AUSTRALIA'S GENDER HEALTH TRACKER TECHNICAL APPENDIX

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About us

The Mitchell Institute for Education and Health Policy at Victoria University is one of the country's leading education and health policy think tanks and trusted thought leaders. Our focus is on improving our education and health systems so more Australians can engage with and benefit from these services, supporting a healthier, fairer and more productive society.

The Australian Health Policy Collaboration is led by the Mitchell Institute at Victoria University and brings together leading health organisations and chronic disease experts to translate rigorous research into good policy. The national collaboration has developed health targets and indicators for preventable chronic diseases designed to contribute to reducing the health impacts of chronic conditions on the Australian population.

Acknowledgements

Suggested citation

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Introduction

This technical appendix is a companion and reference tool for the publication *Australia's Gender Health Tracker* and is part of the [Australia's Health Tracker](#) series.

Since 2015, the Mitchell Institute has led and facilitated the development of a set of targets and indicators to measure and track the prevention and management of chronic diseases in Australia. This work has led to the establishment of the Australian Health Policy Collaboration (AHPC), comprising a network of 70+ chronic disease experts, clinicians and researchers and 60 national organisations who call for, and are active contributors towards, a systemic and sustained approach to the prevention and management of chronic diseases in Australia. A history and sequence of the reports (first and second editions) developed by the AHPC are shown below. A series of spin-off 'Tracker' reports have been created since the creation of the 2016 Australia's Health Tracker which can be found on the Mitchell Institute [website](#).

Why gender matters

The *Gender Health Tracker* national report card aims to highlight the gender differences experienced by men and women in relation to chronic diseases and health risk factors. This report uses the same definition of gender as the Australian Bureau of Statistics (ABS).

Definition of gender

In this document, gender is defined as the way in which a person self-identifies their masculine or feminine characteristics. A person's gender relates to their deeply held internal and individual sense of gender and is not always exclusively male or female. It may or may

not correspond to their sex at birth and can be fluid over time (Australian Bureau of Statistics 2018).

Indicators

The indicators in this national report card are drawn from Targets and indicators for chronic disease prevention in Australia (McNamara et al. 2015, McNamara et al. 2019) and the Australia Health Tracker series (Harris et al. 2017, Harris et al. 2018, Fetherston et al. 2019). In considering national targets and indicators, the AHPC and colleagues used Australian Institute of Health and Welfare criteria. The criteria state that chronic disease indicators must:

- be relevant,
- be applicable across population groups,
- be technically sound (valid, reliable, sensitive to change over time, and robust),
- be feasible to collect and report,
- lead to action (at various levels, for example, individual, community, organisation/agency),
- be timely, and
- be marketable (Australian Institute of Health and Welfare 2011).

Additional indicators

In this national report card, the following additional indicators have been reported on:

- Fruit and vegetable intake
- Sugar sweetened beverages
- Circulatory diseases

Targets

Targets and indicators for chronic disease prevention in Australia (McNamara et al. 2015, McNamara et al. 2019) used 2010 as the baseline year and 2025 as the target year for most chronic disease prevention targets. This is consistent with the approach specified by the World Health Organization Global Action Plans (World Health Organization 2013, World Health Organization 2013). Table 1 and Figure 1 presents the targets and indicators proposed for implementation in Australia by 2025.

Table 1: targets and indicators proposed for implementation in Australia by 2025.

