Western Australian Health Promotion Strategic Framework

2017-2021

DRAFT FOR CONSULTATION

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Note on terminology

The use of the term 'Aboriginal' within this document refers to Australians of both Aboriginal and Torres Strait Islander descent. The word 'Indigenous' is retained where it is included as part of an already-existing formal title.

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Foreword

A Foreword will be included in the final version of the WA HPSF.

Executive summary

The Western Australian Health Promotion Strategic Framework 2017–2021 (WA HPSF) sets out a strategic plan for reducing the prevalence of chronic disease and injury over the next five years.

Understanding chronic disease and injury

Chronic diseases (often described as non-communicable diseases) are broadly defined as health conditions that usually have a number of contributing factors, develop gradually, and have long-lasting effects. They include diseases such as cardiovascular disease, type 2 diabetes, respiratory disease and some cancers.¹

It is estimated that in WA in 2011, 435,000 years were lost to premature death or living with a disability or illness due to chronic disease or injury.²

Many chronic diseases are associated with a cluster of common risk factors that can be prevented or modified. They are being overweight or obese, having a poor diet, getting insufficient physical activity, smoking, and consuming alcohol at harmful levels.³

Injuries are also an important cause of death and disability in WA.² Lifestyle interventions and the creation of safer environments can be effective in preventing many types of injuries, and factors such as alcohol use² and physical inactivity⁴ also influence the risk of injury. Because of this connection, strategies to prevent chronic diseases and injury are therefore often implemented together.

The risk factors associated with chronic disease and injury, and the prevalence of chronic disease and injury are not distributed equally across society. People who live in areas of socioeconomic disadvantage or outside major cities, have lower levels of education, lower incomes, experience mental health problems or have a disability are more likely to report having health risk behaviours, with many having multiple risk factors.³

Aboriginal people have higher rates of chronic disease and injury and also experience the onset of these diseases at a much younger age compared to the general population.⁵

Understanding health promotion and disease prevention

There are significant opportunities to improve the health of the WA population by facilitating behaviour change and creating healthier environments across the community.

The WA HPSF supports evidence-based, population-wide approaches, accompanied by complementary targeted approaches to assist populations with a higher prevalence of risk factors for chronic disease and injury.

Who can use the WA Health Promotion Strategic Framework?

The WA HPSF has been developed primarily for use by WA Health, but it is anticipated that the document will be useful for all agencies and organisations across a diverse range of sectors with a shared interest in promoting better health in WA, particularly those which work in partnership with Government.

The WA HPSF may be used to guide policy related to chronic disease and injury prevention in State and Local Public Health Plans.

As previously, the WA HPSF sets broad strategic priorities to achieve the greatest health gains for the WA population. Decisions regarding appropriate interventions will differ between organisations and settings, depending on their responsibilities and priorities.

Complementary policies and strategies

The WA HPSF is complementary to, and does not duplicate or replace the range of policies which address other aspects of health in WA.

Our state of health

People in WA are leading longer, healthier and more injury-free lives due to a range of factors, including improved disease control, safer living and working conditions, and medical advances. Declines in tobacco use have also helped to improve the health of Western Australians.^{1, 6}

Modifiable lifestyle behaviours are still a major contributor to death and ill-health in WA. It is estimated that in 2006, 64% of all deaths in people in WA aged under 75 were potentially avoidable. The majority of those deaths were due to chronic disease.⁶

In Australia in 2011, the risk factors responsible for the greatest burden of disease were tobacco use (9%), dietary risks (7%), and high body mass and alcohol use (both 5%). Compared with other disease groups, injuries (including self-harm and suicide) caused the fifth largest burden of disease in Australia. ²

Living with a disability, with a greater degree of socioeconomic disadvantage, and dwelling outside metropolitan areas are factors which increase the likelihood of exposure to risk factors for chronic disease.⁸ Aboriginal people⁹ and some culturally and linguistically-diverse (CaLD) communities also have a higher prevalence of risk factors for disease.¹⁰

The gap in life expectancy for Aboriginal men and women compared with the State average life expectancy is largely due to injury and earlier onset of chronic disease. People experiencing mental health problems also often have poorer physical health outcomes than other people. It has been estimated that from 1985–2005 in WA, the gap in life expectancy for psychiatric patients compared with the total WA population increased from 14 years to 16 years for males, and from 10 years to 12 years for females. Seventy-eight per cent of excess deaths were due to physical health

conditions, including cardiovascular disease and cancers. 13

In coming decades, strong population growth, increased longevity and a higher proportion of older adults in WA will translate to a greater burden of chronic disease and injury, with higher economic costs and increased strain on the healthcare system.

The hospital costs in 2013 attributable to chronic disease exceeded \$715 million in WA. In the same year, hospital costs in WA for injury were just short of \$350 million.¹⁴

There is good evidence that prevention offers cost-effective ways to improve health outcomes in Australia. 15

A framework for action

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

The priority areas for the WA HPSF are:

- healthy eating
- a more active WA
- · curbing the rise in overweight and obesity
- making smoking history
- · reducing harmful levels of alcohol use
- · preventing injury and promoting safer communities

The main target groups are the population of WA who are currently well, and population groups with a higher risk of developing chronic disease or experiencing injury than the general population.

The WA HPSF is guided by four principles:

- 1. adopting a comprehensive whole-of-population approach
- 2. working in partnership and building capacity
- 3. intervening early and throughout life
- 4. promoting equity and inclusivity

The WA HPSF supports a comprehensive approach to health promotion, combining interventions across these eight domains:

- healthy policies
- legislation and regulation
- economic interventions
- supportive environments
- public awareness and engagement
- community development
- targeted interventions

• strategic coordination, building partnerships and workforce development

Monitoring progress

The Department of Health takes a rigorous and systematic approach to monitoring progress in the areas of chronic disease and injury, drawing on State and Commonwealth data sets.

The WA HPSF supports robust program evaluation as an important component of health promotion planning and service delivery.

The pursuit of a priority-driven research agenda is also critical to help accelerate necessary policy changes in appropriate health promotion interventions.

As there is often considerable delay between health promotion activity and changes in behaviour or improvements in disease and injury outcomes, progress in health promotion is typically realised over the longer term and it can be difficult to measure progress in the interim.

Mapping progress in chronic disease and injury prevention in WA requires an approach that also captures the range of activities that contribute to changes in health behaviours, and ultimately health outcomes.

Developing a narrative describing what has been achieved in chronic disease and injury prevention, taking into account changes in the broader public health field will be a priority for the WA Department of Health during the life of this Framework.

In parallel, the Department will monitor various lifestyle and behavioural risk factors, biomedical states and injury events, and morbidity and mortality outcomes relating to chronic disease and injury, using State and national data collections.

Box 1: The WA Health Promotion Strategic Framework 2017-2021 at a glance

Goal To lower the incidence of avoidable 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 experiencing injury by engaging in risky lifestyle behaviours **Guiding principles** Adopting a comprehensive whole-of-population approach Intervening early and throughout life Working in partnership and building capacity Promoting equity and inclusivity A framework for action Development of healthy policy at government and Raising public awareness and engagement organisational level Legislation and regulation Community development **Economic intervention** Targeted interventions Creating environments for living, working and relaxing Strategic coordination, building partnerships and workforce development which support healthy choices **Priority areas** Healthy eating A more active Curbing the rise Making smoking Preventing injury WA in overweight history Reducing harmful and promoting and obesity alcohol use safer communities Protect children from Foster environments Promote environments Promote environments Continue efforts to Change community attitudes towards that promote and that support physical that support people to lower smoking rates injury support healthy eating activity and reduced achieve and maintain a alcohol use sedentary behaviour healthy weight Prevent falls in older patterns Eliminate exposure to secondhand smoke Influence the supply of people Increase availability Reduce barriers and Prevent and reverse where the health of alcohol and accessibility of increase opportunities childhood overweight others can be affected Reduce road crashes quality, affordable for physical activity and obesity Reduce demand for and road trauma nutritious food for all across all populations Reduce smoking in alcohol groups with higher Motivate behavior to Improve safety in, on achieve and maintain asmoking rates and around water Increase the Increase knowledge and skills understanding of the healthy weight among necessary to choose a benefits of physical Improve regulation of Reduce interpersonal adults violence healthy diet activity and encourage contents, product increased activity at all disclosure and supply stages of life Develop the injury prevention and safer Monitor emerging products and trends Motivate lifestyle communities sector changes to reduce sedentary behaviour Monitor emerging issues in injury prevention

Measuring progress

Key Performance Indicators for WA Health annual reporting

National Healthcare Agreement

Voluntary targets set by the WHO Global Action Plan for the Prevention and Control of Noncommunicable Diseases 2013–2020

Part 1: Introduction

1.1 About the *Health Promotion Strategic Framework* 2017–2021

The Western Australian Health Promotion Strategic Framework 2017–2021 (WA HPSF) sets out a strategic plan for reducing the prevalence of chronic disease and injury over the next five years. It articulates a goal, policy priorities, and areas for action to improve the health of the population of WA.

The WA HPSF builds on the achievements of the previous two HPSFs (2007–2011 and 2012–2016) and takes into account new evidence, policy changes, relevant national and international developments and feedback from stakeholder consultations. The WA HPSF complements a range of other health strategies and policies that have been developed by the Department of Health and other agencies.

1.2 Understanding chronic disease and injury

Chronic diseases, also known as non-communicable diseases, are broadly defined as health conditions that usually have a number of contributing factors, develop gradually, and have long-lasting effects. Some diseases may lead to many years of disability and require long-term management, while others cause premature death. They include diseases such as cardiovascular disease, type 2 diabetes, respiratory disease and some cancers.¹

It is estimated that in WA, 435,000 years were lost to premature death or living with a disability or illness due to chronic disease or injury in 2011.² Chronic disease and injury have a profound impact on an individual's health and well-being and place an enormous burden on families, carers and our healthcare system.³

Many chronic diseases are associated with a cluster of risk factors that can be prevented or modified (Table 1). They are:³

- being overweight or obese
- poor diet
- insufficient physical activity
- smoking
- harmful levels of alcohol use

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

Conditions Risk factors	Cardiovascular diseases	Type 2 diabetes	Mental health	Chronic kidney disease	Some cancers	Injury	Muscular— skeletal	Oral diseases	Respiratory diseases
	Ca dis	Ę	Me	ည် နဲ့	So	<u>=</u>	M Š Š	ō	Re dis
Behavioural		1		1		ı			
Tobacco smoking	√	√	√	√	√	√	√	√	√
Physical inactivity	~	~	√	~	~	~	√		
Harmful alcohol use	√	~	√		~	~	~	√	
Poor nutrition	~	~	√	~	~	√	√	√	
Biomedical	Į.					l.	l	Į.	1
Overweight and obesity	√	√	√	√	~	√			
High blood pressure	√			√					
High blood cholesterol	√	√							
High blood sugar	√	√		√					
Early life factors (including low birthweight)	√	√	√			√		√	~

Sources: AIHW, 3, 7, 16 Oral Health Monitoring Group 17

The WA HPSF focuses on being overweight or obese, poor diet, insufficient physical activity, smoking, and harmful levels of alcohol use because they are among the risk factors which cause the greatest burden of disease. In Australia in 2011, tobacco use was responsible for 9% of the burden of disease, followed by dietary factors (7%). It is estimated that by avoiding these risk factors, the total burden of disease in Australia could be reduced by almost one third (31%). Influencing these risk factors therefore has the potential to significantly reduce the prevalence and severity of chronic disease and improve the health of people in WA.

The leading four disease groups which cause the greatest burden are cancer, cardiovascular disease, mental and substance use disorders and musculoskeletal conditions (including back problems, arthritis and osteoporosis). The fifth-greatest burden of premature death and disability is due to injuries.² Lifestyle interventions and the creation of safer environments can be effective in preventing many types of injuries, and factors such as alcohol use² and physical inactivity⁴ also influence the risk of injury. Strategies to prevent chronic diseases and injury are therefore often

implemented together. The WA HPSF includes preventing injury and promoting safer communities as a priority area for action.

The risk factors on which the WA HPSF focuses are common in the Western Australian community. Most people have at least one risk factor and many have several risk factors.³ Often, these risk factors occur together. For example, people who consume alcohol at risky levels are also more likely to be daily smokers. Daily smoking is also more common among people with low levels of physical activity. Having more risk factors is usually associated with higher levels of chronic disease.³

Table 2: Proportion (%) of burden of disease and illness attributable to selected risk factors, Australia, 2011

Conditions Risk factors	Cardiovascular diseases	Type 2 diabetes	Mental health	Chronic kidney disease	Some cancers	Injury	Musculo- skeletal	Respiratory diseases	Total burden of disease caused by specific risk factor
Behavioural				_					
Tobacco use	12	4			22			36	9
Dietary risks (joint effect*)	35	33			7				7
Physical inactivity	21	30			6				5
Harmful alcohol use	5	2	12		3	21			5
Biomedical	Biomedical								
Overweight and obesity	21	49		28	5		<1		6
High blood pressure	32			22					5
High blood sugar	3	96		3					3
High blood cholesterol	16								2

^{*}Dietary risk factors include high consumption of processed meat and saturated fats; and low vegetable, fruit, nut, seed, wholegrain and fibre intake. Source: Derived from AIHW^{2, 7}

There is also evidence that these risk factors and the prevalence of chronic disease and injury are not distributed equally across society. People who live in areas of socioeconomic disadvantage or outside major cities, have lower levels of education, lower incomes, experience mental health problems or have a disability are more likely to report having health risk behaviours, with many having multiple risk factors.³

Aboriginal people have higher rates of chronic disease and injury and also experience the onset of these diseases at a much younger age compared to the general population. Aboriginal people also die from chronic diseases at a younger age. About 80% of the mortality gap for Aboriginal people aged 35–74 years results from chronic disease.⁵

When considering the prevention of chronic disease and injury, it is also important to consider protective factors that can have a positive effect on health. For example, regular physical activity can assist with lowering blood pressure or management of body weight.³ Physical activity that includes a strong focus on improving strength and balance can help prevent falls in older people.⁴ A diet high in fruits and vegetables, and low in saturated fat, can protect against certain cancers and heart disease.^{3, 18}

1.3 Understanding health promotion and disease prevention

There are significant opportunities to improve the health of the WA population by facilitating behaviour change and creating healthier environments across the community.

Box 2: What is meant by health promotion and disease prevention?

The WA HPSF uses the World Health Organization's broad definition of health promotion, which states that *Health promotion is the process of enabling people to increase control over, and to improve, their health. It moves beyond a focus on individual behavior towards a wide range of social and environmental interventions.* ¹⁹

In the WA HPSF, prevention refers to reducing the risk of developing chronic disease or being injured through modifying risk factors.

Strategies to encourage healthier and safer populations require a sustained, long-term investment in health promotion and approaches that take into account the wider socioeconomic, cultural and environmental conditions that shape behavior. Effective health promotion provides substantial savings to the community in terms of health and non-health related costs.¹⁵

The WA HPSF continues to support evidence-based, population-wide approaches that have already successfully delivered improvements in health, including declines in prevalence of smoking and harmful drinking, and an increase in the proportion of adults who are being sufficiently physically active.

Despite these improvements, challenges remain. For example, recent data show

that:

- 43% of adults in WA report that they spend most of their day sitting²⁰
- around two-thirds of people aged 16 and over,²⁰ and almost a quarter of children aged 5–15 years are classified as overweight or obese²¹
- 90% of people aged 16 years and over do not consume the recommended servings of vegetables²²
- smoking rates among Aboriginal people remain high at 43%¹¹
- 28% of adults in WA drink at levels considered high risk for long-term harm, and 10% drink at levels considered high risk for short-term alcohol-related harm²⁰
- drowning is still the leading cause of preventable death for 0–4 year-olds²³

The WA HPSF supports complementary targeted approaches to assist populations with a higher prevalence of risk factors for chronic disease and injury.

1.4 Who can use the *WA Health Promotion Strategic Framework*?

The WA HPSF has been developed primarily for use by WA Health, but it is anticipated that the document will be useful for all agencies and organisations with an interest in promoting better health in WA, particularly those which work in partnership with Government. Working to prevent disease and improve health is a shared responsibility, and influencing the wider determinants of health to achieve a healthier WA will require the involvement of many partners, including:

- government departments and agencies
- local governments
- non-government organisations
- professional and voluntary organisations
- trade and industry groups
- educational bodies
- public and private sector workplaces
- health professionals
- community groups
- the general public
- the media

Each of these groups has the capacity to contribute to better health across the community and many of these groups are already taking action that will improve the health of Western Australians.

