# Australia's Health Tracker by Socioeconomic Status: Technical Paper

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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.

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#### **Abbreviations**

ABS Australian Bureau of Statistics

AHS Australian Health Survey

AHPC Australian Health Policy Collaboration

AIHW Australian Institute of Health and Welfare

BMI Body Mass Index

IRSD Index of Relative Socio-Economic Disadvantage

NDSHS National Drug Strategy Household Survey/s

NHMRC National Health and Medical Research Council

NHS National Health Survey/s

NMHC National Mental Health Commission

PHIDU Public Health Information Development Unit, Torrens University Adelaide

SES Socioeconomic status
SA2 Statistical Areas Level 2

WHO World Health Organization

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## Introduction

The Mitchell Institute at Victoria University is a leading education and health policy think tank. The Institute works to improve equity of opportunity and outcomes in health and education for individuals and communities in Australia through the translation of evidence to policy and practice. The Institute has a strong focus on addressing the impacts of socioeconomic disadvantage on health and education opportunity and outcomes.

The health program at the Mitchell Institute explores health policy challenges, seeking to advance policy reform and to contribute to improved population health outcomes. The health program is focused on chronic disease prevention, which is one of the biggest challenges for Australia's health services and systems.

The Australian Health Policy Collaboration (AHPC, the Collaboration) is led by the Institute and brings together health organisations and chronic disease experts to translate rigorous research into good policy that will prevent and reduce the impact of chronic diseases on the population. The Collaboration was established in 2014 with the aim of informing and influencing health and other public policy to embed prevention into the health system and services and into other areas of public policy that directly contribute to or adversely affect good health. The work of the Collaboration since then has provided leadership and consensus based policy evidence, information and guidance to a whole of population approach in policies, funding, institutional arrangements and service models to better prevent and manage chronic diseases in Australia.

The Collaboration has established a Blueprint for Preventive Action (2014) with three strategic priorities:

- Driving healthy behaviours and healthy environments
- Creating accountability for action and monitoring progress
- Generating community support for action on prevention.

Creating accountability was identified as the first area for attention and the Collaboration worked through 2015 to establish health targets and indicators for preventable chronic diseases to influence policies, services and practice to target prevention and reduction of the health impacts of chronic conditions on the Australian population. The targets align with the World Health Organisation (WHO) Global Action Plan for the Prevention and Control of Noncommunicable diseases which aims to reduce the burden of noncommunicable diseases by 2025 through action on nine targets measured by 25 indicators of performance.

The AHPC developed and proposed for implementation in Australia a suite of targets and indicators that would cumulatively contribute to improved prevention of noncommunicable diseases throughout the population.

Building on this work, the Collaboration has contributed to the following suite of policyfocused publications to inform and influence health policies and services:

- Targets and Indicators for Chronic Disease Prevention in Australia 2015, 2019
- Australia's Health Tracker 2016, 2019
- Australia's Health Tracker by Area

- <u>Getting Australia's Health on Track: Priority policy actions for a healthier</u> <u>Australia</u> 2016, 2021
  - o Heart Health: the first step to getting Australia's health on track 2017
  - Active Travel: Pathways to a healthy future 2018
  - <u>Better Data for Better Decisions</u>: the case for an Australian Health <u>Survey 2018</u>
- Australia's Health Tracker by Socio-Economic Status 2016
- Australia's Oral Health Tracker 2018, 2020
- Australia's Mental and Physical Health Tracker 2018
- Australia's Gender Tracker 2020

Targets and Indicators for Chronic Disease Prevention in Australia, Getting Australia's Health on Track, Australia's Health Tracker and other Health Trackers, including the current Health Tracker by Socio-economic Status, are designed to be updated periodically in response to national data collections such as the Census and National Health Surveys.

Following release of *Getting Australia's Health on Track 2016*, a series of policy implementation papers including *Heart Health 2017*; *Active Travel 2018 and Better Data for Better Decisions 2018* were developed with Collaboration experts to provide detailed information on effective implementation of the policy proposals.

Over one third of the burden of chronic disease in the Australian population is preventable (1). Moreover, 38% of the burden of disease could have been prevented by reducing exposure to modifiable risk factors such as tobacco use, overweight and obesity, dietary risk, and high blood pressure (1).