Framework Element	Proposed Australian target	Proposed Australian indicators
Mortality and morbidity		
Premature mortality from noncommunicable disease	1. 25% reduction in the overall mortality from cardiovascular diseases, cancer, chronic respiratory diseases and diabetes	- **Unconditional probability of dying between ages of 30 and 70 years from cardiovascular diseases, cancer, diabetes, or chronic respiratory diseases** - Age-standardised rates of unplanned admission for patients aged between 30 and 70 years admitted to hospital with a primary diagnosis of cardiovascular diseases, cancer, diabetes, or chronic respiratory diseases - Age-standardised rates of unplanned readmission for patients aged between 30 and

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		70 years admitted to hospital with an initial primary diagnosis of cardiovascular diseases, cancer, diabetes, or chronic respiratory diseases
	a. 25% reduction in the overall mortality from cardiovascular diseases and diabetes	• **Unconditional probability of dying between ages of 30 and 70 from cardiovascular diseases** • Unconditional probability of dying between ages of 30 and 70 from diabetes • Age-standardised average blood pressure among patients with chronic kidney disease, and percent of adults aged 18 years or more with elevated blood pressure (≥ 140/90 mmHg)
	b. 25% reduction in the overall mortality from chronic respiratory diseases c. Elimination of asthma deaths in adults aged under 65 years	• **Unconditional probability of dying between ages of 30 and 70 from chronic obstructive pulmonary disease** • **Unconditional probability of dying between ages of 30 and 70 from asthma** • Percent of patients aged 30–70 years who are readmitted within 28 days of discharge following a hospital admission related to asthma or COPD
	d. 25% reduction in the overall mortality from cancer	• **Unconditional probability of dying between ages of 30 and 70 from cancer** • One-year survival rates for individuals diagnosed with the following cancers (individual indicators): lung, breast, colorectal, cervix, melanoma and prostate
	e. Reduction in the national suicide rate by 10% by 2020[1]	• The suicide rate as an age-standardised rate per 100,000 population

Behavioural risk factors

Harmful use of alcohol	2. At least 20% relative reduction in the harmful use of alcohol, with regard to: • Per capita consumption • Heavy episodic drinking • Alcohol-related	• Apparent consumption of pure alcohol per capita (aged 15+), based on excise data, import clearances and sales data from Australian produced wine. • Heavy episodic drinking: Proportion of the population (aged 15+) reporting monthly or more frequent episodes of drinking where 5 or more standard drinks were consumed in a single occasion • Heavy episodic drinking among adolescents: Proportion of the adolescent (12-17 yo) population reporting at least one drinking occasion where 5 or more standard drinks were consumed in the previous week.

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[1] WHO set targets and indicators relevant to mental health in the *WHO Global Mental Health Action Plan 2013-2020,* which contains six global targets and indicators for achievement by 2020