As previously, the WA HPSF sets broad strategic priorities to achieve the greatest health gains for the Western Australian population. Decisions regarding appropriate interventions will differ between organisations and settings, depending on their responsibilities and priorities.

The WA Public Health Act 2016

The WA *Public Health Bill 2014* was passed by the State Government in June 2016 and received Royal Assent on 25 July 2016. The new legislation repeals much of the out-dated *Health Act 1911* and takes a broader approach to public health and the factors which determine health status (Box 3).

The *Public Health Act* 2016²⁴ requires the State's Chief Health Officer to develop a Public Health Plan which 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 in the State.

Box 3: The WA Public Health Act 2016

The Public Health Act 2016²⁴ is intended to protect, promote and improve the health and wellbeing of the public of Western Australia and to reduce the incidence of preventable illness, among other things.

For the purposes of the Act, public health means the health of individuals in the context of—

- (a) the wider health and wellbeing of the community
- (b) the combination of safeguards, policies and programs designed to protect, maintain, promote and improve the health of individuals and their communities and to prevent and reduce the incidence of illness and disability

The objectives of the Act are to—

- (a) promote and improve public health and wellbeing and to prevent disease, injury, disability and premature death
- (b) protect individuals and communities from diseases and other public health risks and to provide, to the extent reasonably practicable, a healthy environment for all Western Australians
- (c) promote the provision of information to individuals and communities about public health risks
- (d) encourage individuals and communities to plan for, create and maintain a healthy environment
- (e) provide for the prevention or early detection of diseases and other public health risks, and certain other conditions of health
- (f) support programs and campaigns intended to improve public health
- (g) facilitate the provision of information to decision-making authorities about public health risks and benefits to public health that may result from certain proposals
- (h) provide for the collection, disclosure and use of information about the incidence and prevalence of diseases and other public health risks in the State, and certain other conditions of health, for research or public health purposes
- (i) reduce the inequalities in public health of disadvantaged communities
- (j) provide for functions relating to public health to be performed by the State and local governments

Each Local Government is required to develop a Local Public Health Plan which is consistent with the State plan. State and Local Governments are encouraged to link with other agencies which have shared goals.

The WA HPSF may be used to guide policy related to chronic disease and injury prevention in State and Local Public Health Plans.

1.5 Complementary policies and strategies

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

The 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 the mind and body

http://ww2.health.wa.gov.au/Reports-and-publications/WA-Health-Strategic-Intent-2015-2020

The health of Aboriginal people is addressed by the *WA Aboriginal Health and Wellbeing Framework 2015–2030* and the *Aboriginal Cultural Learning Framework 2012–2016*

http://ww2.health.wa.gov.au/Improving-WA-Health/About-Aboriginal-Health/WA-Aboriginal-Health-and-Wellbeing-Framework-2015-2030

http://ww2.health.wa.gov.au/Improving-WA-Health/About-Aboriginal-Health/Aboriginal-Cultural-Learning-Framework-2012-2016

Mental health, and alcohol and other drugs issues are addressed by the Mental Health Commission in policies which include *Better Choices. Better Lives* (the *WA Mental Health, Alcohol, and other Drug Services Plan 2015–2025*), the *Drug and Alcohol Interagency Strategic Framework for Western Australia 2011–2015* (under review) and *Suicide Prevention 2020*

http://www.mentalhealth.wa.gov.au/ThePlan.aspx

http://www.dao.health.wa.gov.au/DesktopModules/Bring2mind/DMX/Download.aspx? Command=Core Download&EntryId=538&PortalId=0&TabId=211

http://www.mentalhealth.wa.gov.au/mentalhealth_changes/wa_suicide_prevention_st_rategy.aspx

Communicable (infectious) diseases, including **sexual health** and associated chronic diseases which 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 Department of Health

Prevention and management of cancer is discussed in the *WA Cancer Plan 2012–2017*

http://www.healthnetworks.health.wa.gov.au/cancer/docs/12196_WA_Cancer_PLAN.pdf

Injury prevention is also addressed in the WA Non-Major Trauma Framework and the Falls Prevention Model of Care in WA

http://www.healthnetworks.health.wa.gov.au/docs/NonMajorTraumaFramework.pdf http://www.healthnetworks.health.wa.gov.au/modelsofcare/docs/Falls Model of Care.pdf

Prevention and management of chronic disease in people who have already been diagnosed with a disease is discussed in the WA Chronic Conditions Framework 2011–2016, the WA Chronic Conditions Self-management Strategic Framework 2011–2015 and models of care for individual diseases http://www.healthnetworks.health.wa.gov.au/docs/1112_ChronicHealthConditionsFramework.pdf

http://www.healthnetworks.health.wa.gov.au/docs/1112_CCSM_Strategic_Framework.pdf

Active ageing is led by the Department of Local Government and Communities through the *Seniors Strategic Planning Framework* https://www.dlgc.wa.gov.au/Publications/Pages/Seniors-Strategic-Planning-Framework.aspx

Monitoring and advocacy to strengthen the wellbeing of WA children and young people is one of the three key concerns of the Commissioner for Children and Young People. See *Our approach and priorities 2016–2020* https://www.ccyp.wa.gov.au/media/2220/our-approach-and-priorities-final-lr2.pdf

Prevention in the primary care setting is addressed in the *WA Primary Health Care Strategy*

http://www.healthnetworks.health.wa.gov.au/docs/1112_WAPrimaryHealthCareStrategy.pdf

Prevention and treatment of oral health conditions are addressed by the *State Oral Health Plan 2016–2020* (in draft)

WA Government Departments of Agriculture and Food; Child Protection and Family Services; Commerce; Corrective Services; Culture and the Arts; Education; Local Government and Communities; Parks and Wildlife; Planning; Sport and Recreation; Training and Workforce Development; and Transport; and the Disabilities Services Commission are among other WA leading Government agencies which 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*²⁵ and the *National Strategic Framework for Chronic Conditions* (under development) http://www.health.gov.au/internet/main/publishing.nsf/Content/nsfcc

Links to other important Commonwealth and State policies and relevant international frameworks are included in Appendix 1.

Part 2: Our state of health

Relatively speaking, the majority of Western Australians enjoy good health...

Australia has among the longest life expectancies in the world, and in WA, the average life expectancy of a current newborn is 85 years for females and 80 years for males—just above the national average.²⁶

The self-reported health of people living in WA continues to improve and is the best it has been since data collection began in 2001.8

People in WA are leading longer, healthier and more injury-free lives due to a range of factors, including improved control of many infectious diseases, better sanitation and hygiene, safer living and working conditions, and advances in medicine and healthcare technology. Declines in tobacco use and effective health promotion

... self-reported health of people living in WA continues to improve...

campaigns have also helped to improve the health of Western Australians. 1, 6

... but there is still room for improvement

Modifiable lifestyle behaviours are still a major contributor to death and ill-health in WA. In 2006, 64% of all deaths in people in WA aged under 75 were potentially avoidable. The majority of those deaths were due to chronic disease.⁶

In Australia in 2011, the risk factors responsible for the greatest burden of disease were tobacco use (9%), dietary risks (7%), and high body mass and alcohol use (both 5%). Compared with other disease groups, injuries (including self-harm and suicide) caused the fifth largest burden of disease in Australia.²

In 2013, there were 3,177 deaths in WA from coronary heart disease,

Around 60% of all WA deaths in those under 75 years of age are potentially avoidable ...

cerebrovascular disease and lung cancer combined—all chronic diseases which are linked to modifiable lifestyle behaviours.²⁷

Between 2010 and 2014, chronic diseases were responsible for more than 950,000 hospitalisations in WA, and over 200,000 hospitalisations in 2014 alone.²⁷

Injury is also a major contributor to loss of life in WA. In 2014, the 757 deaths caused by drowning, suicide, accidental poisoning and transport accidents were estimated to have resulted in an average loss of more than 30 potential years of life per death.²⁸

Injuries were responsible for over 250,000 hospitalisations and nearly 1.1 million emergency department visits in WA between 2010 and 2014.²⁹

Some groups are still at greater risk than others

Some sub-populations in WA are also at a greater risk of chronic disease and injury than the general population. Living with a disability, with a greater degree of socioeconomic disadvantage, and dwelling outside metropolitan areas are factors which increase the likelihood of exposure to risk factors for chronic disease. Aboriginal people and some culturally and linguistically-diverse (CaLD) communities also have a higher prevalence of risk factors for disease.

Life expectancy for Aboriginal men living in WA in 2010–2012 was more than 15 years shorter than the State average, and this gap was more than 13 years for Aboriginal women. These differences in life expectancy are largely due to injury and earlier onset of chronic disease.¹¹

People experiencing mental health problems also often have poorer physical health outcomes than other people. ¹² National data show that people with a mental or behavioural condition are more likely to have a range of chronic diseases, including respiratory diseases, diabetes (type 1 and 2 combined), cancer, and cardiovascular diseases. ³⁰ It has been estimated that from 1985–2005 in WA, the gap in life expectancy for psychiatric patients compared with the total WA population increased from 14 years to 16 years for males, and from 10 years to 12 years for females. Seventy-eight per cent of excess deaths were due to physical health conditions, including cardiovascular disease and cancers. ¹³

National data also indicate that living with a disability, under greater levels of socioeconomic disadvantage, and outside of metropolitan areas puts people at greater risk of chronic diseases relative to the rest of the population.⁸

Some CaLD communities also have a higher prevalence of risk factors for disease. This may be due to cultural and social reasons related to their country of origin, or because they may be at greater risk of being disadvantaged, or due to psychosocial impacts on health associated with migration and settlement.¹⁰

Our changing demographic profile will bring new challenges

In addition to continuing increases in life expectancy, the overall population of WA continues to grow. Between 2000 and 2015, the population of WA increased from 1.9 million to almost 2.6 million.³¹

WA is one of the most culturally-diverse States in Australia, with 31% of its population born overseas.³²

Increased life expectancy coupled with lower birth rates means the proportion of older adults is increasing in WA relative to the rest of the population. In WA, the proportion of adults over the age of 65 increased from 11% to 13% between 2000 and 2015, 31 and is projected to jump to 22% by 2050. 33

People over 65 years of age are more likely than the rest of the population to suffer from multiple chronic diseases and are at significant risk of fall-related injuries. Falls currently account for more than half of injury deaths and three quarters of injury hospitalisations in WA people over 65 years of age.

The changing demographic profile in WA means many of the challenges currently being faced are likely to intensify over the coming decades. Strong population growth, increased longevity and a higher proportion of older adults in WA will translate to higher economic costs and a greater strain on the healthcare system.

Hospital costs for chronic disease and injury are already high...

The hospital costs in 2013 attributable to chronic disease exceeded \$715 million in WA. In the same year, hospital costs in WA for injury were just short of \$350 million.¹⁴

Osteoarthritis, coronary heart disease and chronic kidney disease cost WA more than \$400 million in 2013 (57% of chronic disease hospital costs).¹⁴

For injury, falls and transportation injuries alone accounted for almost \$200 million (57% of all injury hospital costs) in 2013.¹⁴

Hospital costs of admissions due to alcohol-related causes in WA exceeded \$478 million over the period 2007–2011.³⁴

The overall costs of chronic disease are much higher, when health care costs other than hospitalisations are considered, as well as the impact on the workforce and the community. For example, while hospital costs attributed to tobacco use in WA in 2009–10 were estimated at \$94 million, the overall tangible cost (including all health care costs, workforce and household labour impacts) of tobacco use were estimated to be \$1.3 billion. If intangible costs are also included (that is, estimated costs of pain and suffering), then the overall cost of tobacco use in WA in 2009–10 was an estimated \$3 billion.³⁵

Prevention makes good sense

There is good evidence that prevention offers cost-effective ways to improve health outcomes in Australia. 15

Looking back, it has been estimated that the \$176 million (in year 2000 dollars) invested in tobacco prevention in Australia between 1971 and 2010 averted approximately \$8.6 billion nationally in costs over this period through increases to life span, improved life quality and lower health care costs.³⁶

\$176 million invested in tobacco prevention in Australia between 1971 and 2010 averted approximately \$8.6 billion in costs over this period

Similarly, a 2010 report on the cost-effectiveness of preventive interventions in Australia projected that by implementing 20 cost-effective interventions over the lifetime of the Australian population born in 2003, \$4.6 billion would have been spent on interventions, averting \$11 billion in healthcare costs, and saving the equivalent of one million years of healthy life. Most of these gains could be achieved through taxation and regulation interventions on salt, alcohol and tobacco, and a preventive medication for cardiovascular disease.¹⁵

A 2016 analysis of the possible reduction in healthcare expenditure which could occur if vegetable consumption in Australia increased by 10% estimated that Government health expenditure could decline by close to \$100 million per year (in 2015–16 dollars) as a result.³⁷

Box 4: Cancer—a case study in prevention

It is not so long ago that a diagnosis of cancer was likened to receiving a death sentence. But as time has gone by and now that some of the more common cancers are better understood, it is known that many cases of cancer can potentially be avoided. Some other types of cancer now have much better survival rates due to earlier detection and improved treatments, meaning that some people may continue to live for many years with cancer.

Almost 12,000³⁸ Western Australians are diagnosed with cancer every year, and it is estimated that up to 40%³⁹ (or 4,800) of these could be prevented by modifying certain risk factors. Ninety per cent of potentially avoidable cancers can be attributed to just six key risk factors: smoking, UV radiation, poor diet, being overweight, physical inactivity and alcohol use. Although trends in smoking continue downwards in WA and nationally, cancer deaths lag about 20–30 years behind levels of consumption,⁴⁰ meaning that tobacco is still the leading cause of cancer in Australia, and the cause of one in eight cancers.⁴¹

By setting up systems and environments which encourage and support making healthier choices, there is a great opportunity to reduce the toll of disability and death due to cancer. As an example, the success seen in the tobacco program *Make Smoking History* shows the power of effective public education campaigns; forging strategic, cross-sectoral partnerships; the importance of backing them up with strong State and Commonwealth legislation, and gaining the support of the wider community. But until population levels of overweight and obesity are arrested, weight-related cancers (along with other chronic diseases such as diabetes and cardiovascular disease) can be expected to increase. Lessons learned from tobacco control may provide pointers to approaches which could potentially be applied to other risk factors.

One risk factor for cancer that cannot be prevented is getting older, and as WA's ageing population increases, an increase in the numbers of people diagnosed with and surviving with cancer may be expected. While greater survivorship is undoubtedly good news, cancer survivors may experience emotional, physical and financial hardship, which in turn impact on their families and carers. As they age, they will continue to be vulnerable to recurrences of cancer, as well as the development of other chronic diseases, including new cancers. Carers themselves may be elderly and in poor health. Seeking and seizing opportunities for cancer prevention has never been more important than it is now.

Part 3: A framework for action

3.1 Overarching goal

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

3.2 Priorities

- healthy health
- a more active WA
- curbing the rise in overweight and obesity
- making smoking history
- reducing harmful levels of alcohol use
- preventing injury and promoting safer communities

3.3 Target groups

The WA HPSF adopts a whole-of-population approach to preventing chronic disease and injury. Complementary to the whole-of-population approach is the development of targeted interventions to reduce health inequities and assist those in the community who are at higher risk of chronic disease or injury because of a high prevalence of the associated risk factors.

In line with this approach, the main target groups for the WA HPSF are:

- people in WA who are currently well
- population groups with a higher risk of developing chronic disease or experiencing injury than the general population

These groups include:

- those living in low socioeconomic circumstances
- Aboriginal people
- people with mental illness
- people with disabilities
- carers and families of people with sickness and disability
- populations living in rural and remote areas
- some CaLD populations; particularly new arrivals

3.4 Guiding principles

Four principles underpin the approaches taken to health promotion in the WA HPSF:

- 1. adopting a comprehensive whole-of-population approach
- 2. working in partnership and building capacity
- 3. intervening early and throughout life
- 4. promoting equity and inclusivity

These principles are supported by a commitment to evidence-based health promotion practice. Where there is a lack of evidence for successful interventions, initiatives will be informed by a sound theoretical basis and expert advice while the evidence base is being developed.

Principle 1: Adopting a comprehensive, whole-of-population approach

Complex problems require a comprehensive, long-term set of solutions. Influencing issues and behaviours such as obesity, poor eating patterns and insufficient physical activity cannot occur through single interventions. Experience demonstrates that prevention activities work best with a combination of universal and targeted approaches, and with multiple strategies and interventions addressing the many factors which influence behaviour. The domains for action which combine to make a comprehensive approach are detailed later in this section.