Inequalities in health by socioeconomic status are widening. In Australia, premature mortality rates are up to twice as high among the most socioeconomically disadvantaged individuals and communities compared to the most advantaged population groups (2). In 2014-18, the premature mortality equity gap was more than double compared to 1987-91 (3). Over 30 years, there has been a doubling in the premature mortality of the population with the lowest SES.

The differences in health outcomes between population groups are primarily associated with higher rates of smoking, alcohol consumption, physical inactivity, and obesity among population groups in lower socioeconomic areas (2), a trend that has been identified for some time (4).

This technical paper summarises evidence of the connection between socioeconomic status and premature death and suicide and the relationship between socioeconomic status and significant risk factors for preventable chronic disease: physical inactivity; harmful alcohol consumption; smoking; high cholesterol; high blood pressure; diabetes and obesity, that have been identified by the AHPC as those requiring urgent policy attention. The importance of social and economic participation for improved health of people living with mental illness has been emphasised in AHPC reports and policy priorities and data on participation in employment by socioeconomic status in this report highlights the need for further policy attention to the impact of lower socioeconomic status.

# Scope

The Health Tracker by Socioeconomic Status 2021 report card and technical paper show the risk factors for preventable chronic disease in the adult population by the socioeconomic status (SES) of the adult population. SES is measured using quintiles of socioeconomic disadvantage, using the Australian Bureau of Statistics (ABS) Index of Relative Socio-Economic Disadvantage which is compiled from data (on education, family and housing and other characteristics of the population) collected in the Census of Population and Housing.

The relationship between SES status and health is complex. Structural (including policy and culture), individual (such as material, behavioural and psychosocial aspects) and health-system factors all contribute to health inequity (5). The diversity in health outcomes related to socioeconomic status is attributed to three interrelated categories: upstream (macro) factors; midstream (intermediate) factors and downstream (micro) factors (6). Macro factors include government policies and social determinants of health. Intermediate factors include psychosocial processes, quality of the healthcare system, and health behaviours. Micro factors refer to the function of physiological systems (endocrine and immune), socioeconomic health inequalities (mortality, morbidity, and life expectancy) and biological factors (6).

#### **Background**

This technical paper discusses the data presented in the *Health Tracker by Socioeconomic Status report card 2021*. The 2021 report card updates the 2017 *Health Tracker by Socio-Economic Status* report card.

The suite of *Australia's Health Tracker* report cards together provides a summary and overview of the progress towards prevention and reduction in chronic diseases in the Australia's population over time. Australia needs to do better in preventing chronic physical health conditions, particularly among populations groups and communities affected by disadvantage.

#### Data used for this report

#### National Health Surveys

The data presented in this report are primarily derived from National Health Surveys (NHS) collected by the ABS. The NHS are a series of Australia-wide health surveys that collect data on the health of Australians, including:

- prevalence of long-term health conditions;
- health risk factors such as tobacco use, overweight and obesity, alcohol consumption and physical activity; and
- demographic and socioeconomic characteristics.

NHS survey data from 2007-08, 2011-12, 2014-15 and 2017-18 are used in this report. In addition, the Australian Health Survey (AHS), conducted by the ABS during 2011–2013, provided a comprehensive range of anthropometric, biomedical and environmental measures

and risk factors for preventable chronic diseases in the Australian population. These data are included in this report as point in time information.

#### Mortality and suicide rates

Premature mortality by major chronic diseases and suicide data presented in this report are provided by the Public Health Information and Development Unit (PHIDU) at Torrens University. The data are based on the 2010-2014 and 2014-2018 Cause of Death Unit Record Files were supplied by the Australian Coordinating Registry and the Victorian Department of Justice, on behalf of the Registries of Births, Deaths and Marriages and the National Coronial Information System. This data includes every recorded death in the country in the time period.

#### National Drug Strategy Household Surveys

This report presents data on harmful alcohol consumption using the 2010, 2013, 2016 and 2019 National Drug Strategy Household Surveys (NDSHS) administered by the AIHW. More specifically, the measure of harmful alcohol consumption in this report is the percentage of Australians (aged 14 years and older) who engage in lifetime risky drinking, described, at the time the surveys were undertaken, as consuming more than two standard drinks per day on average (7).