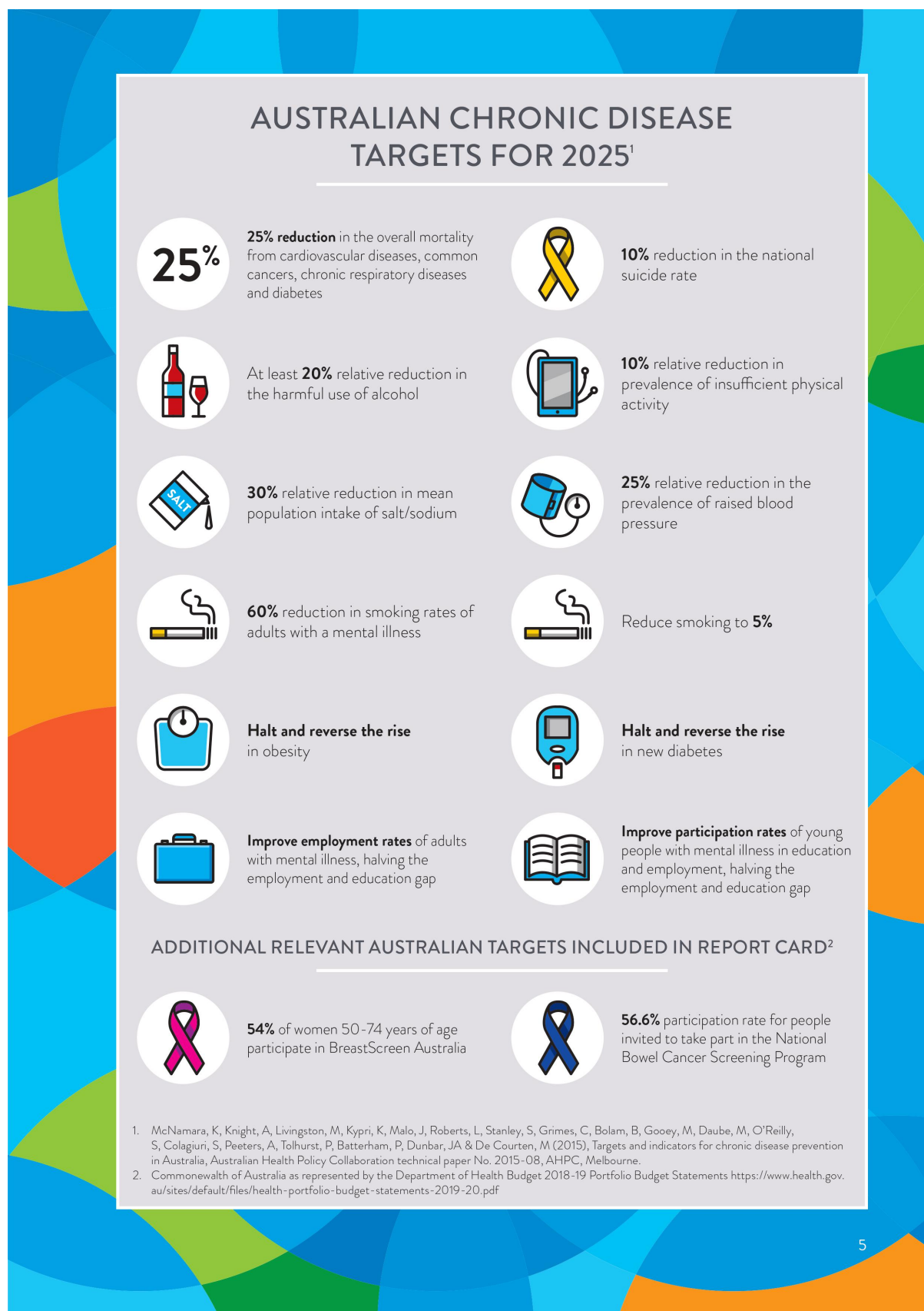|		
	morbidity and mortality	- Long-term risky drinking: Proportion of the population (aged 15+) reporting average alcohol consumption of more than two standard drinks per day over the past year. (gender split) - Emergency department presentations: Presentations for injury (S & T ICD-10 codes) to Australian Emergency Departments (excluding Tasmania) at any of the following times: Fridays, 22:00 to 23:59; Saturdays, 0:00 to 3:59; 22:00 to 23:59; Sundays, 0:00 to 3:59 and 18:00 to 23:59). Rate per 100,000 population. (gender and age (<30, 30+) - Hospital admissions for alcohol use disorders: Hospital admissions with primary diagnoses of ICD-9-CM codes; 291.0-291.9, 303.0-303.9, 305.0 and ICD-10-AM codes; F10.0-F10.9. Rate per 100,000 population. (gender split) - Alcoholic liver disease deaths: Mortality rates with primary cause of alcoholic liver cirrhosis (ICD-9-CM codes: 571.0, 571.1, 571.2, 571.3 ICD-10-AM codes: K70.0, K70.1, K70.2, K70.3, K70.4 and K70.9) (gender split)
Physical inactivity	3. A 10% relative reduction in prevalence of insufficient physical activity	Prevalence of insufficiently physically active children and adolescents aged 5–17 years defined as less than 60 minutes of activity daily Prevalence of insufficiently physically active adults aged 18+ is based on a physical activity recommendation of 150 minutes from five or more sessions per week. (Updated guidelines have removed the sessions requirement and thus the baseline prevalence and WHO target will need to be updated according to estimates based on the new guidelines).
Salt/sodium intake	4. A 30% relative reduction in mean population intake of salt/sodium	Age-standardised mean population intake of sodium expressed as salt grams per day
Tobacco use	5a. A 30% relative reduction in prevalence of current tobacco use in persons aged 14+ years	**Adults**: **Age-standardised prevalence of daily smokers aged 14 years and older from National Drug Strategy Household Survey (NDSHS)** (also group 1) **Adolescents**: daily smoking prevalence (in the seven days prior to the survey) for adolescents aged 12–17 years
	5b. Reduce smoking rates of adults over 18 years with a mental illness by 30% by 2020 and 60% by 2025	The proportion of the population with mental illness who report being smokers compared with the smoking rates for the population without mental illness