Implementing a population-wide approach is integral to achieving the goal of lowering the incidence of avoidable chronic disease and injury in WA. It is sound public health practice to place population-wide approaches at the centre of health promotion strategies for preventing chronic disease and reducing injury. A small shift in the average population levels of several risk factors can lead to a large overall reduction of the burden of chronic disease. ⁴⁵

The WA HPSF promotes a whole-of-population approach that is complemented by strategies directed to groups that have a greater risk of developing chronic disease and experiencing injury, due to their age or circumstances.

Principle 2: Working in partnership and building capacity

Providing effective public health responses to chronic disease and injury prevention requires strong partnerships within and between Commonwealth, State and Local Governments, as well as the non-government sector and groups such as industry and research organisations. To maximise effectiveness, it is of critical importance to identify shared goals and form partnerships to amplify the impact of expertise, skills and resources. The WA HPSF supports the strengthening of existing partnerships and exploring opportunities to develop new partnerships, and provides a common agenda to guide planning and collaboration.

To ensure that interventions are effectively implemented and able to be sustained over time, a capacity-building approach is adopted throughout the WA HPSF.

In the context of health promotion, capacity building is the process of developing sustainable skills, organisational structures, resources and commitment to health improvement in health and other sectors, to prolong and multiply health gains many times over.⁴⁶

At a practical level, this concept includes:⁴⁷

- building infrastructure to deliver health promotion programs
- building partnerships and organisational environments so that programs are sustained—and health gains are sustained
- building problem-solving capability

Encouraging greater coordination of interventions to improve health across different sectors and within various agencies ensures that prevention efforts are complementary and integrated for target groups, that risk of duplication is reduced, and that strategic gaps are identified and appropriately addressed (Box 5).

Box 5: The need for coordinated action

"The prerequisites and prospects for health cannot be ensured by the health sector alone. More importantly, health promotion demands coordinated action by all concerned: by governments, by health and other social and economic sectors, by non-governmental and voluntary organisations, by local authorities, by industry and by the media. People in all walks of life are involved as individuals, families and communities. Professional and social groups and health personnel have a major responsibility to mediate between differing interests in society for the pursuit of health." The Ottawa Charter, World Health Organization.⁴⁸

An important measure of the success of the WA HPSF will be its ability to act as a catalyst for inter-sectoral cooperation and facilitate coordinated approaches to improve health outcomes for Western Australians.

Principle 3: A life-course approach

A life-course approach is an important element of the WA HPSF (Box 6). Health promotion and prevention efforts must start early in life, and address key ages and stages across the life course. ⁴⁹ The foundations for lifelong health and wellbeing are established in childhood, and early experiences have a considerable influence on physical and psychological health, behaviour and life achievements. ⁵⁰

High quality preventive programs can substantially change the impact of poor early childhood experiences, and there is substantial evidence that by acting early, governments and other agencies can help to reduce the impact of poor quality environments and disrupt the cycle of disadvantage from one generation to the next ⁵¹

Box 6: A life-course approach to preventing chronic disease and injury

A life-course approach to promoting health and wellbeing and preventing chronic disease and injury acknowledges that at every stage of life, there is the potential to prevent the development of disease or reduce the risk of injury, and improve health and wellbeing.⁵²

The risk of developing chronic disease begins even before birth. Maternal health and nutrition, and exposures to risk factors such as alcohol and tobacco use, can have an impact on infant and child health. Breastfeeding in infancy and good nutrition in childhood help to enhance healthy development and protect against obesity and the early onset of chronic diseases. Home, school, neighbourhood and cultural environments shape eating behaviours and patterns of physical activity during childhood, and set the stage for attitudes towards tobacco, alcohol and other drug use during adolescence. ⁵²

In adulthood, pregnancy and parenthood mark a key time for re-evaluating lifestyle behaviours. Adults with unhealthy lifestyle behaviours are at greatest immediate risk of developing chronic diseases and suffering injury, and significant health gains can be made by bringing about changes in unhealthy practices. Other key opportunities arise for promoting healthy lifestyles as adults develop symptoms of, or are diagnosed with chronic diseases, and become aware of increasing rates of illnesses and deaths among family and friends.⁵³

The risk of developing a chronic disease increases with age.³ Adopting healthier behaviours can slow disease progression, improve health outcomes, and prevent the onset of additional health problems. Moving into older age provides opportunities for promoting active and healthy ageing.⁵²

Adopting a healthier lifestyle at any age can improve health and wellbeing and increase vitality.

Principle 4: Equity and inclusivity

Health inequities arise from the conditions in which people are born, grow, live, work and age—often referred to as the determinants of health. Some of these are individual factors such as a person's genetic makeup, or whether they smoke or drink alcohol at levels likely to cause harm. Other factors influence health at a broader level across society such the availability of health services, access to education, employment, early childhood experiences and the environment we live in (Figure 1).³

Some groups in the population experience poorer health than the rest of the population. In general, people living in the lowest socioeconomic circumstances suffer significantly poorer health than other groups. ⁵⁴ Aboriginal people, ⁵ those living in rural and remote areas, ³ people with disabilities and mental illness, ⁵⁵ and some CaLD communities also experience significantly poorer health than the general community. ⁸

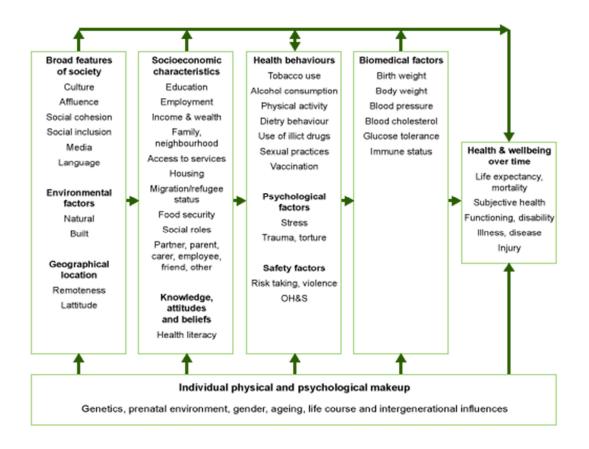


Figure 1: A conceptual framework for the determinants of health (quality of Figure will be improved)

Source: Australian Institute of Health and Welfare³

Interventions intended for these groups should carefully consider the full complexity of the environments in which they live and the barriers they can pose to behavioural change. These interventions should also consider, and seek to address the impact of lower health literacy where relevant.¹

Strategies which address the environmental, economic and social influences on health are pivotal to reducing health inequities (Box 7) and improving health status. Governments and their partners have the potential to take collaborative and coordinated action to alter determinants in areas such as early childhood experiences, access to health, housing, education and employment. The WA HPSF recognises the importance of the social, cultural and physical environments on health behaviours, as well as the effect of individual circumstances on shaping personal priorities and decision-making about health and other behaviours.

Well-designed mainstream programs, developed with a focus on equity, inclusiveness and cultural security have the capacity to be effective in specific population groups as well as the wider population. However, in some cases it may be necessary to develop additional interventions to meet particular needs.

Policy makers and practitioners must carefully examine the potential impact of health promotion interventions to ensure that these programs do not widen existing inequalities (Box 7). Interventions should prioritise the inclusion of population groups with a higher risk of chronic disease and injury, and identify whether there is a need to provide further targeted approaches.

Box 7: What are health inequities?

Health inequities are avoidable inequalities in health between groups of people within a society. These arise within and between societies. Social and economic conditions and their effects on people's lives determine their risk of illness and the actions taken to prevent them becoming ill or treat illness when it occurs.⁵⁴

3.5 Domains for action

A comprehensive approach to health promotion requires a combination of interventions which challenge the fundamental causes of chronic disease and injury. These action areas for change may be grouped into eight domains:

- healthy policies
- legislation and regulation
- economic interventions
- supportive environments
- public awareness and engagement
- community development
- targeted interventions
- strategic coordination, building partnerships and workforce development

Operating an intervention in a domain in isolation from the others will reduce its potential for impact, but an intervention which crosses domains, or a number of complementary interventions operating simultaneously in a number domains, have the potential to drive substantial change. For example, initiatives to improve the built environment as a way of encouraging more physical activity will probably involve work across several domains, including the development of appropriate policy; engagement with planning, zoning or building regulatory authorities; and consultation with community groups.

Development of appropriate healthy policy, based on consultation and endorsement of relevant groups or authorities will often be needed before specific initiatives can be successfully introduced.

Interventions must also be coordinated to ensure consistency of approach. As an example, workplace programs to support more nutritious eating behaviours are likely to be undermined if the onsite canteen offers low cost, unhealthy food choices.

Healthy policies

The Department of Health has a significant role to play in developing policies to improve the health of all Western Australians. However, as many of the most important influences on the population's health do not fall within the direct control of the health sector, it is vital to ensure that health and wellbeing are fundamental considerations in public policy development across all levels of Government. Industry, non-government organisations, the education sector, professional organisations and the wider community also have an important role to play in ensuring healthy policies.

Encouraging and supporting the adoption of healthy policies and practices helps to extend the reach of health messages, provides a supportive environment for behavioural change, and positively influences cultural norms regarding health behaviours.

Legislation and regulation

Laws and regulations provide the cornerstone for safeguarding and improving public health. Laws can be used to restrict the sales, promotion and use of harmful or potentially harmful substances (as in the cases of tobacco and alcohol), or to protect public safety (for example laws on seatbelts in cars and drink-driving). The production, processing, transport, sales and labelling of food are all subject to regulations intended to protect public health and safety. By introducing and enforcing appropriate legislation to underpin health promoting behaviours, governments demonstrate a firm commitment to healthy public policy and provide a strong foundation for building environments to support health interventions.

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 public debate about the need for regulation, as well as legislative content.

Economic interventions

Economic interventions are an effective way of influencing consumer behaviours and consumption patterns. Higher tobacco prices in Australia due to increases in taxation are credited with helping to bring down the prevalence of smoking, particularly in young people. There are also precedents for allocating money raised from taxes on harmful or potentially harmful products to funding of health campaigns. The World Health Organization has identified the potential for tax and other economic measures (including grants, pricing, incentives and subsidies) to be used to influence healthier nutritional behaviours and reduce harmful alcohol use.⁵⁷

Supportive environments

All of the environments we encounter—including the neighbourhood where we live; workplaces, schools and community settings; our social and cultural networks and in the home—have the potential to influence health outcomes. Environments which support good health may do so by promoting healthy behaviours; by making healthy choices the easier or more attractive choices; by ensuring equitable access to nutritious food; and by denormalising unhealthy or risky behaviours.

Public awareness and engagement

Raising awareness and engaging public interest prompt and motivate the population to consider their lifestyle behaviours and the potential for changing their behaviour to reduce the risk of chronic disease and injury. Engaging the public by providing reliable, consistent and motivating messages that are relevant at a personal, family, organisational or community level also increases the effectiveness of other health promotion activities. Mass media campaigns have the capacity to deliver real public health gains when they are well-designed and delivered with appropriate reach and intensity.⁵⁸

There are a number of other effective ways of conveying health messages and information. For example, clear product information (such as food and alcohol labelling or health warnings on tobacco packs) has an important role in elevating public awareness and knowledge. Professional groups (such as health professionals and researchers), organisations and the media also have a vital role in disseminating information and contributing to the public discourse about health issues.

Community development

Community approaches to health promotion take into account the social, cultural, economic, environmental, geographical and other factors which make individual communities distinct. The community is directly engaged in identifying the factors which contribute to ill-health in their particular setting, deciding on priorities and working 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 steer their own course, with health professionals acting as cofacilitators. ⁵⁹

Community development fosters participation, empowerment and sustainability. These important elements help to build more equitable, healthy and resilient communities.

Targeted interventions

Targeted interventions refer to delivery of health interventions in specific settings (such as workplaces, schools, leisure centres and GP surgeries), specific communities (such as remote Aboriginal communities or local government areas) or to particular groups (for example parents, and CaLD groups), or a combination of

these. Targeted interventions need to include, or be part of a larger integrated suite of activities which take into account the environmental and individual determinants of health. Targeted interventions also need to take account of, and support the improvement of health literacy skills.

Providing public health messages in specific settings increases the likelihood that they will reach their target audiences, and enables tailoring of messages and associated support activities which will increase their likelihood of success.

Strategic coordination, building partnerships and workforce development

As noted in Principle 2 (p 27 above), a coordinated, partnership approach to tackling chronic disease and injury prevention is essential to ensure that the reach and impact of health-promoting interventions are as effective as possible.

As the underlying determinants of non-communicable diseases often lie outside the health sector, strategies need the involvement of both public and private actors in multiple sectors such as agriculture, finance, trade, transport, urban planning, education and sport.⁶⁰

The Department of Health is well-positioned to act as a coordinating agency to assist in aligning strategic planning and policy priorities and developing productive partnerships across sectors that may not traditionally be seen as active participants in the health domain, but that have the capacity to influence health and wellbeing; especially the upstream, systemic factors which influence the determinants of health (Figure 1). There is the potential for the development of synergistic policies with a number of Government Departments and Agencies (many of which already take public health concerns into consideration), and the non-government organisations which are active within those sectors. The Department of Health can provide a leadership role by guiding evidence-based policy-making; providing expert information and resources, facilitating access to relevant, quality data, and connecting partners to broader health-promoting networks.

The health sector comprises a large, diverse and specialised workforce, and the existing state-wide health infrastructure offers great potential for contributing to health promotion. Nurturing and maintaining a workforce with specialist skills in health promotion and chronic disease prevention is vital, and facilitating ongoing workforce development is a crucial element in maximising opportunities for improving public health. There is a need to ensure awareness of health promotion priorities, and competency in best-practice methods to contributing to health promotion across the continuum of care. There is also scope for increasing the capacity and competency of the workforce in sectors beyond the health sector that have an overlapping interest in, or responsibility for factors which influence health.

Part 4: The five-year plan Healthy eating

"The overarching message is optimistic. A range of high-impact, cost-effective nutrition interventions exists... any country that wants to achieve rapid improvements in nutrition can do so." Margaret Chan, Director-General, World Health Organization, 2015⁶¹

A snapshot of nutrition and diet in WA

- The 2011–12 Australian Health Survey found that most Western Australians aged two years and over⁶²⁻⁶⁴ did not meet the usual daily intake of foods recommended in the Australian Dietary Guidelines (Box 8).
 - 7% of Western Australians met the recommended usual daily intake of vegetables and 53% met the recommended usual daily intake of fruit.⁶²
 - 10% of Australians met the recommended usual daily intake of milk and alternatives and 29% of serves consumed were lower fat versions.⁶³
 - 14% of Australians met the recommended usual daily intake of meat and alternatives.⁶³
 - 30% of Australians met the recommended usual daily intake of grain (cereal) foods.⁶³
 - Western Australian adults aged 19 years and over obtained 36% of their total energy from discretionary foods and beverages high in saturated fat, salt, sugar or alcohol. Children aged 2–18 years obtained 38% of their energy from these items.⁶²
 - 52% of Australians exceeded the WHO recommendation to limit energy from free sugars[†] to less than 10% of dietary energy. Sugar-sweetened beverages were a major source of free sugars.⁶⁴
- 58% of Australian consumers' spending on food in 2014 was on discretionary items compared to 15% for fruit and vegetables. 65
- In 2011–12, 5% of Western Australians lived in a household that had run out of food and had been unable to afford to buy more at least once in the previous 12

The Australian Dietary Guidelines define foods and drinks as 'discretionary' when they are not necessary to provide the nutrients the body need (although do add variety to the diet). Many are high in saturated fats, sugars, salt and or alcohol and are energy dense. Guideline 3 recommends limiting intake of these items (Box 8).

[†] 'Free sugars' extends the definition of added sugars to include sugars naturally present in honey, fruit juice and fruit juice concentrates.

months.62

- National data show that in 2012–13, 22% of Aboriginal people reported living in a household that, in the previous 12 months, had run out of food and had not been able to afford to buy more. Among Aboriginal people dwelling remotely, the prevalence was 31%.⁶⁶
- In 2013, families on welfare and low incomes were likely to suffer 'food stress', that is, they would need to spend 25% or more of their disposable income to buy sufficient foods for a healthy weekly meal plan.⁶⁷
- Breastfeeding initiation rates in WA were 97% in 2014. Although guidelines recommend breastfeeding infants exclusively until around six months of age, 44% had been given infant formula before one month of age.¹⁷

Priorities for healthier eating in WA

Foster environments that promote and support healthy eating patterns

The current environment promotes poor dietary patterns, contributing to excess energy intake from manufactured foods and drinks high in saturated fat, added sugar and salt, and inadequate intake of unprocessed and minimally-processed nutritious foods and drinks, including vegetables, fruit and wholegrain cereals from the five food groups (Box 8). In Australia, discretionary foods are heavily marketed, easy to obtain and prepare, and relatively cheap. The ready availability of sugar-sweetened beverages, increases in portion sizes, and food packaging and promotion all impact on dietary intakes. 72-76

There has been substantial effort to improve the supply and promotion of nutritious foods (while limiting discretionary foods) provided through food outlets in some settings, such as schools, health services and workplaces, and continued action is needed in these as well as in other settings where Western Australians live, work, learn and play.