#### Socioeconomic data

The 2017 edition and this 2021 *Health Tracker by Socioeconomic Status* report use the ABS definition of socioeconomic advantage and disadvantage. Socioeconomic advantage and disadvantage "can be defined as people's access to material and social resources, and their ability to participate in society" (8).

The data presented in this report uses the Index of Relative Socio-economic Disadvantage and is analysed at the Population Health Area level. The Index of Relative Socio-economic Disadvantage (IRSD) summarises information about economic and social conditions of people within a particular area. Each quintile represents, approximately, 20% of the population. IRSD quintiles are numbered one to five with the most disadvantaged quintile labelled quintile one, through to the most advantaged, labelled quintile five. This report follows the social science convention of labelling the most advantaged quintile as (quintile one) through to the most disadvantaged (quintile five). Accordingly, in this report, quintile one refers to ~20% of the population living in PHAs with the most advantage (few households with low incomes, few people with no qualification and few people in low skilled occupations). Quintile five refers to approximately 20% of people living in areas with the lowest socioeconomic characteristics (most disadvantaged). In these areas, there are many households with low income, many people with no qualifications and many people in low skilled occupations (9). This is the approach used by the Public Health Information Development Unit, the leading reporting unit for data on socioeconomic and health inequality, funded by the Australian Government Department of Health. The ordering of the quintiles is in accord with the traditional way in which they have been used in the social sciences, and in reverse of that used by economists.

Population Health Areas (PHAs) are comprised of a combination of the ABS geographical structures, Statistical Areas Level 2 (SA2), and aggregates of SA2s. SA2s were introduced as a new geographical structure by ABS in 2011, which resulted in a problem with representing small area health data. PHIDU constructed PHAs to overcome this issue (10).

#### **Burden of Disease**

Burden of disease is recognized as the best method to measure the impact of different diseases or injuries in a population. This report uses the Australian Burden of Disease Study (1).

#### **Targets for Australia**

The AHPC have agreed on a suite of health improvement targets and indicators for Australia (*Targets and Indicators for Chronic Disease Prevention in Australia*), which were developed in 2015 and updated in 2019 (11). The Collaboration uses 2025 as the target year and 2010 (where necessary 2011) as the baseline year, using the relevant data source. This is consistent with the global targets and indicators for reduction in non-communicable diseases by 2025 established by the World Health Organization (WHO) (12).

A detailed presentation and discussion of the targets and indicators is available in *Targets* and *Indicators for Chronic Disease Prevention in Australia* (11).

#### **Broader inequality in Australia**

Despite Australia's economic prosperity through recent decades, people living in the lowest socioeconomic areas continue to experience the poorest levels of health in the nation (2). The AIHW has stated that, if all Australians experienced the same disease burden as people in the most advantaged areas of Australia, the total burden of poor health on the population could be reduced by about one-fifth (13). This report highlights the pressing societal and policy challenge of the gap in lifespan between people living in Australia's most disadvantaged areas and those in the most advantaged, and the rising levels of health risks for preventable chronic disease that accrue with increased socioeconomic disadvantage.

Indigenous Australians experience both widespread socioeconomic disadvantage and health inequalities. In 2018, Indigenous Australians were significantly more likely to live in disadvantaged areas (48% lived in most disadvantaged areas) than non-Indigenous people (18%). Overall, 5.3% of Aboriginal and Torres Strait Islander people lived in relative advantage, compared with 22% of non-Indigenous people (8). Life expectancy among Indigenous Australians is estimated to be 8.6 years shorter for males and 7.8 years for females compared to the non-Indigenous population. The latest Closing the Gap report (14) states that 34% of the health gap between Indigenous and non-Indigenous Australians can be attributed to social determinants of health. Behavioural risks (tobacco use, obesity, alcohol use and diet) account for approximately 19% of the gap (15).

Mortality rates increase with level of remoteness. Remoteness is measured by the Australian Statistical Geography Standard Remoteness Structure 2016 in five categories based on relative access to services: Major cities, Inner regional, Outer regional, Remote and Very remote (16). People living in Remote and Very remote areas are more likely to die younger

compared to people living in Major cities. In 2017, the median age at death was 79 in Major cities compared to 68 in Very remote areas. Similar inequality is evident in prevalence rates of premature mortality. Females in Very remote areas are 3.3 times more likely to die before the age of 75, compared to females in Major cities where individualised care and/or treatment is more readily available. Males in Very remote areas are 2.3 times more likely to die prematurely (17).