Biological risk factors

Raised blood Pressure	6. A 25% relative reduction in the prevalence of raised blood pressure	• **Age-standardised average blood pressure and percent of adults aged 18 years or more with elevated blood pressure (≥ 140/90 mmHg)** (also group 1)
Diabetes and obesity	7. Reverse the rise in obesity	• **Age-standardised prevalence of normal weight, overweight and obesity class I, II,III in persons 18 years or older (also group 1)** • **Prevalence of normal weight, overweight and obesity in children and adolescents (also group 1)** • Age-standardised proportion of total energy intake from discretionary foods in persons aged 18 years or older and in children (2–17 years) • Prevalence of breastfeeding and exclusive breastfeeding
	8. Reverse the rise in new diabetes	• Age-standardised incidence and prevalence of diabetes in persons 25–65yrs • Use of HbA1c > 6.5% in addition to fasting blood glucose <7.0 mm/L or taking blood glucose lowering medications as a tool for the early diagnosis of type 2 diabetes

Additional indicators

		• Age-standardised average total cholesterol levels for adults aged 18 years or more, and percent with total cholesterol ≥ 5.0 mmol/L
Mental ill-health	9. Improve employment rates of adults over 18 with mental illness, and participation rates of young people with mental illness in education and employment, halving the employment and education gap by 2025	• Participation rates by people with mental illness of working age in employment: general population • Participation rates by young people aged 16-30 with mental illness in education and employment: general population

Note: indicators in bold were regarded as core by the mortality and morbidity working group or were nominated by multiple groups (table extracted from Targets and Indicators for Chronic Disease Prevention in Australia 2019 second edition).

Figure 1 Australian chronic disease targets for 2025

AUSTRALIAN CHRONIC DISEASE TARGETS FOR 2025[1]

25%
25% reduction in the overall mortality from cardiovascular diseases, common cancers, chronic respiratory diseases and diabetes

10% reduction in the national suicide rate

At least **20%** relative reduction in the harmful use of alcohol

10% relative reduction in prevalence of insufficient physical activity

30% relative reduction in mean population intake of salt/sodium

25% relative reduction in the prevalence of raised blood pressure

60% reduction in smoking rates of adults with a mental illness

Reduce smoking to **5%**

Halt and reverse the rise in obesity

Halt and reverse the rise in new diabetes

Improve employment rates of adults with mental illness, halving the employment and education gap

Improve participation rates of young people with mental illness in education and employment, halving the employment and education gap

ADDITIONAL RELEVANT AUSTRALIAN TARGETS INCLUDED IN REPORT CARD[2]

54% of women 50-74 years of age participate in BreastScreen Australia

56.6% participation rate for people invited to take part in the National Bowel Cancer Screening Program

1. McNamara, K, Knight, A, Livingston, M, Kypri, K, Malo, J, Roberts, L, Stanley, S, Grimes, C, Bolam, B, Gooey, M, Daube, M, O'Reilly, S, Colagiuri, S, Peeters, A, Tolhurst, P, Batterham, P, Dunbar, JA & De Courten, M (2015), Targets and indicators for chronic disease prevention in Australia, Australian Health Policy Collaboration technical paper No. 2015-08, AHPC, Melbourne.
2. Commonewalth of Australia as represented by the Department of Health Budget 2018-19 Portfolio Budget Statements https://www.health.gov.au/sites/default/files/health-portfolio-budget-statements-2019-20.pdf

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Better data for better decision

Accurate monitoring of the prevalence of chronic diseases and related risk factors requires a national commitment to regular data collection (including anthropometric, biomedical and environmental measures). The Australian Health Survey (AHS) carried out in 2011/12 provided a baseline for more comprehensive health surveillance than has previously been available nationally. Although this data has proved invaluable to governments, researchers and leading health organisations, the survey has not been repeated.