Healthy dietary patterns can be promoted and supported across all segments of the food system, including production, processing, trade, distribution, food service, marketing and retail. There is evidence for a range of interventions that have potential to help improve the Western Australian diet, such as monetary incentives and disincentives for industry and consumers in the form of taxes, pricing policies and subsidies; planning provisions supporting local primary production and healthy food retailers; food reformulation to reduce saturated fat, added sugar and salt and increase fibre; portion size limits; nutrition standards in food service settings; policies reducing exposure to discretionary food marketing, particularly for children; and provision of point-of-purchase nutrition information on food labels and menus.⁷⁷

Both health and environmental benefits are likely if healthy dietary patterns are widely adopted. Overconsumption, particularly of discretionary foods, leads to greater use of natural resources and puts more pressure on the environment.

including increased disposal of food waste and packaging.⁷⁸ A food system that supports healthy dietary patterns will require a combined effort from different levels and sectors of government, industry and the community.

A multifaceted approach involving a range of sectors is also needed to foster and maintain an environment that supports breastfeeding. There is a high level of social acceptability for breastfeeding in public places in WA, and although breastfeeding initiation rates are high in WA, mothers need a range of environmental supports to encourage and enable them to continue to feed for an optimal time. These could include education and support for mothers, the fostering of supportive community and family environments, and enforcement of already-existing restrictions on the marketing and labelling of infant formula.

Increase availability and accessibility of safe, nutritious, sustainable, and affordable food for all

The supply of relatively cheap, energy-dense, nutrient-poor foods has grown substantially⁷¹ and the price of healthy foods, particularly fruits and vegetables, has increased.⁶⁵ Access to fresh, good quality, nutritious and affordable food in WA is limited by where people live and their income.⁶⁷ Due to transport time and costs, food is generally more expensive and of poorer quality as distance from Perth increases. A 2013 study showed that a healthy food basket cost 26% more in remote areas than in metropolitan areas.⁶⁷

People at risk of experiencing food insecurity^{83*} and hunger include low income earners, the unemployed or underemployed, the homeless, sole parents and Aboriginal people,⁸⁴ as well as those living with physical disabilities or mental illness,⁸⁵ and some CaLD communities.⁸⁶

Other barriers to healthy eating include limited access to food outlets; inadequate skills and facilities to store and prepare food; lack of time or mobility to shop for and prepare meals at home; and social isolation.⁸⁵

Increase the knowledge and skills necessary to choose a healthy diet

Australians are increasingly exposed to conflicting nutrition messages and misinformation. The *Australian Dietary Guidelines* (Box 8) are based on scientific evidence, take account of Australian eating patterns and recommend the best approach to eating for a longer and healthier life. However, adherence to the Guidelines is generally poor, and there is a significant disparity across economic status. Socio-economic differences in nutrition knowledge, particularly diet-disease relationships, can contribute to inequalities in food purchasing choices. Lower levels of nutrition knowledge have also been reported in the unemployed, the less educated and among men. Maternal diet quality, socioeconomic status and nutrition knowledge are important influencers of children's dietary patterns.

^{*} Food insecurity may be defined as "A situation that exists when people lack secure access to sufficient amounts of safe and nutritious food for normal growth and development and an active and healthy life. Food insecurity may be chronic, seasonal or transitory."

Although many individuals regard their diet as healthy,⁹⁴ providing credible, reliable, easily-understood nutrition information, for example in the media, at point-of-sale and on food labels, can help people make more informed decisions about the foods they eat. Research shows that the majority of WA adults support the need for clear information through appropriate food labelling.⁹⁷

Increasing food literacy skills such as food planning, shopping, meal preparation and confidence in cooking can help improve dietary choices. There are concerns that there has been a population-wide reduction in food literacy skills with the increase in the need for convenience. Although 95% of WA adults rate themselves as reasonably competent cooks, 72% report that information about ways to prepare healthy foods would assist them to make healthier choices, and 55% want to know more about cooking. Low food literacy may contribute to consumption of highly-processed foods. Low food literacy may contribute to consumption of highly-processed foods.

Box 8: Australian Dietary Guidelines⁷⁸

Guideline 1: To achieve and maintain a healthy weight, be physically active and choose amounts of nutritious food and drinks to meet your energy needs.

- Children and adolescents should eat sufficient nutritious foods to grow and develop normally. They should be physically active every day and their growth should be checked regularly
- Older people should eat nutritious foods and keep physically active to help maintain muscle strength and a healthy weight

Guideline 2: Enjoy a wide variety of nutritious foods from these five groups every day:

- Plenty of vegetables, including different types and colours, and legumes/beans
- Fruit
- Grain (cereal) foods, mostly wholegrain and/or high cereal fibre varieties, such as breads, cereals, rice, pasta, noodles, polenta, couscous, oats, quinoa and barley
- Lean meats and poultry, fish, eggs, tofu, nuts and seeds, and legumes/beans
- Milk, yoghurt, cheese and/or their alternatives, mostly reduced fat milks are not suitable for children under the age of 2 years)
- And drink plenty of water

Guideline 3: Limit intake of foods containing saturated fat, added salt, added sugars and alcohol.

- a. Limit intake of foods high in saturated fat such as many biscuits, cakes, pastries, pies, processed meats, commercial burgers, pizza, fried foods, potato chips, crisps and other savoury snacks
 - Replace high fat foods which contain predominantly saturated fats such as butter, cream, cooking margarine, coconut and palm oil with foods which contain predominantly polyunsaturated and monounsaturated fats such as oils, spreads, nut butters/pastes and avocado
 - Low fat diets are not suitable for children under the age of 2 years.
- b. Limit intake of foods and drinks containing added salt
 - Read labels to choose lower sodium options among similar foods.
 - Do not add salt to foods in cooking or at the table
- Limit intake of foods and drinks containing added sugars such as confectionary, sugar-sweetened soft drinks and cordials, fruit drinks, vitamin waters, energy and sports drinks
- d. If you choose to drink alcohol, limit intake. For women who are pregnant, planning a pregnancy or breastfeeding, not drinking alcohol is the safest option.

Guideline 4: Encourage, support and promote breastfeeding

Guideline 5: Care for your food; prepare and store it safely

Strategic directions for healthier eating in WA

Healthy policies

- Encourage, shape and support the development and implementation of public policies across the food system^{*} to improve the availability and accessibility of healthy foods and reduce that of less healthy foods
- Encourage and support the development and implementation of food and nutrition policies within key settings
- Strengthen and elevate the priority of breastfeeding policies, including support for breastfeeding mothers, in health services, child care services, workplaces and community venues

Legislation and regulation

- Support food regulation to protect and promote public health consistent with the Australian Dietary Guidelines
- Support food regulation to improve the nutrition content of food products through reformulation and portion control; and assist consumers to make informed food choices
- Support regulations and policy to ensure that food advertising and promotion is not misleading or deceptive, and to reduce exposure to the marketing and promotion of ultra-processed discretionary foods and drinks, particularly to children

Economic interventions

- Investigate and consider fiscal policies with potential to increase the consumption of healthy foods, and improve the availability and accessibility of healthy foods and reduce that of less healthy foods
- Reinforce the health and economic benefits of breastfeeding, and investigate fiscal policies that support breastfeeding mothers

Supportive environments

- Work with key food system stakeholders to improve the availability, relative affordability, acceptability and promotion of nutritious foods
- Work across government and key sectors to influence planning to ensure urban design promotes and supports healthy dietary patterns
- Facilitate the creation of health-promoting environments that encourage healthy dietary patterns and support breastfeeding in key settings
- Support and implement initiatives that limit exposure to the marketing and promotion of ultra-processed discretionary food and drinks, and encourage promotion of healthy products
- Investigate, develop and implement effective strategies to improve access to quality, affordable nutritious foods to ensure food equity

Public awareness and engagement

 Invest in sustained, high quality statewide public education campaigns and programs that increase awareness, skills, beliefs and attitudes regarding a healthy dietary pattern

^{*} The food system includes primary food production, food processing, food distribution, food marketing, food retail, food service, food purchasing and consumption.⁷⁷

• Increase access to reliable, practical, culturally-appropriate nutrition information about the healthy eating patterns needed at all stages of life for good health

Community development

- Engage with the community and key stakeholders, including Local Governments, to identify and prioritise actions that support healthy dietary patterns and community food security
- Work with Local Governments to develop Local Public Health Plans which include support for healthier eating

Targeted interventions

- Support initiatives that increase the availability, accessibility and affordability of nutritious food, particularly among those groups most vulnerable to poor nutrition
- Invest in programs that increase food and nutrition knowledge and skills of parents, children and other groups most vulnerable to poor nutrition
- Integrate messages about healthy eating with other healthy lifestyle initiatives, and develop links between programs and services which are targeted at specific populations who are more likely to be at risk of poor nutrition
- Complement population approaches with targeted programs that are culturallyappropriate and or meet the needs of those at higher risk of poor nutrition (such as pregnant women and new mothers, adolescents, Aboriginal people and CaLD groups with poorer nutrition)

Strategic coordination, building partnerships and workforce development

- Strengthen existing and develop new partnerships across all sectors to ensure a comprehensive, consistent and effective approach to promoting healthy eating
- Strengthen, upskill and support relevant parts of the workforce (nutrition, public health, food industry and other non-health) to address public health nutrition in their programs, services, policies and plans
- Continue to collect evidence to inform new approaches and monitor the effectiveness of existing initiatives targeting nutrition and eating patterns
- Support continued population monitoring and surveillance of nutrition and food consumption and related environmental factors

A more active WA

"The potential benefits of physical activity to health are huge. If a medication existed which had a similar effect, it would be regarded as a 'wonder drug' or 'miracle cure'"—Sir Liam Donaldson, UK Chief Medical Officer, 2010¹⁰⁴

A snapshot of physical activity and sedentary behaviour in WA

- In 2015, nearly two-thirds (64%) of people in WA aged 18 years and over reported being sufficiently active for good health (according to *Australia's physical activity and sedentary behaviour guidelines*—Box 9). This has increased significantly since 2007 (56%).²⁰
- In WA in 2015, males aged 18 and over were more likely to be sufficiently active than females (68% compared with 59%).²⁰
- The prevalence of males aged 18 and over who met sufficient levels of physical activity in 2015 (68%) was higher than in 2007 (60%). The prevalence of females meeting sufficient levels of physical activity in 2015 (60%) was also higher than in 2007 (53%).²⁰
- One in four (26%) adults aged 65 years and over reported doing no physical activity in WA in 2015.²⁰
- In 2015 in WA, 43% of people aged 18 and over reported spending most of their day sitting.²⁰
- In WA in 2015, 38% of children aged 5–15 years were sufficiently active for good health.²²
- Boys aged 2–15 years were more likely to be sufficiently active than girls in 2015 (49% compared to 28%).²²
- Over one third (35%) of children aged 0–15 years exceeded their age-related recommendations for electronic media use in 2014, with children aged 2–4 years the most likely to exceed these (64%).²¹
- In 2015, adults living in the most disadvantaged areas of WA were less likely to be physically active than those in the least disadvantaged areas (55% compared to 70%).²⁰
- In 2012–13, just under 40% of Aboriginal adults living in non-remote areas of Australia were sufficiently active. Similar to the non-Aboriginal population, rates of physical activity declined with age.¹⁰⁵

 In 2014, 61% of Australian adults with a disability participated in sport and physical recreation, compared to 76% of those with no disability.

Priorities for a more active WA

Create environments that support physical activity and reduced sedentary behavior

Over past decades, lifestyles have changed for much of the population. The emergence of more passive forms of entertainment, labour-saving devices, more sedentary occupations, higher density housing and increased car use have fundamentally changed how much time people spend being physically active at home, at work, during travel and in their recreational pursuits. ¹⁰⁷

Given this, many different factors need to be addressed in order to create a more supportive environment for increasing physical activity and reducing sedentary behaviour. The Creating environments that support physical activity requires: good town planning and urban design that enables a variety of daily activities within walking distance of where people live, work and play; active travel infrastructure for walking, cycling and public transport use; and the provision of high-quality parks and public open spaces. 109-113

The number of health-promoting child and adult settings that support physical activity and reduced sedentary behavior can be increased through influencing organisational policy and physical environments, providing education and information, and building partnerships and services.⁵⁷

Reduce barriers and increase opportunities for physical activity across all populations

There are many 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 culturally-inclusive activities. Some groups, such as Aboriginal people, CaLD groups, people with a disability, older adults and those who live with socioeconomic disadvantage, may face a greater range of barriers than others. Interventions should ensure that all members of the community have equitable, accessible, safe, convenient and affordable options to incorporate physical activity into their daily routines.

Increase understanding of the benefits of physical activity and encourage increased activity at all stages of life

There are still a substantial number of Western Australians who are not sufficiently active for good health. People of all ages need to be encouraged and supported to increase physical activity in line with *Australia's physical activity and sedentary behaviour guidelines* (Box 9). The guidelines provide minimum recommendations, noting that increasing the duration and intensity of activity above the minimum for all

age groups may result in additional health and fitness benefits. Increasing levels of physical activity in people who are currently inactive is also an important goal for public health. Increasing levels of physical activity in people who are currently inactive is also an important goal for public health.

As there are several stages in a person's life where physical activity levels are likely to change and decrease, it important is to take a life-course approach to encouraging engagement in physical activity. This starts in childhood with gaining confidence in the basic movement skills (such as running, jumping, catching and throwing) that become the building blocks of more complex skills used in a wide range of physical activities, games, sports and recreational pursuits. Ongoing physical activity is important during ageing, as it is of vital importance for maintaining good health, as well as improving mobility and balance and protecting against falls.

Motivate lifestyle changes to reduce sedentary behavior

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. Adherence to both adult and child sedentary behavior guidelines is low.^{20, 21}

There is evidence that sedentary behaviour is associated with poorer health outcomes, independent of physical activity levels. ¹²⁰ It is recommended that the amount of time spent sedentary each day should be minimised, and broken up as often as possible with movement integrated through daily activities. This can include structured exercise as well as incidental physical activity while working, playing, carrying out household chores, travelling and engaging in recreational pursuits such as gardening, walking or cycling for leisure. ¹¹⁵ There is a need to educate adults, parents and children about this emerging area and the national recommendations for adults and children.

Box 9: Australia's Physical Activity and Sedentary Behaviour guidelines¹¹⁵

For children aged 0-5:

- For healthy development in infants (birth–1 year) physical activity—particularly supervised floor-based play in safe environments—should be encouraged from birth.
- Toddlers (1–3 years) and pre-schoolers (3–5 years) should be physically active every day for at least three hours, spread throughout the day.
- Children under 2 should not spend any time watching television or using other electronic media (DVDs, computer and other electronic games) and children aged 2–5 years should be limited to less than one hour per day.
- Infants, toddlers and pre-schoolers (all children birth—5 years) should not be sedentary, restrained, or kept inactive, for more than one hour at a time, with the exception of sleeping.

For children and young people aged 5–17 years:

- Children and young people should accumulate at least 60 minutes (and up to several hours for additional health benefits) of moderate to vigorous intensity physical activity every day. This should include a variety of aerobic activities as well as activities that strengthen muscle and bone.
- Break up long periods of sitting as often as possible. Children and young people should not spend more than two hours a day using electronic media for entertainment, particularly during daylight hours.

For adults aged 18-64 years:

- Doing any physical activity is better than doing none. If you currently do no physical activity, start by doing some, and gradually build up to the recommended amount.
- Be active on most, preferably all, days every week.
- Accumulate 150–300 minutes (2–5 hours) of moderate intensity physical activity or 75–150 minutes (1–2 hours) of vigorous intensity physical activity, or an equivalent combination of both moderate and vigorous activities, each week.
- Do muscle strengthening activities on at least 2 days each week.

For older adults (65 years and older):

- Older people should do some form of physical activity, no matter what their age, weight, health problems or abilities.
- Older people should be active every day in as many ways as possible, doing a range of physical activities that incorporate fitness, strength, balance and flexibility.
- Older people should accumulate at least 30 minutes of moderate intensity physical activity on most, preferably all, days.
- Older people who have stopped physical activity, or who are starting a new physical
 activity, should start at a level that is easily manageable and gradually build up the
 recommended amount, type and frequency of activity.
- Older people who continue to enjoy a lifetime of vigorous physical activity should carry on doing so in a manner suited to their capability into later life, provided recommended safety procedures and guidelines are adhered to.