However, the prevalence rates of chronic diseases were similar across all remoteness areas in 2017-18. Mental and behavioural conditions were most prevalent in Inner regional areas and osteoporosis, heart stroke and diabetes had similar prevalence rates in all geographical areas (17).

# Premature deaths and risk factors for preventable chronic diseases

This report considers potentially avoidable deaths before the age of 70 - premature deaths - from major chronic diseases and deaths from suicide in relation to socio economic status<sup>1</sup>. Risk factors for preventable chronic disease considered in this report comprise behavioural risk factors and biological risk factors.

The preventable deaths and risk factors are described and their contribution to the burden of disease<sup>2</sup> is discussed. The AHPC target (following the *Targets and Indicators report* (11)) for improvement in each area is discussed and the rate at which the risk factor is present in the population in each socioeconomic quintile is identified against the target.

Table 1 Preventable deaths and risk factors for preventable chronic diseases

Premature mortality
Early deaths from major chronic diseases
Suicide
Behavioural risk factors
Alcohol use
Physical inactivity
Tobacco use
Biological risk factors
Diabetes
Obesity
Raised blood pressure
High cholesterol
Mental ill-health and participation
Employment among people living with mental health conditions

<sup>&</sup>lt;sup>1</sup> Definitions of premature mortality differ. The AIHW defines premature deaths as before the age of 75.

#### **Premature mortality**

#### Early deaths from major chronic diseases

Premature mortality is described as "deaths that occur at a younger age than a selected cutoff. The age below which deaths are considered premature can vary depending on the
purpose of the analysis and the population under investigation" (18). In the AHPC's *Targets*and Indicators for Chronic Disease Prevention in Australia, premature mortality is defined as
the unconditional probability of dying between 30 and 70 years from cardiovascular diseases,
cancer, diabetes or chronic respiratory diseases (11). The five leading underlying causes of
premature mortality in Australia in 2018 were coronary heart disease, dementia (including
Alzheimer's disease) cerebrovascular disease, lung cancer, and chronic obstructive
pulmonary disease (18). AlHW reports that leading causes of deaths are the same among
men and women, apart from dementia, which is the number one cause of premature
mortality among females (18).

Early deaths from major chronic diseases rates (as well as suicide rates) are derived from the 2010-2014 and 2014-2018 Cause of Death Unit Record Files. This is an administrative data set and these results are not based on the NHS but rather on the medically assessed primary cause of death.

#### Target for Australia

The target for population health improvement agreed by the AHPC is a 25% reduction in premature mortality from 2010 to 2025. Table 2 presents the AHPC target and indicators for premature mortality.

In the baseline year of 2010, there were 221.5 deaths per 100,000; therefore the 2025 target (a 25% reduction) is 166 deaths per 100,000 population (19).

Table 2 AHPC target and indicators for premature mortality per 100,000 population (30-70 years old) caused by major chronic diseases

Risk factor	Latest Australian data	AHPC 2025 target	Indicators
Premature mortality	210 per 100,000 in 2014-2018	25% reduction in the overall mortality from cardiovascular diseases, cancer, chronic respiratory diseases and diabetes. That is 166 per 100,000.	<ul> <li>Unconditional probability of dying between ages of 30 and 70 years from cardiovascular diseases, cancer, diabetes, or chronic respiratory diseases</li> <li>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,</li> </ul>

or chronic respiratory	
diseases	

 Age-standardised rates of unplanned readmission for patients aged between 30 and 70 years admitted to hospital with an initial primary diagnosis of cardiovascular diseases, cancer, diabetes, or chronic respiratory diseases

#### **Evidence**

In 2018, there were 158,493 deaths registered in Australia, of which 26,700 were identified as potentially avoidable. Almost half (49%) of deaths for adults aged less than 75 in that year were potentially avoidable deaths (18). According to PHIDUs analysis, in 2014-18 there were People living in areas with the most socioeconomic disadvantage (quintile 5) face a higher risk of premature death than the rest of the population. In 2010-2014, there were 286.9 per 100,000 premature deaths caused by chronic diseases and 288.9 per 100,000 in 2014-18.

