causes of hospitalisations by external cause (injury and poisoning) for Western Australia State residents. Perth, Western Australia: Department of Health; 2021.
- 228. Sweeney R, Meade R, Visser M. 2020 Western Australian Falls Report. Perth, Australia: Injury Matters; 2020 [Available from: <https://injurymatters.org.au/wp-content/uploads/sites/5/2020/08/2020WAFallsReport.pdf>].
- 229. Epidemiology Directorate. Comparison of other external causes of morbidity and mortality avoidable death rates for Aboriginals and non-Aboriginal people who live in the Western Australia State for persons aged 0-74 years. Perth, Western Australia: Department of Health; 2021.
- 230. Epidemiology Directorate. Comparison of all-cause hospitalisations by external cause (injury and poisoning) rates for Aboriginal and non-Aboriginal people who live in the Western Australia State. Perth, Western Australia: Department of Health; 2021.
- 231. Australian Institute of Health and Welfare. Alcohol risk and harm. Canberra, Australia: AIHW; 2021 [Available from: <https://www.aihw.gov.au/reports/australias-health/alcohol-risk-and-harm>].

232. Lifeline. Suicide Statistics. NSW: Lifeline; 2021 [Available from: <https://www.lifeline.org.au/resources/data-and-statistics/>].
233. Australian Institute of Health and Welfare. Deaths in Australia. Canberra, Australia: AIHW; 2021 [Available from: <https://www.aihw.gov.au/reports/life-expectancy-death/deaths-in-australia>].
234. Mental Health Commission. Western Australian Suicide Prevention Framework 2021 – 2025. Perth, Western Australia: MHC; 2020 [Available from: <https://www.mhc.wa.gov.au/media/3505/wa-suicideprevention-a4-mk40-web-version.pdf>].
235. Department of Communities. Path to Safety: Western Australia’s strategy to reduce family and domestic violence 2020–2030. Perth, Western Australia: Department of Communities; 2020 [Available from: <https://www.wa.gov.au/sites/default/files/2021-04/fdv-strategy-2020-2030.pdf>].
236. Kidsafe WA. Kidsafe WA - About us. Perth, Western Australia: Kidsafe WA; 2021 [Available from: <https://www.kidsafewa.com.au/>].
237. Stay On Your Feet. Stay On Your Feet. Leederville, Western Australia: Stay on your feet; 2021 [Available from: <https://www.stayonyourfeet.com.au/>].
238. Royal Life Saving WA. WA Drowning Report. Perth, Western Australia: RLSS WA; 2019 [Available from: <https://royallifesavingwa.com.au/your-safety/facts-and-figures/drowning-reports>].
239. Australian Water Safety Council. Australian Water Safety Strategy 2030: Towards a nation free from drowning. Sydney, NSW: AWSC; 2021 [Available from: https://www.swimaustralia.org.au/docs/AWS_Strategy2030_Final.pdf].
240. Road Safety Commission. Behaviours. Perth, Western Australia: Government of Western Australia; 2020 [Available from: <https://www.rsc.wa.gov.au/Your-Safety/Behaviours>].
241. Road Safety Commission. Driving Change: Road Safety Strategy for Western Australia 2020–2030. Perth, Western Australia: Government of Western Australia; 2020 [Available from: <https://www.rsc.wa.gov.au/New-Road-Safety-Strategy>].
242. Road Safety Commission. WA Road Fatalities 2020 (January 2021). Perth, Western Australia: Government of Western Australia; 2021 [Available from: <https://www.rsc.wa.gov.au/RSC/media/Documents/Road%20Data/Statistics/WA-Road-Fatality-Progress-2020.pdf>].
243. Department of Health. Annual Report 2019-20. Perth, Western Australia: Government of Western Australia; 2020 [Available from: <https://ww2.health.wa.gov.au/-/media/Corp/Documents/Reports-and-publications/Annual-report/2020/DOH-annual-report.pdf>].

244. Australian Institute of Health and Welfare. National Healthcare Agreement (2021). Canberra, Australia: AIHW; 2021 [Available from: <https://meteor.aihw.gov.au/content/index.phtml/itemId/725844>].
245. Cambridge Dictionary. Research. Cambridge, UK: Cambridge University Press; [Available from: <https://dictionary.cambridge.org/dictionary/english/research>].

This document can be made available in alternative formats on request for a person with disability.

© Department of Health 2021

Copyright to this material is vested in the State of Western Australia unless otherwise indicated. Apart from any fair dealing for the purposes of private study, research, criticism or review, as permitted under the provisions of the *Copyright Act 1968*, no part may be reproduced or re-used for any purposes whatsoever without written permission of the State of Western Australia