Strategic directions for a more active WA

Healthy policies

- Support the development and implementation of policies that will positively influence physical activity and reduce sedentary behaviour
- Encourage and support the development and implementation of organisational policies that facilitate increased physical activity and reduced sedentary behavior, particularly in key settings

Legislation and regulation

 Support regulatory initiatives that will positively influence physical activity and sedentary behaviour, including those that address planning, transport, land use and the design of built environments

Economic interventions

 Investigate and consider fiscal policies with the potential to remove barriers to participation in physical activity

Supportive environments

- Work across government and key sectors to influence the design of natural and built environments that support physical activity and active travel.
- Facilitate the creation of health-promoting environments to increase physical activity (including the development of fundamental movement skills) and reduce sedentary behavior in key settings

Public awareness and engagement

- Invest in sustained, high quality statewide public education campaigns that raise awareness of the benefits of physical activity and motivate and support increased physical activity and reduced sedentary behaviour across the lifecourse
- 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

Community development

- Engage with the community and key stakeholders, including Local Governments, to identify and prioritise actions that create environments and opportunities for physical activity at a local level
- Work with Local Governments to develop Local Public Health Plans which include measures to address physical inactivity and sedentary behaviour

Targeted interventions

Complement population approaches with targeted programs that meet the needs
of those who are less likely to engage in physical activity, including adolescents,
young females, Aboriginal people, CaLD groups, people with a disability and
older people

- Deliver family-oriented initiatives that increase the ability of parents and carers to establish and maintain physically active lifestyles in children
- Integrate messages about increasing physical activity and reducing sedentary behavior with other healthy lifestyle initiatives, and develop links between programs and services which are targeted at specific populations who are more likely to be physically inactive and/or sedentary

Strategic coordination, building partnerships and workforce development

- Strengthen existing and develop new partnerships across all sectors to ensure a comprehensive, consistent and effective approach to increasing physical activity levels and reducing sedentary behaviour
- Strengthen, upskill and support relevant parts of the workforce (public health, broader health and non-health workforce) to address physical inactivity and sedentary behaviour in their programs, policies and plans
- Continue to collect evidence to inform new approaches and monitor the effectiveness of existing initiatives targeting physical inactivity and sedentary behaviour
- Support continued population monitoring of physical activity and sedentary behavior levels in the population as well as individual and key environmental factors that impact on these behaviours

Curbing the rise in overweight and obesity

"Obesity is the result of many complex, man-made systems, including: food supply, transport, urban design, business, socio-cultural, marketing, communications, education, health, trade, legal, economic, and governance systems. All could potentially be re-oriented for better population and environmental outcomes"—World Obesity Federation, 2015¹²¹

A snapshot of overweight and obesity in WA

- In 2015, just over two-thirds (67%) of adults aged 16 and over were classified as overweight (40%) or obese (27%), based on self-reported height and weight.²⁰
- Males were more likely than females to be overweight or obese (73% compared with 61%). Males aged 45–64 years had the highest rate of overweight and obesity of any group (85%).²⁰
- Rates of overweight and obesity among adults have increased over time, driven by a general increase in Body Mass Index (see Box 10: How healthy weight is assessed). Since 2002, there has been a significant increase in the mean BMI for men and women.²⁰
- In 2014, almost a quarter of all children (23%) aged 5–15 were classified as overweight (14%) or obese (9%).²¹
- Rates of childhood overweight and obesity have remained relatively stable over the last decade.²¹
- In 2012–13, while the combined national rate of overweight and obesity was similar to that in the non-Aboriginal population, Aboriginal people were 1.5 times more likely to be obese.¹⁰⁵
- In 2014–15, rates of overweight and obesity were higher in women living in areas
 of most disadvantage (61%) compared to those living in areas of least
 disadvantage (48%) in Australia. This pattern was not observed in men.⁸
- Rates of overweight and obesity were higher among people living in rural or remote areas, some overseas-born populations, and people with severe or profound disability.^{1, 8, 55}
- A healthy diet contributes significantly to maintaining a healthy weight, but the majority of Western Australians are not consuming a diet in line with the Australian Dietary Guidelines⁶³ (for a snapshot of nutrition and diet in WA see p. 38).

- In 2011–12, Western Australians obtained over one-third of their energy (36%) from discretionary food and drinks.¹²² More than half of all Australians exceeded the WHO recommendations around sugar intake with around half of free^{*} sugars in the diet consumed from beverages such as soft drinks.⁶⁴
- Physical inactivity and sedentary behavior are also associated with overweight and obesity. In 2015, nearly 40% of adults were not sufficiently active and 43% reported spending most of their day sitting ²⁰ (for a snapshot of physical activity and sedentary behavior in WA see p. 41).

Priorities for curbing the rise in overweight and obesity in WA

Promote environments that support people to achieve and maintain a healthy weight

Today's environment has been referred to as obesity-promoting or 'obesogenic', ¹²³ in that it encourages people to consume more energy than their bodies need and to be less physically active. A comprehensive, cross-sectoral approach is needed to create an environment that supports people to achieve and maintain a healthy weight. ^{51, 57}

The way in which our neighborhoods and cities are designed can have a profound impact on the degree to which people can live healthy lifestyles (particularly in relation to active living and access to healthy food). The creation of health-promoting environments in child and adult settings, through policy, physical environments, food supply, education, partnerships and services, can also support healthy eating, physical activity and reduced sedentary behaviour. ⁵⁷

There is a need to address children's exposure to the promotion and marketing of ultra-processed, discretionary foods[†]. There is evidence that food advertising influences children's attitudes to food and dietary preferences, and in turn, what they eat. ¹²⁴ In Australia, children are still exposed to high levels of advertising and promotion for food, most of this being for unhealthy food products. ^{125, 126}

The growth in the supply of relatively cheap energy-dense, nutrient-poor foods high in saturated fat, salt and sugar⁷¹ undermines and reinforces the need to step up efforts that encourage a diet consistent with the *Australian Dietary Guidelines* (Box 8).¹⁸ Growing evidence suggests that taxes and subsidies may act as an incentive for dietary changes and improve population health outcomes.^{127, 128}

¹ Food and drinks high in saturated fats, sugars and/or salt that have little nutritional value.

^{* &#}x27;Free sugars' extends the definition of added sugars to include sugars naturally present in honey, fruit juice and fruit juice concentrates. In 2015, the WHO issued a recommendation that adults and children reduce their daily intake of free sugars to less than 10% of their total energy intake.

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CONSULTATION DRAFT

Box 10: How healthy weight is assessed

The following information is based on material provided by the National Health and Medical Research Council. 18

In adults

Body mass index (BMI) is the most common approach to assess weight classification in adults. It is calculated by dividing weight (in kilograms) by height (in metres) squared (kg/m²) BMI is a measure of body size that is widely used as an index of relative risk of mortality and morbidity at the population level, with risk lowest in the healthy weight range. BMI categories for adults are:

BMI (kg/m2)	Classification
< 18.5	Underweight
18.5–24.9	Healthy weight
25.0–29.9	Overweight
≥ 30.0	Obese

The BMI classification may not be suitable for all population groups; for example athletes, some CaLD communities and older people.

Waist circumference is another good indicator of total body fat and can be a better predictor of health risk than BMI.

Waist circumference	Disease risk
Men ≥ 94 cm Women ≥ 80 cm	Increased risk
Men ≥ 102 cm Women ≥ 88 cm	High risk

In children

For infants, children and adolescents, it is not possible to have a single set of numerical values for BMI cut-offs that apply to both sexes and all ages. Growth (percentile) charts are a valuable tool for monitoring growth and screening for inadequate growth or overweight and obesity. These show the normal ranges of height for age, weight for age and BMI, by sex as well as length for age and head circumference for age for infants aged 0–2 years. Given that growth is a dynamic process, several measures are preferable when assessing infants and children.

There are a number of widely-accepted tools available for assessment including those developed by the WHO¹²⁹ and the United States Centres for Disease Control and Prevention.¹³⁰

Prevent and reverse childhood overweight and obesity

The risk of becoming overweight or obese starts early in life and is influenced by factors including maternal overweight and obesity, antenatal and postnatal care and infant feeding practices (including breastfeeding). The quality and nature of environments to which children are exposed (for example at home, in child care, or at school) are important influences on future dietary and physical activity habits.⁵⁷

Overweight and obesity in childhood has a range of short- and long-term health impacts and is associated with a high risk of obesity in adulthood. The later into adolescence that overweight persists and the more overweight children are, the greater the chance they will be obese as adults. Therefore, preventing and addressing overweight and obesity in children and adolescents offers significant gains.

It should be noted that the focus of initiatives targeting children should be on *healthy growth and development* (including physical, psychological and cognitive development) rather than weight. This helps to manage the risks of under-nutrition or an unhealthy obsession with weight loss in children of a healthy weight.¹³³

Motivate behaviour to achieve and maintain a healthy weight among adults

Common misperceptions about what is a healthy weight need to be challenged. Studies show that adults consistently underestimate their weight status and parents mistake the weight status of their children. These misperceptions are likely to continue as rates of overweight and obesity increase in the community, as much of how people view themselves informed by social comparison.

Being overweight or obese puts people at greater risk of a range of health problems including heart disease, stroke, type 2 diabetes and some cancers. The associated health risks appear to increase with increasing BMI. There has been a general increase in adult weight and BMI since 2002 in WA. Given this, it is important to address gradual weight gain through adult life by encouraging behaviour that supports maintenance of a healthy weight and early reversal of small weight gains. With a large proportion of the adult population overweight or obese, the benefits of even small, sustained weight loss must also be emphasised. A modest loss of 5–10% of body weight can lead to significant health benefits.

Strategic directions for curbing the rise in overweight and obesity in WA

The strategic directions presented in this section overlap with and complement those outlined in the earlier sections on **Healthy eating** and **A more active WA**. Approaches for preventing overweight and obesity must also recognise that increasing physical activity and healthier eating can improve health outcomes, independent of weight loss.

Healthy policies

- Support the development and implementation of policies that have a positive impact on obesity and its determinants
- Support the development and implementation of organisational policies that facilitate increased physical activity and healthy eating and reduced sedentary behaviour

Legislation and regulation

- Support stronger controls across all levels of Government to reduce exposure to the marketing and promotion of ultra-processed discretionary food and drinks, particularly for children
- Support food regulation to improve the nutrition content of food products through reformulation and portion control and assist consumers to make informed food choices (nutrition labelling and information at point of sale)

Economic interventions

• Investigate and consider fiscal policies with the potential to reduce consumption of unhealthy food and drinks and increase consumption of healthy foods

Supportive environments

- Work across government and key sectors to encourage and support environmental changes that facilitate increased physical activity and access to healthy foods
- Support and implement initiatives that engage with key sectors within the food industry to increase the production, marketing and availability of healthier food and drinks
- Facilitate the creation of health-promoting environments that support physical activity, healthy eating and reduced sedentary behavior within key settings such as workplaces, schools and child care
- Support and implement initiatives that limit exposure to the marketing and promotion of ultra-processed discretionary food and drinks, both in children's settings and the broader community

Public awareness and engagement

 Invest in sustained, high quality statewide public education campaigns that increase community understanding about the risks of overweight and obesity and motivate behaviour necessary to support achievement and maintenance of a

healthy weight

- 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
- Implement strategies that stimulate debate and increase community demand and support for measures aimed at obesity prevention

Community development

- Engage with the community and key stakeholders, including Local Governments, to identify and implement priority actions that support obesity prevention at a local level
- Encourage and support community-based obesity prevention initiatives in partnership with key stakeholders to maximise their reach and impact
- Work with Local Government to develop Local Public Health Plans which include measures to address overweight and obesity

Targeted interventions

- Implement strategies targeting those planning pregnancy, pregnant women and parents/families to increase behaviours that support the healthy growth and development of children
- Invest in initiatives for children who are identified as above a healthy weight and their families to support adoption of healthy lifestyle behaviours
- Complement population approaches with targeted approaches that are inclusive
 of needs and issues of specific sub populations at higher risk of overweight and
 obesity (for example Aboriginal people, CaLD groups with higher obesity rates,
 people with disabilities)

Strategic coordination, building partnerships and workforce development

- Strengthen existing and develop new partnerships across all sectors to ensure a comprehensive, consistent and effective approach to addressing overweight and obesity and its determinants
- Strengthen, upskill and support relevant sectors of the workforce (public health, broader health and non-health) to address overweight and obesity, poor diet and physical inactivity in their programs, policy and plans
- Support and undertake research in line with the National Preventive Health Research Strategy 2013–2018 Priority-driven research agenda for obesity prevention
- Continue to collect evidence to inform new approaches and monitor the effectiveness of existing initiatives targeting overweight and obesity and its related risk factors
- Support continued population monitoring of overweight and obesity as well as individual and key environmental factors that impact on obesity rates

Making smoking history

Tackling smoking remains a key priority area for improving the health of Western Australians: two out of three long-term smokers are likely to die from their tobacco use. While smoking rates overall are lower than ever, challenges remain. Some groups still have much higher smoking rates, new nicotine delivery products are being developed, and evidence grows about harmful tobacco additives.

A snapshot of smoking in WA

- In 2015, 9% of the WA population aged 18 and over were daily smokers. Men were more likely to be daily smokers than women (11% compared to 8%).²²
- Fewer than 5% of WA secondary school students aged 12–17 reported that they
 were regular smokers in 2014 (4.8%). Prevalence was the same for boys and
 girls.¹⁴⁰
- Between 1984–2014, weekly smoking rates among 12–17 year olds fell from 21% to 4.8%. 140
- 43% of Aboriginal people aged 15 and over in WA were smokers in 2012–13, close to the national prevalence for Aboriginal people of 44%.¹⁴¹ Nationally, between 2002 and 2012–13 smoking among Aboriginal males declined from 51% to 44% and among Aboriginal females from 47% to 40%.¹⁴¹
- National data show that in 2013, daily smokers were twice as likely to have been diagnosed with, or treated for a mental health condition.¹⁴²
- Lower socioeconomic groups,¹⁴² people who live outside major cities,¹⁴² prison inmates,¹⁴³ gay, lesbian and bisexual people,¹⁴² and some overseas-born communities¹⁴⁴ also have a higher prevalence of smoking than the general population.
- In WA in 2013, 11% of women reported smoking during the first 20 weeks of pregnancy, and 9% reported smoking after the first 20 weeks of pregnancy.
 Prevalence of smoking during pregnancy is higher in some groups, including Aboriginal women, younger women, and women who are disadvantaged.
- Most homes in WA are smoke-free. In 2015, only 2% of adults reported smoking in their home on a frequent basis,²⁰ and between 2002 and 2014 the prevalence of children aged 15 and under living in a smoke-free house increased from 91% to 99%.²¹
- In Australia in 2004–05, there were over 40 deaths in infants exposed to maternal smoking.¹⁴⁶
- In WA in 2009–10, it is estimated that 1,420 deaths were attributable to tobacco

smoking. Eleven of these deaths occurred in people exposed to secondhand smoke.³⁵

 Tobacco was responsible for 9% of the total burden of disease in 2011 in Australia. Most of the disease burden was due to respiratory diseases and cancers.²

Priorities for making smoking history in WA

Continue efforts to lower smoking rates

Although there has been significant progress made in reducing the prevalence of tobacco use in WA, smoking continues to have a major impact on public health. The greatest burden of tobacco-caused death and disease occurs among some of the most disadvantaged groups in the community.

Encouraging and supporting smokers to quit, and discouraging non-smokers from taking up tobacco use, are primary objectives of tobacco control. Quitting smoking at any age results in immediate health benefits, irrespective of how long a person has been smoking.

Decades of experience gained from tobacco control in Australia and internationally have provided clear direction about best practice in reducing the prevalence of smoking. The comprehensive approach required to reduce tobacco-related harm has been articulated by the National Preventative Health Taskforce, ⁵¹ the *National Tobacco Strategy 2012–2018* (NTS), ¹⁴⁷ and in the World Health Organization's *Framework Convention on Tobacco Control* (WHO FCTC), to which Australia is a signatory.

Consistent with commitments detailed within the NTS and in Article 5.3 of the WHO FCTC, the WA Government and other Australian Governments at state, territorial and national level share a long track record of protecting tobacco control policy from tobacco industry interference. This has enabled the introduction of innovative and world-leading tobacco control programs.