The population in the most advantaged group (quintile 1) is reported to have had 139.10 premature deaths per 100,000 in 2014-2018 and is the only group to have met and exceeded the AHPC target for 2025 of 166 premature deaths per 100,000 in both reporting periods.

In quintile one, there were 147.9 premature deaths per 100,000 population in 2010-14 down to 139.1 in 2014-18. In quintile five, the rate was 286.9 in 2010-14 up to 288.9 in 2014-18. The gap in premature mortality rates between the most and least advantaged groups significantly increased from 2010-14 to 2014-18, with P<0.01.

Residents of areas in the lowest socioeconomic quintile have age-standardised mortality rates nearly 50% greater than residents living in areas in the highest socioeconomic quintile (2). Socioeconomic and geographic inequalities in premature mortality are substantial and are also widening (2).

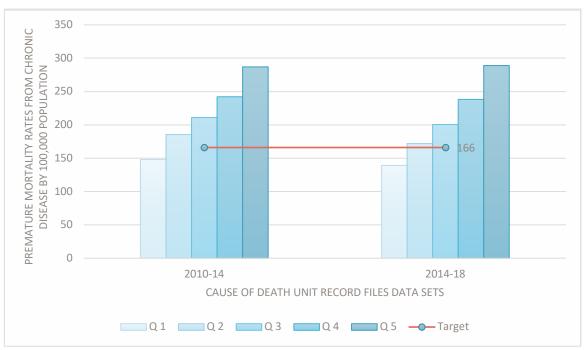


Figure 1 Premature mortality from chronic disease, per quintile per 100,000 population (30-70 years old), by socioeconomic quintile

Table 3 Premature mortality from chronic disease per 100,000 population (30-70 years old), by socioeconomic quintile

Years	Q 1 (most advantaged)	Q 2	Q 3	Q 4	Q 5 (most disadvantaged)	Target
2010-14	147.9	185.4	211	242.1	286.9	166
2014-18	139.1	171.9	200.5	238.1	288.9	166

The widening of mortality differentials in Australia is influenced by "differential risk factor exposure and health behaviours in the various socioeconomic quintile groups" (2). The risk factors for premature mortality, including tobacco use, no or low physical activity and unhealthy diet, are much more prevalent among lower socioeconomic groups (2).

#### **Suicides**

The National Mental Health Report 2013 considered that suicides are the starkest indicator of the mental health of a nation.

Suicide rates increase with increased socioeconomic disadvantage (20) and with remoteness (21). Suicide rates vary across age categories. Suicide is the leading cause of death among people aged between 15 and 44 years (or 37% of all deaths in this age group). For adults aged 45 and 65 it is the third leading cause of death (18).

#### Target for Australia

The AHPC proposed a target of a 10% reduction in suicides from 2010 to 2020. The WHO baseline year is 2012 or 2013 with 2020 as the target year. The suicide rate reported in

Australia in 2013 was 10.9 suicides per 100,000 population. From this baseline, the target for 2020 is 9.8 per 100,000, that is ≈265 fewer deaths from suicide in the population (19).

Table 4 AHPC target and indicators for suicide rates in Australians (all ages)

Risk factor	Latest Australian data	AHPC 2020 target	Indicators
Suicides	12.9 per 100,000	Reduction in the national suicide rate by 10% by 2020, that is, 9.8 per 100,000.	<ul> <li>Number of suicide deaths per year per 100,000 population.</li> <li>The suicide rate as an agestandardised rate per 100,000 population.</li> </ul>

#### **Evidence**

Suicide rates in the Australian population are rising. In the baseline year, 2013, used to establish the AHPC target for reduction in the rate of suicide, the suicide prevalence rate was 10.9 per 100,000 (22). The latest Australian data of Causes of Death in 2019 shows a prevalence rate of 12.9 per 100,000 (23). In 2019, preliminary data indicates that 3,318 deaths by suicide occurred in Australia, of which 3,299 deaths were individuals aged 15 years and over (23).

Figure 2 (and Table 5 in more detail) shows that the most disadvantaged population quintile had a reported suicide rate of 13.7 per 100,000 in 2010-2014 and 16.2 four years later. The most advantaged population quintile had a reported suicide rate of 8 in 2010-2014 and 9.1 in 2014-2018. This was the only group in 2014-2018 below (met and exceeded) the AHPC target rate.