The Intergenerational Health and Mental Health Study (the Study), to be conducted in 2020 will provide current and much needed data about health needs, risk factors, and chronic diseases. The Mitchell Institute recommends that this study is conducted **every six years** in conjunction with the current and on-going National Health Survey to assess changes over time, to better focus our preventive efforts and improve capacity to assess the effects of policy changes (Calder et al. 2018). For example, the nutrition and physical activity component of the Study will not be conducted until 2023 leaving an 11-year gap between the surveys and yet diet-related diseases are profoundly shaping our health care needs. In comparison, the UK has been providing regular and critical information to inform national health policies since 1991. The Health Survey for England collects a set of core biometric data such as smoking and alcohol consumption; biomedical measures including blood pressure, height and weight and analysis of blood and saliva samples are collected from a sample size of 10,000 including 2,000 children (Productivity Commission 2017).

As recently outlined in the National Women's Health Strategy 2020–2030 and National Men's Health Strategy 2020–2030, improved data collection will also inform policy and practice to allow Australia to take a gendered approach to health. Both strategies discuss the need for high quality, routinely collected national gender disaggregated data. Without these data, health outcomes for men and women can "perpetuate the cycle of invisibility". Furthermore, recent commentary from leading health experts calls for greater gender analyses in medical research as Australia is "lagging behind other countries in instituting policies and practices of sex and gender analyses in grants and journal publications" (Swannell 2019) and "Failure to appreciate the differences between and across the sex and gender spectrum risks compromising the quality of care and increasing costs due to inappropriate allocation of resources."

Indicators

This document provides information, as ordered in the report card (left to right), relevant to the targets and indicators reported in *Australia's Gender Health Tracker*. The most recent data from the National Health Survey 2017-18 was used for this report card (Australian Bureau of Statistics 2019).

Physical inactivity

Latest population data: In 2017–18, 43.2% of Australian women did not engage in a total of 150 minutes of more of physical activity during a week compared to 45.8% of men. *Source: Australian Bureau of Statistics (2019) table 13.7 and 13.11*

Technical note: Physical activity refers to a combination of exercise only and workplace activity. Exercise consists of four domains; walking for transport, walking for fitness, sport or recreation, moderate exercise and/or vigorous exercise, which was undertaken in the last week. Workplace activity is physical activity undertaken in the workplace which consists of two domains; moderate and/or vigorous workplace activity, which was undertaken on a typical workday.

2025 target: A 10% relative reduction in prevalence of insufficient physical activity (40%).

Depression/feeling depressed

Latest population data: In 2017–18, an estimated 11.4%,of men were feeling depressed or had depression. More women (14.3%) reported feeling depressed or had depression. *Source: Australian Bureau of Statistics (2019) table 3.7 and 3.11*

2025[2] target: 10% reduction in the national suicide rate (9.8 per 100,000)

Anxiety

Latest population data: An estimated 11.3% and 18% of men and women, respectively, reported anxiety and anxiety-related conditions in 2017–18. *Source: Australian Bureau of Statistics (2019) table 3.7 and 3.11*

Technical note: Anxiety-related disorders include panic disorders/panic attacks, phobic anxiety disorders, obsessive-compulsive disorder, post-traumatic stress disorder and other anxiety-related conditions.

Circulatory system disease

Latest population data: Men and women had similar rates of reported circulatory system diseases in 2017. 20.6% and 21.9% respectively. *Source: Australian Bureau of Statistics (2019) table 3.7 and 3.11*

2025 target: 25% reduction in the overall mortality from cardiovascular diseases, common cancers, chronic respiratory diseases and diabetes.