The delivery of high-quality mass media education campaigns remains a critical factor in driving down smoking rates. Over the years there has been some debate about whether tobacco public education campaigns should focus primarily on youth or on adults. The weight of evidence shows that the most appropriate means of reaching young people is through mainstream campaigns which they see as personally relevant, and which are effective in promoting negative attitudes to smoking. ¹⁴⁹

Eliminate exposure to secondhand smoke in places where the health of others can be affected

The harmful effects of exposure to second hand smoke are well documented and indisputable. The primary goal of smoke free regulation is the immediate protection of others from tobacco smoke. There is strong evidence that smoke free legislation has reduced the mortality from smoking related illness at a population level. There is also strong evidence of other improvements in health outcomes such as reduced admissions for acute coronary syndrome. Smoke free laws also shift broader social norms and have a flow-on effect of increasing the numbers of smokers who choose to keep their homes and cars smoke free, and to refrain from smoking in other people's homes.

Reduce smoking in groups with higher smoking rates

Although the prevalence of daily smoking in the Aboriginal population is falling, it is still substantially higher than among other Australians, leading to poorer health outcomes for Aboriginal people. Maintaining an ongoing commitment to a comprehensive approach to Aboriginal tobacco control is considered to be the most effective means of driving down tobacco use. This approach includes conducting mainstream population-wide public education campaigns which include messages which are particularly salient to Aboriginal people; providing advice and support to quit; and using health promotion messages which continue to reinforce and enhance social norms about quitting smoking and being smokefree.

Higher prevalence of smoking also contributes to health and financial inequalities in some other groups in our communities, including among people in lower socioeconomic groups, people living with mental illness, and the prison population. These people may be more likely to encounter social environments where smoking remains the norm and where quit attempts may be less supported. Strengthening efforts to reduce smoking rates in populations with a higher prevalence of smoking is one of the nine priority action areas within the NTS.

Improve regulation of contents, product disclosure and supply

While progress has been made in reducing the fire risk associated with cigarettes, and some Australian states and territories have banned the sales of fruit and confectionery-flavoured cigarettes, the NTS notes that there are currently few controls on the contents, product disclosure and supply of tobacco in Australia.¹⁴⁷

There is concern that current policy arrangements for product disclosure are inadequate. 154 Articles 9 and 10 of the WHO FCTC 148 call for the implementation of measures for testing, measuring and regulating contents and emissions of tobacco products, and for the disclosure by tobacco manufacturers and importers of information about the toxic content of and emissions from their products. Correspondingly, the NTS states that "the contents of tobacco products and of tobacco product disclosures is an important area of tobacco control that warrants additional investigations and analysis to inform future policies." 147

Supply of tobacco products to children remains a concern. Research from 2014 showed that 44% of Western Australian children aged 12–17 who had smoked in the past week had obtained cigarettes from their friends¹⁴⁰ and that 20% had asked somebody else to make the purchase.¹⁵⁵ It is encouraging that fewer tobacco retailers are selling cigarettes to children in WA than previously.¹⁵⁶

There is evidence from interstate ^{157, 158} and Western Australian ¹⁵⁹⁻¹⁶³ compliance monitoring activities that some sales assistants who appear to be under the age of 18 sell tobacco products to minors. It may be that younger sales assistants find it more difficult to refuse to sell tobacco products to their peers, or do not feel as confident about asking to view identification. Article16 of the WHO FCTC calls for appropriate measures to be taken to stop minors from selling tobacco products. ¹⁴⁸

Monitor emerging products and trends

Alternative nicotine delivery products such as electronic cigarettes (e-cigarettes, also known as electronic nicotine delivery systems, electronic non-nicotine delivery systems, or 'ENDS') have recently gained prominence in Australia and around the world. 164

These products give rise to important considerations of consumer safety, product regulation and protection of young people.

Following the sixth session of the Conference of the Parties to the WHO FCTC in October 2014, the WHO advised that *Governments should consider that if their country has already achieved a very low prevalence of smoking and that prevalence continues to decrease steadily, use of ENDS will not significantly decrease smoking-attributable disease and mortality even if the full theoretical risk reduction potential of ENDS were to be realized.* 165

Many of these products are marketed online as a method to assist smokers to quit, or a 'safe alternative' to conventional tobacco cigarettes; however there is currently insufficient evidence to support these claims and further research is needed to enable the safety, quality and efficacy of e-cigarettes to be assessed. ¹⁶⁴ In Australia, the Therapeutic Goods Authority is responsible for evaluating and regulating the availability of products which make therapeutic claims. ¹⁶⁶ The pace of industry innovation reinforces the need to monitor and ensure appropriate policy responses to emerging products and issues.

Strategic directions for making smoking history in WA

Healthy policies

- Continue to safeguard public health policy, including tobacco control policies, from tobacco industry interference
- Support the development and implementation of state and national policies which will reduce the health, social and economic harms caused by tobacco, in line with the NTS and the WHO FCTC
- Support the development and implementation of smoke free policies, particularly in environments where children are exposed to tobacco smoke

Legislation and regulation

- Eliminate exposure to secondhand smoke in workplaces and public places, especially where children are present
- Maintain monitoring, enforcement and review of legislative controls on the sale, supply, marketing and use of tobacco products
- Ensure that the legislative environment is responsive to changing market conditions and industry innovations
- Support further regulatory initiatives in alignment with the FCTC, including initiatives related to protecting tobacco control policies from industry interference, ingredients disclosure and regulation of ingredients and additives

Economic interventions

 Support Commonwealth Government fiscal policies to discourage tobacco use Supportive environments

- Continue to build on strong public support for tobacco control measures
- Encourage the expansion of smoke free environments
- Encourage and embed provision of evidence-based smoking cessation support and information throughout workplaces, educational and community settings and health service providers

Public awareness and engagement

- Invest in sustained, high-quality statewide public education campaigns to encourage and support quitting, and discourage uptake of smoking
- Evaluate and adopt new technologies to enhance and extend public education activities
- Support communities and stakeholders to adopt local policies which will reduce the prevalence of smoking and exposure to tobacco smoke in places where the health of others can be affected

Community development

- Engage with the community and key stakeholders, including Local Governments, to identify and implement priority actions to reduce exposure to second hand tobacco smoke and promote smoking cessation
- Work with Local Government to develop Local Public Health Plans which include measures to address tobacco control

Targeted interventions

- Complement population approaches with targeted programs that are culturallysecure and/or meet the needs of people with higher smoking prevalence (including Aboriginal people, those with mental illness and the prison population), or who are particularly vulnerable to the harmful effects of smoking (such as pregnant women and infants)
- Collaborate on the range of initiatives implemented under the *Commonwealth Tackling Indigenous Smoking* program
- Integrate smoking prevention and cessation messages with other healthy lifestyle initiatives, and develop links between programs and services which are targeted at specific populations with higher prevalence of smoking, or more vulnerable to its effects

Strategic coordination, building partnerships and workforce development

- Strengthen existing and develop new partnerships across all sectors 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 workforce (public health, broader health and non-health sectors) to address tobacco control in their programs, policies and plans
- Improve and maintain the capacity of the wider health and allied workforce to provide reliable cessation information, advice and support to smokers
- Support and undertake research in line with the National Preventive Health Research Strategy 2013–2018 Priority-driven research agenda for tobacco control in Australia and ensure that policies and programs are based on best information available
- Support continued population monitoring of smoking prevalence as well as individual and key environmental factors that impact on smoking behaviour

Reducing harmful alcohol use

"Alcohol continues to be a priority drug of concern for Western Australia. There is a need to continue efforts to change the drinking culture from one of harmful use to one where low-risk drinking is encouraged and supported."—Mental Health Commission WA. 167

A snapshot of alcohol use in WA

- In 2015, 62% of the WA population aged 16 and over reported that they
 consumed alcohol, and the remainder (38%) reported that they were nondrinkers, or their drinking level was not determined.²⁰
- According to the Australian Guidelines for Alcohol Consumption (Box 11), 28% of the WA population aged 16 and over in 2015 were drinking at levels likely to increase their risk of long-term harm and 10% drank at levels likely to increase their risk of short-term harm.²⁰
- The prevalence of drinking at risk of long-term harm and short-term harm declined among males and females aged 16 and over in WA between 2002 and 2015.²⁰
- Males in all age groups were significantly more likely than females to report drinking at high-risk levels for long-term harm. Males were also significantly more likely than females to report drinking at high-risk levels for short-term harm (15% compared with 4%).²⁰
- Although Aboriginal people were more likely to abstain from drinking alcohol than non-Aboriginal people in 2013 (28% and 22%, respectively), among those who consumed alcohol, a higher proportion of Aboriginal people drank at risky levels.¹⁴²
- From 2010 to 2013, there was a significant decline in the proportion of Aboriginal people consuming alcohol at levels that exceed the NHMRC guidelines for risk of long-term harm (from 32% to 23%). There were also fewer Aboriginal people drinking alcohol at least once a month in 2013 at levels that put them at risk of short-term harm (from 45% to 38%).
- From 1984–2014, rates of alcohol use among secondary school students declined. There were notable declines over this period in the proportion of students who reported drinking in the past year (80% to 44%), in the past month (50% to 24%) and in the past week (34% to 14%). 168
- In 2014, almost one in seven (14%) students aged 12–17 years drank during the past week. Of this 14%, almost one in three (30%) drank at risky levels for shortterm harm.¹⁶⁸
- From 2010–2013, the proportion of pregnant women abstaining from alcohol

increased slightly from 49% to 53%. About three-quarters (78%) of pregnant women who consumed alcohol while pregnant drank monthly or less, and 17% drank two to four times a month. 142

- From 2007–2011, the rate of alcohol-related deaths was nearly twice as high in people living in very remote areas relative to the state average. For people living in remote and moderately-accessible areas, the rate of alcohol-related deaths was approximately 1.4 times higher than the state average.¹⁶⁹
- In 2012, there were almost 19,000 hospitalisations in WA attributable to alcohol. This accounted for more than 88,500 bed-days and cost in excess of \$114 million.

Box 11: Australian Guidelines to Reduce Health Risks from Drinking Alcohol¹⁷¹

The National Health and Medical Research Council recommend that:

- For healthy men and women, drinking no more than two standard drinks on any day reduces the lifetime risk of harm from alcohol-related disease or injury.
- For healthy men and women, drinking no more than four standard drinks on a single occasion reduces the risk of alcohol related injury arising from that occasion.
- Parents and carers should be advised that children under 15 years of age are at the greatest risk of harm from drinking and that for this age group, not drinking alcohol is especially important.
- For young people aged 15–17 years the safest option is to delay the initiation of drinking for as long as possible.
- For women who are pregnant or planning a pregnancy, not drinking is the safest option.
- For women who are breastfeeding, not drinking is the safest option.

Australian^{172, 173} and international¹⁷⁴ health authorities do not recommend drinking alcohol as a way of preventing or treating heart disease.

Priorities for reducing harmful alcohol use in WA

Change community attitudes towards alcohol use

Alcohol use is embedded in national culture¹⁷⁵ and the majority of Western Australians consume alcohol at some level.²⁰ The greatest number of alcohol-related problems occurs in people who often drink moderately, and drink to harmful levels only occasionally. A large proportion of the general drinking population has this pattern of consumption.¹⁷⁶

Australian children are initiated into a culture of drinking at an early age. ¹⁷⁵ Among WA secondary school children in 2014 who drank in the last week, more than one quarter (27%) of those aged 12–15 years, and more than one third (36%) of those

aged 16–17 years, reported that they drank alcohol with the aim of getting drunk. ¹⁶⁸ Community attitudes to drinking, role-modelling and the availability, price and advertising of alcohol all influence the drinking behaviour of young people. ¹⁷⁵

Alcohol use poses unique problems during pregnancy and breastfeeding, adolescence, young adulthood and later in life. ¹⁷¹ Efforts to influence community attitudes towards alcohol need to take into account the range of effects that alcohol can have at key life stages.

The traditional Australian tolerance of harmful levels of drinking⁵¹ is increasingly being countered by community concern and awareness about the damage it causes. In a WA survey in 2011, 60% of respondents thought that it was unacceptable to get drunk.¹⁷⁷ Support for and development of a culture that discourages harmful alcohol use is required to achieve sustainable change.

Influence the supply of alcohol

How alcohol is made available influences the extent to which alcohol-related harm occurs. Risk can be reduced by controlling alcohol sales and supply through location, density and type of licensed outlets.⁵¹ Increasingly, communities are engaging in the decision-making process about how alcohol is managed in their localities. Some remote communities in WA have opted for a complete ban on alcohol.¹⁷⁸

The most common sources for obtaining alcohol for under-aged drinkers are their friends (31%) and parents (30%). Community concern about the supply of liquor to under-aged people was a significant factor in the introduction of secondary supply laws. In November 2015, legislation came into effect in WA that makes it an offence to supply liquor to anyone under the age of 18 years without their parent's or guardian's permission. 179

There is a need for ongoing public education about the harms of underage drinking, the dangers and penalties of supplying alcohol to young people and the importance of delaying initiation to alcohol use, as well as increasing awareness about adult responsibilities and obligations to protect children and adolescents from alcohol use.

Reduce demand for alcohol

A range of options have been demonstrated to influence demand for alcohol products and can be employed to help shape lower-risk patterns of drinking behaviour or abstention for population groups for whom this is considered to be the safest option. These include changes to taxation and pricing; regulation of access and availability; drink-driving countermeasures; regulation of alcohol advertising and promotion; public education; and provision of appropriate treatment and rehabilitation options.¹⁷⁵

Alcohol is closely associated with injury. It is a contributing factor to almost one in five (19%) injury deaths and more than one in ten (12%) hospitalisations due to injury in the community. ¹⁸⁰ Introducing effective strategies to reduce harmful drinking in the community will also reduce injuries caused by alcohol use.

Strategic directions for reducing harmful alcohol use in WA

Healthy policies

 Support the development and implementation of policies that reduce or prevent alcohol-related harm, and encourage, create and support low-risk drinking settings, particularly where children and young people are present

Legislation and regulation

- Support the development and implementation of legislative controls on the sale, supply and use of alcohol
- Support effective controls at all levels of government to reducing the exposure of children and adolescents to alcohol consumption and the promotion of alcohol
- Encourage partnerships with State and Commonwealth agencies to support a comprehensive approach to preventing and reducing harmful alcohol consumption

Economic interventions

Support reforms of alcohol taxation and pricing that will discourage harmful alcohol consumption

Supportive environments

- Support the development of settings that discourage harmful alcohol use and promote a lower risk drinking culture
- Support strategies that reduce exposure of children to alcohol consumption, marketing and promotion

Public awareness and engagement

- Invest in sustained, high-quality statewide public education campaigns to reduce short-term and long-term harmful alcohol use, influence cultural and social attitudes to alcohol and support the development of a safer, lower risk drinking culture
- Adopt and evaluate new technologies to enhance and extend public education activities
- Provide ongoing education regarding patrons' and licensees' responsibility to act in accordance with current legislation, including the responsible supply and service of alcohol
- Increase access to reliable, practical, culturally-appropriate information about reducing harmful drinking

Community development

- Engage with the community and key stakeholders, including Local Governments, to identify and implement priority actions to prevent alcohol-related harm
- Work with Local Governments to develop Local Public Health plans which include strategies to prevent alcohol-related harm

Targeted interventions

• Promote the compulsory delivery of appropriate, evidence-based alcohol

- education in schools and associated workforce development for teachers
- Complement population approaches with targeted programs that are culturallysecure and/or meet the needs of people at greater risk of experiencing alcoholrelated harm (including Aboriginal people and people who live outside the metropolitan areas) or who are particularly vulnerable to the harmful effects of alcohol use (such as children, pregnant women, and woman who are breastfeeding)
- Integrate messages about reducing harmful alcohol use with other healthy lifestyle
 initiatives, and develop links between programs and services which are targeted
 at specific populations with levels of risky drinking, or who are more vulnerable to
 its effects

Strategic co-ordination, building partnerships and workforce development

- Strengthen existing and develop new partnerships across all sectors to ensure a comprehensive, consistent and effective approach to reducing alcohol-related harm
- Strengthen, upskill and support relevant parts of the workforce (public health, broader health and non-health sectors) to address harmful alcohol use in their programs, policies and plans
- Improve and maintain the capacity of the wider health and allied workforce to address harmful alcohol consumption in their clients and patients
- Support and undertake research in line with the National Preventive Health
 Research Strategy 2013–2018 Priority-driven research agenda for prevention of
 alcohol related harm in Australia and ensure that policies and programs are based
 on best information available
- Support continued population monitoring of alcohol consumption as well as individual and key environmental factors that impact on drinking behaviour

Preventing injury and promoting safer communities

"Whether intended or accidental, most physical injuries can be prevented by identifying their causes and removing these, or reducing people's exposure to them."—National Injury Prevention and Safety Promotion Plan 2004–2014¹⁸¹

A snapshot of injuries in WA

The most significant risk factor for injuries is alcohol use, which was a factor in 21% of all injuries which occurred in Australia in 2011. Alcohol was responsible for 28% of the burden of injury due to road traffic crashes, and 23% of the burden of injury due to suicide and self-inflicted injuries. Males are far more likely to experience injury due to alcohol use.²

Introducing effective strategies to reduce harmful drinking in the community will have a positive impact on the amount of injury caused by alcohol use. Priorities for addressing harmful use of alcohol are discussed in the previous section.