There seems to be a widening gap in suicide rates by socioeconomic quintiles (18,21). The most disadvantaged quintile had a suicide prevalence of 16.2 per 100,000 people over four years (2014-18), compared to 9.1 per 100,000 people in the most advantaged quintile (2014-18).

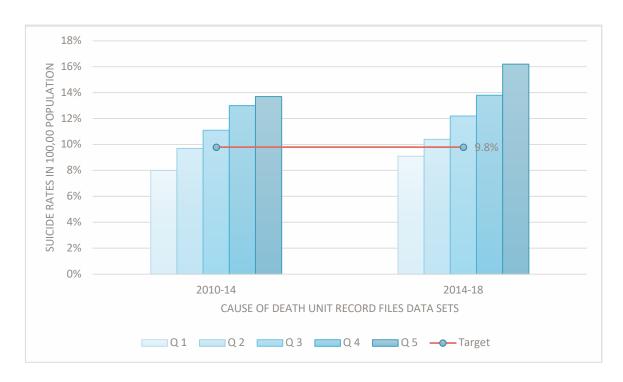


Figure 2 Suicide rates per 100,000 population (all ages), by socioeconomic quintile

Table 5 Suicide rates per 100,000 population (all ages), by socioeconomic quintile

Years	Q 1 (most advantaged)	Q 2	Q 3	Q 4	Q 5 (most disadvantaged)	Target 2020
2010-14	8	9.7	11.1	13	13.7	9.8
2014-18	9.1	10.4	12.2	13.8	16.2	9.8

An Australian study on trends in socioeconomic inequalities of suicide from 1979 to 2013 reports inequalities are widening (20)<sup>3</sup>. The study suggests the widening inequalities are "primarily associated with declines in suicide rates in high SES areas" (20, p. 969). In older men, higher relative rate of suicide is linked with low socioeconomic status (20).

One study showed that increased rates of suicide are likely to be linked to the limited number of (mental health) services in areas of lower socioeconomic status (24). Other social, economic, cultural, and physical features may negatively impact the sense of wellbeing of people living in lower SES areas (25). These may include inter-generational poverty, community norms that may foster stigma and discrimination, and built environments with poor amenities promoting social isolation (24).

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<sup>&</sup>lt;sup>3</sup> The authors use a low, medium and high SES.

#### Behavioural risk factors

#### **Physical inactivity**

Physical inactivity is a significant risk factor for the development of preventable noncommunicable diseases (26). On a global scale, it is estimated that there would be an increase in global gross domestic product of US\$6.0-\$8.6 trillion cumulatively over 2020-2050 if the world's adult population met physical activity guidelines (27).

In 2015, 2.5% of the total Australian burden of disease was attributed to physical inactivity (1).

The <u>Australian Physical Activity Guidelines</u> recommend that adults aged between 18-64 years should be active on most, if not all, days of the week for optimal health benefits (28). The recommended total amount of physical activity is between 150 to 300 minutes per week of moderate intensity physical activity or between 75 to 150 minutes per week of vigorous intensity physical activity, or an equivalent combination of both, as well as muscle strengthening activities on at least two days of each week (28). The *Australian Physical Activity Guidelines* advise to minimise sedentary behaviour or screen-based activities and break up prolonged periods of sitting.

Australia's Health Tracker 2019 (19) and this report use the benchmark of 150 minutes or more 'exercise only in the last week', which is the only comparable question over three decades of the NHS with which to measure trends over time and track Australia's progress against the 2025 target. This definition excludes some types of physical activity undertaken, and does not assess health-related walking, but is considered by the AHPC expert working group to be closest to the definition used in the 2011-12 NHS (11).

#### Target for Australia

The target agreed by the AHPC is a 10% relative reduction in physical inactivity rates for adults from 2010 to 2025. Table 6 presents the AHPC target and indicator for insufficient physical activity rates among Australian adults.

In the baseline year of 2010, the prevalence of adults (aged 18 years and over) not meeting the guidelines was 44.5%. The AHPC target rate for 2025 (a 10% reduction) is therefore 40% prevalence.

Table 6 AHPC target and indicator for physical inactivity rates among adults (18-64 years old)

Risk factor	Latest Australian data	AHPC 2025 target	Indicator
Physical inactivity	44.6%	10% reduction in 2025 from 2010, that is 40% of adults not meeting physical activity guidelines by 2025	Age-standardised prevalence of insufficiently physically active persons aged 18+ years (defined as less than 150 minutes of moderate-intensity activity per week, or equivalent).