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[2] The target for suicide is 2020, consistent with the WHO *Mental Health Action Plan 2020*

Comorbidities

Latest population data: Latest figures show that more women aged 15–44 years were living with one (women 29.2%, men 28.5%), two (women 10.4%, men 7.1%) and three (women 3.5%, men 2.2%) chronic conditions compared to men. *Source: Australian Bureau of Statistics (2019) Table 19.3*

Technical note: include arthritis; asthma; back problems; cancer; chronic obstructive pulmonary disease; diabetes mellitus; heart, stroke and vascular disease; kidney disease' mental and behavioural conditions and osteoporosis.

Fruit and vegetable consumption

Latest population data: In 2017–18, an average of 46.6% of men met the recommended daily fruit intake in comparison to women at 55.8%; and 4.1% of men met the recommended daily vegetable intake in comparison to women at 10.9%. *Source: Australian Bureau of Statistics (2019)Table 12.3*

2025 target: Halt and reverse the rise in new diabetes; halt and reverse the rise in obesity.

Sugary drinks consumption

Latest population data: Men consumed almost double (11.8%) the amount of sugar sweetened beverages compared to women (6.4%) in 2017-18. *Source: Australian Bureau of Statistics (2019) Table 12.3*

2025 target: Halt and reverse the rise in new diabetes (4.1%); halt and reverse the rise in obesity (24.6%).

Obesity

Latest population data: In 2017-18, 32.5% of men and 30.2% of women were living with obesity.

Technical note: Obesity is defined as a measured body mass index (BMI) of 30.00 or more.

2025 target: Halt and reverse the rise in obesity (24.6%).

Overweight or obesity

Latest population data: Men are approximately 1.2 times more likely to be overweight and/or obese compared to women. An estimated 74.5% of men are overweight and/or obese compared to 59.7% of women who are overweight and/or obese. *Source: Australian Bureau of Statistics (2019) Table 8.3*

Technical note: Overweight is defined as a measured body mass index (BMI) of 25-29.99. Obesity is defined as a measured BMI of 30.00 or more.

2025 target: Halt and reverse the rise in overweight or obesity (61.1%).

Alcohol

Latest population data: In 2017–18, men (15 years and older) were more likely to exceed the alcohol guidelines of 2 standard drinks per day than women; and 22.7% of men exceeded the guidelines compared to 8.4% of women. *Source: Australian Bureau of Statistics (2019)Table 10.3*

Technical note: The National Health and Medical Research Council (NHMRC) 2009 guide 1 for the consumption of alcohol recommends no more than 2 standard drinks per day. Revised guidelines are currently out for public consultation.

2025 target: At least 20% relative reduction in the harmful use of alcohol (16.1%).

Diabetes

Latest population data: In 2017-18, an estimated 7.1% of men and 5.4% of women were living with diabetes. *Source: Australian Bureau of Statistics (2019) Table 3.7 and 3.11*

Technical note: Diabetes is defined as total diabetes (Type 1 and Type 2).

2025 target: Halt and reverse the rise in new diabetes (4.1%).

Tobacco smoking

Latest population data: In the 2017-18 National Health Survey, 15.9% of men and 10.7% of women aged 15 years and over were daily smokers. *Source: Australian Bureau of Statistics (2019) Table 9.3*

Technical note: The *Australia's Health Tracker 2019* tobacco smoking measure is 'daily smokers 14 years and over' from the National Drug Strategy Household Survey.

2025 target: Reduce smoking to 5%

High blood pressure

Latest population data: The proportion of men and women with high blood pressure was estimated at 25.1% and 20.3%, respectively in 2017-18. *Source: Australian Bureau of Statistics (2019) table 14.3*

2025 target: 25% relative reduction in the prevalence of raised blood pressure (16.1%)

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