- Injuries were responsible for 9% of the burden of disease in Australia in 2011²
- Injuries were the fourth leading cause of death amongst Western Australians between 2009–2013, and the second most common cause of hospitalisation between 2010–2014¹⁸²
- The top five causes of community* injury death in WA between 2009–2013 were self-harm, falls, transportation, poisoning and other unintentional injuries 182
- The leading causes of hospitalisation for community injury in WA residents between 2010–2014 were falls, unintentional injuries, transportation, interpersonal violence and self-harm¹⁸²
- Overall, between 2009–2013 males were more likely to die or be hospitalised from injury than females. Falls-related injuries were the only injury type where females were at greater risk of dying or being hospitalised than males¹⁸²
- Transport, drowning, suicide, poisoning and interpersonal violence were the leading causes of death in WA for young people aged 1–24 years (2009–2013).
 Falls were the most common cause of hospitalisation due to injury among children aged 1–14 years (2010–2014)¹⁸²
- In each year between 2001–2011, nearly 80 children aged 1–19 years died from preventable injuries in WA, 10,580 injured children were hospitalised and hospital emergency departments treated more than 50,000 children due to

^{*} Community injuries are those which are typically sustained in places such as the home, workplace or street.

injury. 183

- Children aged four and under had the highest death rates due to drowning between 2009–2013¹⁸³
- Aboriginal people were three times more likely to be hospitalised for a community injury between 2010–2014, and over three times more likely to die from community injury than non-Aboriginal populations in WA between 2009–2013¹⁸²
- Between 2000–2008, people living in the most disadvantaged areas had approximately twice the risk of dying from injury compared with people living with greater advantage. Those living in regional or remote areas were also at higher risk¹⁸⁰

Priorities for preventing injury and promoting safer communities in WA

The Department of Health works with a range of external stakeholders, including other government departments and funded non-government agencies, to improve injury prevention and encourage safer communities in this State. In some areas the Department of Health takes a lead role, but in areas led by other agencies—such as road safety, mental health, suicide prevention, occupational health and safety, product safety and crime prevention—the Department provides support by offering a skills base, models of practice, and data provision and analyses.

Protect children from injury

Children's developmental stages influence the kinds of injury which are more likely to occur, and the types of interventions needed to counter them. Leading causes of child injury include motor vehicle crashes, drowning, self-harm, poisoning and falls.¹⁸²

Promoting home-safety strategies, such as keeping medicines and household products out of reach; creating safer environments for backyard and playground equipment; and promoting good mental health and reducing risk-taking behaviours are key strategies for protecting toddlers, children and teenagers from harm.¹⁸³

Childhood injury is predictable and preventable and can be reduced by raising awareness of childhood injuries, informing and educating parents about how they can protect their children from harm, providing education and training to health professionals and community groups, and advocating for improvements to the design of products which are intended for use by children.

Prevent falls in older people

Falls are the leading cause of death and hospitalisation due to injury in people aged over 65 years (Aboriginal people aged over 55 years) in WA. Falls injuries may lead to further problems such as a loss of confidence, independence and mobility, and the onset of depression. ¹¹⁹ WA's ageing population makes falls prevention a priority.

Interventions to prevent falls in WA target older people in the community who are well and specific groups at increased risk of falls. The most effective type of exercise to prevent falls involves activities that include a moderate or high challenge to balance (for example Tai Chi). Other interventions include modifications to hazards in the home, and ensuring that poor vision and use of medications (and combinations of medications) which can impair balance are addressed to the extent possible.⁴

It is vital that interventions developed for older people are based on collaborative health promotion partnerships, and take account of the diversity of older peoples' activity levels and care needs.

Reduce road crashes and road trauma

The Department of Health actively supports the Road Safety Commission's *Towards Zero, the State's road safety strategy for 2008–2020.*¹⁸⁴

Road crashes, including those involving on and off-road use of motor vehicles, motorcycles and bicycles as well as pedestrian activity, remain a leading cause of injury and hospitalisation in WA. Contributing factors include alcohol, speed and increased use of motorcycles.¹⁸⁵

Towards Zero focuses on safe road use, safe roads and roadsides, safe speeds, and safe vehicles. The strategy supports public education, enforcement of road rules, targeting of risk-taking behavior, and the development and implementation of a 'safe system' which to the extent possible, anticipates and reduces the risk of crashes. ¹⁸⁴ Since the launch of *Towards Zero*, road fatalities have dropped by about one-third. ¹⁸⁵

Improve safety in, on and around water

WA's environment and culture promote water-based recreational activities. Coastal locations, home swimming pools, rivers, lakes and dams are the most common sites for fatal and non-fatal drowning in WA. Males, Aboriginal people and people of CaLD backgrounds are at greater risk of drowning. 180

Evidence for measures for drowning prevention in Australia focuses on three key drivers to prevent drowning: taking a life stages approach, targeting high-risk locations, and focusing on key drowning challenges. Strategies include child drowning prevention programs, teaching rescue and resuscitation skills, learning to swim, preventing drinking and drowning, wearing a lifejacket when on water, raising awareness of the role pre-existing medical conditions take, and partnering with relevant groups. ¹⁸⁶

Reduce interpersonal violence

The Department of Child Protection and Family Support leads Western Australia's Family and Domestic Violence Prevention Strategy to 2022. 187

Interpersonal violence, including assault, domestic violence, family violence, sexual violence and community violence is a leading cause of preventable injury in WA, especially in people aged 15–64. Injuries from interpersonal violence are more common in males than females, among Aboriginal people, people living in lower socio-economic areas, and those living in rural and remote areas. Alcohol use is an important factor, contributing to about 45% of hospitalisations and deaths from interpersonal violence. Some illicit drugs, including methamphetamines, are related to an increase in violent behaviour.

Approaches to reduce the incidence of interpersonal violence in WA include population-wide initiatives to increase awareness of and challenge community attitudes to violence, as well as targeted prevention activities for high risk groups. Western Australia's Family and Domestic Violence Prevention Strategy to 2022 identifies action areas for prevention and early intervention of violence, with a focus on education programs, awareness raising campaigns, media collaboration and coordinated organisational responses. These action areas are applicable to all forms of violence across the community.

Develop the injury prevention and safer communities sector

The importance of a coordinated approach to disease and injury prevention is a constant theme throughout the WA HPSF, and because of the breadth of organisations with an active interest and engagement in injury prevention, a coordinated approach is critical. Organisations and agencies with an interest in injury prevention include those concerned with law enforcement; mental health; alcohol and drug use; road safety; product safety packaging; occupational health and safety; drowning prevention; and urban design. Injury prevention is vital for population groups at all life stages from infancy to old age; Aboriginal people; and some CaLD populations, particularly new arrivals. Injury prevention therefore falls within the remit of all levels of government, public and private sector organisations, community organisations, and communities themselves, across metropolitan, rural and remote parts of WA. A range of health professionals and specialist groups are also directly engaged in injury prevention, and treating and rehabilitating people who have experienced injuries.

While it is the role of the health sector to provide leadership in the provision of evidence-based policy guidance, quality data, and access to skills and expertise, the capacity for outreach and access to established networks and specialist knowledge which are the domain of the many partners concerned with injury prevention are essential to fostering a positive safety culture and building safer communities.

The breadth of the injury stakeholder group gives rise to the need for a coordinated approach to strategic planning which will support communication, ensure consistency of public health messaging, maximise the impact of limited resources, and minimise unnecessary duplication

Monitor emerging issues in injury prevention

New causes of injury constantly arise in the community with changing products and behaviours. Some examples of emerging injury issues include gastrointestinal burns in children from swallowing button batteries, injuries from misuse of quad bikes, and injuries from hoverboards and other personal motorised transport devices such as scooters. Emerging injury risks require an immediate, coordinated response to inform the community and, where appropriate, the development of policies and practices to reduce ongoing risk of injury.

Strategic directions for preventing injury and promoting safer communities in WA

Healthy policies

 Support the development and implementation of policies that will lower the incidence of avoidable injury and promote safer communities

Legislation and regulation

- Support the development, implementation and monitoring 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
 Economic interventions
- Investigate and support fiscal interventions to prevent injury and promote safer communities

Supportive environments

- Encourage 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 natural and built environments that promote community safety and reduce the risk of injury

Public awareness and engagement

- Invest in sustained, high-quality statewide public education campaigns to reduce the risk of injury and promote a cultural acceptance that injuries are preventable
- Adopt and evaluate new technologies to enhance and extend public education activities
- Increase access to reliable, practical, culturally-appropriate information about reducing the risk of injury
- Support industry and the community to increase their awareness of the role of safe design in injury prevention

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

 Work with Local Governments to develop Local Public Health plans which include strategies to prevent injury and promote safer communities

Targeted interventions

- Complement population approaches with targeted programs that are culturallysecure and/or meet the needs of people at greater risk of experiencing injury at various stages of the life-course
- Integrate messages about avoiding injury with other healthy lifestyle initiatives, and develop links between programs and services which are targeted at specific populations that are at higher risk of injury

Strategic coordination, building partnerships and workforce development

- Strengthen existing and develop new partnerships across all sectors to ensure a comprehensive, consistent and effective approach to preventing injury and promoting safer communities
- Strengthen, upskill and support relevant parts of the workforce (public health, broader health and non-health sectors) 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 on preventing injury
- Support and undertake research in injury prevention and ensure that policies and programs are based on best information available
- Support continued population monitoring of injury as well as individual and key environmental factors that impact on risk of injury

Part 5: Monitoring progress

5.1 Reporting frameworks

WA Health takes a rigorous and systematic approach to monitoring progress in the areas of chronic disease and injury, drawing on State and Commonwealth data sets.

WA Health annual reporting

As part of annual reporting procedures, the WA Department of Health reports on the Potential Years of Life Lost per 1,000 persons due to lung cancer, ischaemic heart disease and falls. Improvements have been observed across all of these measures between 2005 and 2013 (Table 3).

Table 3: Potential years of life lost in WA per 1,000 persons, 2005–2013

Cause	2002	2006	2007	2008	5000	2010	2011	2012	2013	Target
Lung cancer	1.9	2.0	2.1	1.7	2.1	1.7	1.8	1.8	1.5	1.8
Ischaemic heart disease	3.3	3.3	3.7	3.3	3.3	2.9	3.1	2.5	2.5	2.4
Falls	0.5	0.4	0.4	0.5	0.5	0.3	0.4	0.2	0.4	0.2

Source: WA Department of Health Annual Report 189

National Healthcare Agreement

All Australian State and Territory Governments are signatories to the *National Healthcare Agreement 2016.*²⁵ Fundamental to this agreement are the principles that Australia's health system should focus on the prevention of disease and injury, on maintaining health, on supporting an integrated approach to the promotion of healthy lifestyles, and on the prevention of illness and injury across the continuum of care. The *National Healthcare Agreement* sets specific performance benchmarks, some of which relate directly to chronic disease and injury prevention (Table 4).

Table 4: National Healthcare Agreement 2016 performance benchmarks

Diabetes in people over 25 years	Reduce the age-adjusted prevalence of Type 2 diabetes to 2000 levels by 2023 (7.1% nationally)
Healthy body weight in Australian adults and children	Increase by 5 percentage points the proportion of Australian adults and children at a healthy weight by 2018, over the 2009 baseline
Smoking in the Australian population	Reduce the national smoking rate to 10% of the population by 2018, over the 2009 baseline
Smoking in the Aboriginal population	Halve the Aboriginal smoking rate by 2018, over the 2009 baseline
Potentially preventable hospital admissions	Reduce the proportion of potentially preventable hospital admissions by 7.6%, over the 2006–07 baseline

Source: National Healthcare Agreement²⁵

WHO Global Action Plan for the Prevention and Control of Noncommunicable Diseases targets

Australia is also a signatory to the WHO's *Global Action Plan for the Prevention and Control of Noncommunicable Diseases 2013–2020.*⁵⁷ As part of the agreement, a range of voluntary global targets has been set (Table 5).

Table 5: Selected WHO Global Action Plan voluntary targets

	Great reason reasons for general
Harmful alcohol use	At least a 10% relative reduction in the harmful use of alcohol, as appropriate, within the national context
Insufficient physical activity	A 10% relative reduction in prevalence of insufficient physical activity
Salt/sodium intake	A 30% relative reduction in mean population intake of salt/sodium
Raised blood pressure	A 30% relative 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% relative reduction in the risk of premature mortality from cardiovascular disease, cancer, diabetes, or chronic respiratory diseases

Source: Global Action Plan for the Prevention and Control of Noncommunicable Diseases 2013-2020.⁵⁷

5.2 Program evaluation and monitoring

Rigorous program evaluation is an important component of health promotion planning and service delivery. Proper evaluation ensures that all aspects of programs are assessed, lessons are learnt, strengths are built on, and future directions and policies are properly-informed. Robust evaluation also ensures that the WA community is benefitting from the programs put in place.

The Department of Health, with the assistance of Edith Cowan University, has developed the *Research and Evaluation Framework Implementation Guide*¹⁹⁰ to assist with the delivery and reporting of health promotion program evaluation, including initiatives funded by the Department.

In order to inform future planning, WA Health will also continue to monitor health promotion activity across the state to assist with identifying shortfalls and gaps in current programming as well as duplication and overlap.

5.3 Promoting a priority-driven research agenda

The National Health and Medical Research Council describes priority-driven research as work that contributes directly, in the short to medium term, to population

health and the effectiveness, efficiency and equity of the health system. Priority-driven research helps to accelerate necessary policy changes in appropriate health promotion interventions. The *National Preventive Health Research Strategy* provides a useful guide to researchers on how to direct their research so that their work can make a practical contribution to the evidence base for tobacco control, obesity prevention and prevention of alcohol-related harm.

5.4 Documenting a more complete picture of progress

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. There is often considerable delay between health promotion activity and changes in behaviour or improvements in disease and injury outcomes. Consequently, progress in health promotion is typically only realised over the longer term and we are often left with an incomplete picture of progress in the interim.

Mapping progress in chronic disease and injury prevention in WA requires a more complete approach that also captures the vast array of activities that precede and may precipitate changes in health behaviours, and ultimately health outcomes. Factors that could be considered include:

- changes to, and compliance with relevant policy and legislation
- the broader adoption of healthy policies across Government and other sectors
- changes to the environment (built; natural; food and so forth)
- public knowledge, attitudes and beliefs, and motivation to change health behaviours
- reach (throughout population/s and geographically), appropriateness and effectiveness of preventive health programs and interventions
- development of professional networks between relevant stakeholders
- efforts and outcomes in capacity-building in the health and other workforces as appropriate to support healthy behaviours

Developing a narrative describing what has been achieved in chronic disease and injury prevention, taking into account changes in the broader public health field will be a priority for the WA Department of Health during the life of this Framework.

In parallel, the Department will monitor various lifestyle and behavioural risk factors, biomedical states and injury events, and morbidity and mortality outcomes relating to chronic disease and injury, using State and national data collections. An early example of this evolving data set is provided in Appendix 2.

Appendix 1: State, Commonwealth and international frameworks and policies

General

State

WA Health Strategic Intent 2015–2020

http://ww2.health.wa.gov.au/Reports-and-publications/WA-Health-Strategic-Intent-2015-2020

WA Aboriginal Health and Wellbeing Framework 2015–2030 http://ww2.health.wa.gov.au/Improving-WA-Health/About-Aboriginal-Health/WA-Aboriginal-Health-and-Wellbeing-Framework-2015-2030

National

Australia: The healthiest country by 2020. National Preventative Health Strategy—the roadmap for action (2009)

http://www.health.gov.au/internet/preventativehealth/publishing.nsf/Content/nphsroadmap

National Aboriginal and Torres Strait Islander Health Plan 2013–2023 http://www.health.gov.au/internet/main/publishing.nsf/Content/natsih-plan

National Arts and Health Framework (2013; updated annually) http://mcm.arts.gov.au/national-arts-and-health-framework

National Chronic Disease Strategy (2006)

http://www.health.gov.au/internet/main/publishing.nsf/content/7E7E9140A3D3A3B CCA257140007AB32B/\$File/stratal3.pdf

Note – the above strategy will be superseded by:
National Strategic Framework for Chronic Conditions (under development)
http://www.health.gov.au/internet/main/publishing.nsf/Content/nsfcc

National Healthcare Agreement (2016)

http://meteor.aihw.gov.au/content/index.phtml/itemId/598643

National Preventive Health Research Strategy 2013–2018 https://www.saxinstitute.org.au/wp-content/uploads/ANPHA-Research-Strategy-2013-18.pdf

International

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

http://www.who.int/nmh/events/ncd_action_plan/en/

Eating for better health

National

Australian Dietary Guidelines (2013) https://www.nhmrc.gov.au/guidelines-publications/n55

Australian National Breastfeeding Strategy 2010–2015

http://www.health.gov.au/internet/main/publishing.nsf/Content/aust-breastfeeding-strategy-2010-2015 (currently being updated, due for release 2017)

Infant Feeding Guidelines for Health Workers (2013) https://www.nhmrc.gov.au/guidelines-publications/n56

A more active WA

State

An Age-friendly WA: the Seniors Strategic Planning Framework 2012–2017 http://www.dlgc.wa.gov.au/Publications/Pages/Seniors-Strategic-Planning-Framework.aspx

Directions 2031 and Beyond: Metropolitan planning beyond the horizon (2010) http://www.planning.wa.gov.au/publications/826.asp

Liveable Neighbourhoods (currently under review) http://planning.wa.gov.au/650.asp

Public Transport Plan for Perth 2031

http://www.transport.wa.gov.au/projects/public-transport-plan-2031.asp

SD6 Strategic Directions for the Western Australian Sport and Recreation Industry 2016–2020

http://www.dsr.wa.gov.au/about/plan-for-the-future/industry-strategic-plan

State Planning Strategy 2050

http://www.planning.wa.gov.au/6561.asp

Walk WA: A Walking Strategy for Western Australia 2007–2020 http://www.beactive.wa.gov.au/index.php?id=350

Western Australian Bicycle Network Plan 2014–2031 http://www.transport.wa.gov.au/mediaFiles/active-transport/AT_CYC_P_WABN_Plan.pdf

National

Blueprint for an Active Australia 2014–2017

https://heartfoundation.org.au/images/uploads/publications/Blueprint-for-an-active-Australia-second-edition.pdf

National Cycling Strategy 2011–2016

http://www.bicyclecouncil.com.au/files/publication/National-Cycling-Strategy-2011-2016.pdf

Australia's Physical Activity and Sedentary Behaviour Guidelines http://www.health.gov.au/internet/main/publishing.nsf/content/health-publith-strateg-phys-act-guidelines

Our Cities Our Future—A National Urban Policy for a Productive, Sustainable and Liveable Future (2011)

https://infrastructure.gov.au/infrastructure/pab/files/Our_Cities_National_Urban_Policy_Paper_2011.pdf

Preventing overweight and obesity

Note: Policies for maintaining a healthy weight overlap with policies for physical activity and dietary factors, listed above.

National

Clinical Practice Guidelines for the Management of Overweight and Obesity in Adults, Adolescents and Children in Australia (2013)

https://www.nhmrc.gov.au/guidelines-publications/n57

International

Report of the Commission on Ending Childhood Obesity (2016) http://www.who.int/end-childhood-obesity/en/

Making smoking history

National

National Drug Strategy 2010–2015

http://www.nationaldrugstrategy.gov.au/internet/drugstrategy/publishing.nsf/Content/nds2015

Note—the above strategy will be superseded by:

National Drug Strategy 2016–2025 (in draft)

http://www.nationaldrugstrategy.gov.au/internet/drugstrategy/Publishing.nsf/content/draftnds

National Tobacco Strategy 2012–2018

http://www.nationaldrugstrategy.gov.au/internet/drugstrategy/publishing.nsf/content/D4E3727950BDBAE4CA257AE70003730C/\$File/National%20Tobacco%20Strategy%202012-2018.pdf

International

WHO Framework Convention on Tobacco Control (2003) http://www.who.int/fctc/en/

Reducing harmful alcohol use

State

Drug and Alcohol Interagency Strategic Framework for Western Australia 2011–2015 (under review)

http://www.dao.health.wa.gov.au/Informationandresources/Nationalandstatepolicie s.aspx

Better Choices. Better Lives (the WA Mental Health, Alcohol, and other Drug Services Plan 2015–2025)

http://www.mentalhealth.wa.gov.au/ThePlan.aspx

Strong Spirit Strong Mind—Aboriginal Drug and Alcohol Framework for Western Australia

2011-2015

http://www.dao.health.wa.gov.au/Informationandresources/Nationalandstatepolicie saspx

National

National Alcohol Strategy 2016–2021 (under development)
http://www.health.gov.au/internet/main/publishing.nsf/Content/health-pubhlth-strateg-drugs-alcohol-index.htm

National Drug Strategy 2010–2015

http://www.nationaldrugstrategy.gov.au/internet/drugstrategy/publishing.nsf/Content/nds2015

Note – the above strategy will be superseded by:
National Drug Strategy 2016–2025 (Currently in draft)
http://www.nationaldrugstrategy.gov.au/internet/drugstrategy/Publishing.nsf/content/draftnds

Australian Guidelines to Reduce Health Risks from Drinking Alcohol (2009) http://www.nhmrc.gov.au/publications/synopses/ds10syn.htm

Injury prevention and promoting safer communities

State

Towards Zero. Road Safety Strategy to Reduce Road Trauma in Western Australia 2008–2020

http://ors.wa.gov.au/Documents/towardszero-strategy.aspx

Falls Prevention Model of Care (2012)

http://www.healthnetworks.health.wa.gov.au/modelsofcare/docs/Falls_Model_of_C are.pdf

National

National Injury Prevention and Safety Promotion Plan: 2004–2014 http://www.nphp.gov.au/publications/sipp/nipspp.pdf

Australian Work Health and Safety Strategy 2012–2022

http://www.safeworkaustralia.gov.au/sites/SWA/AboutSafeWorkAustralia/WhatWe Do/ Publications/Pages/Australian-Work-Health-and-Safety-Strategy-2012-2022.aspx

National Aboriginal and Torres Strait Islander Safety Promotion Strategy (2005) http://www.health.gov.au/internet/main/publishing.nsf/Content/health-pubhlth-strateg-injury-index.htm

National Falls Prevention for Older People Plan: 2004 Onwards http://www.health.vic.gov.au/archive/archive2014/nphp/publications/sipp/fallplan.pgdf

National Road Safety Strategy, 2011–2020 http://infrastructure.gov.au/roads/safety/national_road_safety_strategy/index.aspx

Australian Water Safety Strategy 2016–2020 http://www.watersafety.com.au/AustralianWaterSafetyStrategy/2016-2020Strategy.aspx

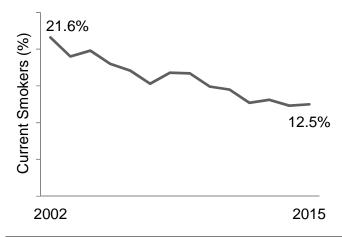
Appendix 2: Broad indicator set for chronic disease and injury prevention in WA

Progress in WA for chronic disease and injury prevention is partly informed by population level changes in behaviour, disease prevalence and rates of injury. For monitoring purposes, a set of indicators based on data collected via the WA Health and Wellbeing Surveillance System and WA Hospital Morbidity Data System is provided for monitoring progress in chronic disease and injury prevention in WA across the life of this framework.

The indicators are divided into three categories—(1) modifiable behaviour, (2) disease and biomedical and (3) injury events. It should be noted that these indicators are a broad examples only and do not represent specific sub-populations that may be associated with greater risk and priority.

1. Modifiable behaviour

Tobacco smoking

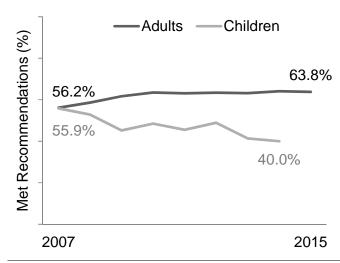


Source

WA Health and Wellbeing Surveillance System

Trend: Tobacco smoking in WA in people 16 years of age and older declined steadily between 2002 and 2015.

Physical activity

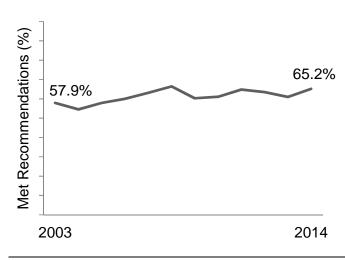


Source

WA Health and Wellbeing Surveillance System

Trends: Compliance with physical activity recommendations in WA adults (16+ years) increased slightly but significantly between 2007 and 2015. For children aged 5 to 15 years, compliance with physical activity recommendations has gradually decreased between 2007 and 2014.

Sedentary behaviour in children



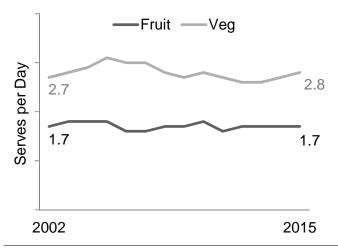
Source

WA Health and Wellbeing 65.2% Surveillance System

Trend: Compliance with sedentary behaviour recommendations in WA children aged 0 to 15 years has increased slightly since 2003. Compliance in 2014 was significantly higher than in 2004.

1. Modifiable behaviour

Fruit and vegetable consumption in adults

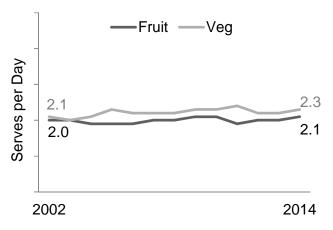


Source

WA Health and Wellbeing Surveillance System

Trends: Mean serves of fruit and vegetable consumed by adults over the age of 16 years remained steady between 2002 and 2015.

Fruit and vegetable consumption in children

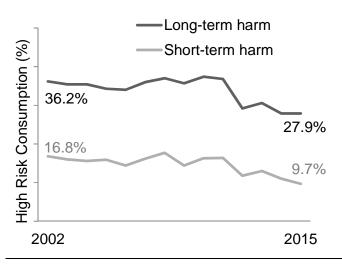


Source

WA Health and Wellbeing Surveillance System

Trends: Mean serves of fruit and vegetables consumed by children aged 2 to 15 years remained steady between 2002 and 2014.

Harmful alcohol use



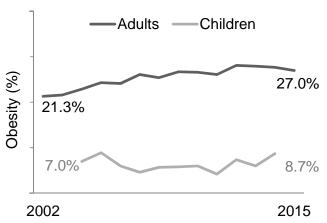
Source

WA Health and Wellbeing Surveillance System

Trends: High risk alcohol consumption for long-term and short-term harm in people aged 16 years and over decreased between 2002 and 2015.

2. Disease and biomedical

Obesity

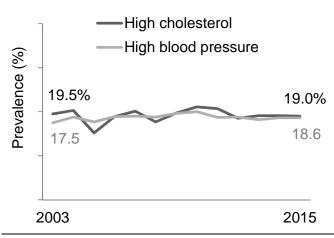


Source

WA Health and Wellbeing Surveillance System

Trends: The prevalence of obesity in people 16 years and over increased steadily between 2002 and 2015. For children aged 5 to 15 years, the prevalence of obesity remained steady between 2004 and 2014.

Cholesterol and blood pressure

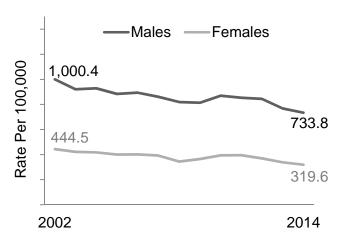


Source

WA Health and Wellbeing Surveillance System

Trends: The prevalence of high cholesterol and high blood pressure in adults aged 25 years and over remained steady between 2003 and 2015.

Coronary heart disease hospitalisations



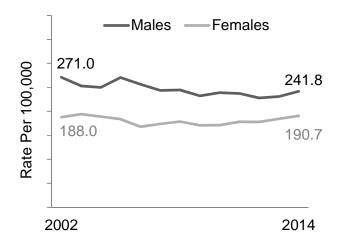
Source

WA Hospital Morbidity Data System

Trends: The age-standardised rate of hospitalisations due to coronary heart disease declined steadily for males and females between 2002 and 2014.

2. Disease and biomedical

Cerebrovascular disease hospitalisations

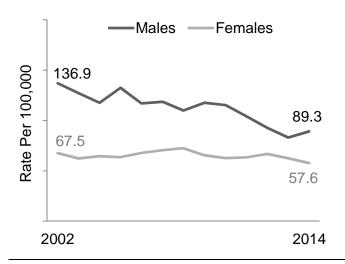


Source

WA Hospital Morbidity Data System

Trends: The age-standardised rate of hospitalisations due to cerebrovascular declined slightly for males but remained steady for females between 2002 and 2014.

Lung cancer hospitalisations

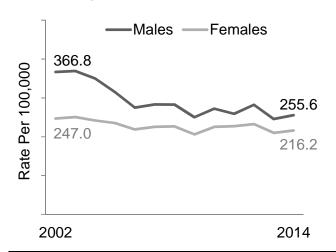


Source

WA Hospital Morbidity Data System

Trends: The age-standardised rate of hospitalisations due to lung cancer declined for males but remained relatively steady for females between 2002 and 2014.

COPD hospitalisations



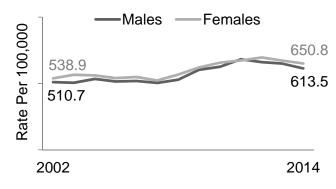
Source

WA Hospital Morbidity Data System

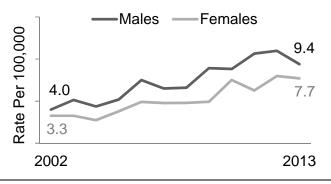
Trends: The age-standardised rate of hospitalisations due to chronic obstructive pulmonary disease declined for both males and females between 2002 and 2014.

3. Injury events

Falls hospitalisations



Falls deaths



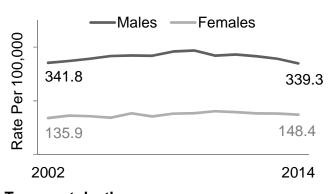
Source

WA Hospital Morbidity Data System

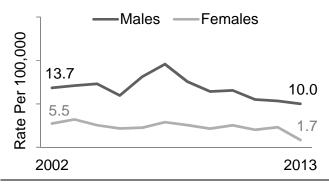
Trends: The age-standardised rate of hospitalisations due to fall-related injuries increased between 2002 and 2012 but decreased between 2012 and 2014 for both males and females.

The age-standardised rate of deaths due to falls increased between 2002 and 2013 for both males and females.

Transport hospitalisations



Transport deaths



Source

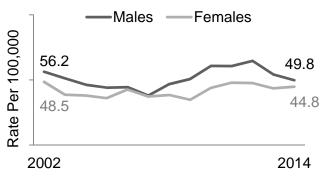
WA Hospital Morbidity Data System

Trends: The age-standardised rate of hospitalisations due to transportation accidents increased for males between 2002 and 2009 but decreased between 2009 and 2014. For females, hospitalisations increased between 2002 and 2010 but remained steady between 2010 and 2014.

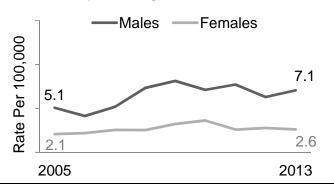
The age-standardised rate of deaths due to transportation accidents increased for males between 2002 and 2007 but decreased between 2007 and 2013. For females, deaths remained steady between 2002 and 2012 but declined in 2013.

3. Injury events

Accidental poisoning hospitalisations



Accidental poisoning deaths



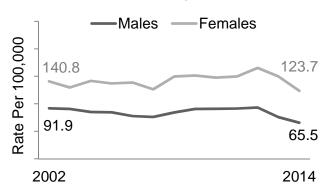
Source

WA Hospital Morbidity Data System

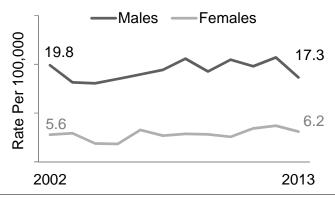
Trends: The age-standardised rate of hospitalisations due to accidental poisoning remained relatively consistent for both males and females between 2002 and 2014.

The age-standardised rate of deaths due to accidental poisoning remained relatively consistent for both males and females between 2005 and 2013.

Intentional self-harm hospitalisations



Intentional self-harm deaths



Source

WA Hospital Morbidity Data System

Trends: The age-standardised rate of hospitalisations due to intentional self-harm remained consistent between 2002 and 2012 but declined between 2012 and 2014 for both males and females.

The age-standardised rate of deaths due to intentional self-harm remained relatively consistent for males and females between 2002 and 2013.

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