#### **Evidence**

In the NHS 2017-18, 55.4% of adults (18-64 years old) reported being engaged in 150 minutes or more exercise in the last week (29). Less than the recommended exercise time was reported by 44.6% of adults.

As Figure 3 (and Table 7 more in detail) demonstrates, quintile one (most advantaged) met the 2025 target of 40% of adults not meeting physical activity guidelines both in 2014-15 and in 2017-18. Quintile 3 reported a physical inactivity rate of 50.2% in 2014-15 and 46.8% in 2017-18. In the most disadvantaged quintile, 58.2% reported not meeting the guidelines in 2014-15 and 58.7% in 2017-18.

As disadvantage increases, the rates of reported participation in the recommended amount of physical activity decreases.

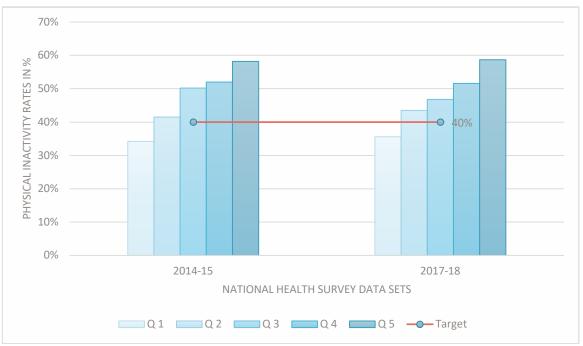


Figure 3 Percentage of adults (18-64 years old), who are physically active less than 150 minutes per week, by socioeconomic quintile

Table 7 Percentage of adults (18-64 years old) who are physically active less than 150 minutes per week, by socioeconomic quintile

	Q 1 (most				Q 5 (most	
Years	advantaged)	Q 2	Q 3	Q 4	disadvantaged)	Target
2014-15	34.2	41.5	50.2	52	58.2	40
2017-18	35.6	43.5	46.8	51.6	58.7	40

The association between high SES and higher population rates of physical activity is consistently reported (30,31). People living in areas of greater disadvantage have higher

rates of burden of disease associated with being physically inactive, at 1.7 times compared to those living in the most affluent areas (32).

The socioeconomic gradient seen in the 2020 data is a longstanding challenge. Evidence from NSW shows that between 2002 and 2012 the gap in physical activity levels between advantaged and disadvantaged groups in the population widened (33).

Studies have reported that individuals who live in lower socioeconomic areas with limited neighbourhood facilities are less likely to be sufficiently physically active (34). People are also less likely to be active when living far from sporting facilities (35), living in neighbourhoods that lack cycle paths and/or footpaths (35,36), or experiencing financial constraints (37).

#### **Alcohol use**

Alcohol consumption poses a risk to a person's health when consumed in harmful quantities. Globally, alcohol consumption is ranked as the 6<sup>th</sup> leading risk factor for death and disability (38). While alcoholic liver diseases are wholly attributable to alcohol consumption, over 200 medical conditions are causally implicated with (harmful) alcohol consumption (39). In Australia, the burden of disease attributable to alcohol in 2010 was estimated to include 5554 deaths and 157,132 hospitalisations (40). In 2015, 4.5% of the proportion of total burden of disease was attributed to alcohol use. Alcohol is recognised as a particularly high risk factor for mental illness (12%), injuries (14.1%) and gastrointestinal disease (10.5%) (1).

To reduce health risks from drinking alcohol, the National Health and Medical Research Council (NHMRC) published national Australian guidelines in 2009. These guidelines were revised and replaced in 2020. The NHMRC 2009 guidelines included Guideline 1 (lifetime risk): no more than 2 standard drinks on average for healthy men and women reduces the lifetime risk of harm from alcohol-related disease or injury.

This report presents data collected by the NDSHS.

#### Target for Australia

The AHPC target for reduction in lifetime risky drinking was developed using data from the 2010 NDSHS (41). The 2010 survey reported on the proportion of the population aged 14 years and older reporting average alcohol consumption above the 2009 NHMRC life risk measure of more than 14 standard drinks per week, or two standard drinks per day on average.

The target for reduction in risky drinking agreed by the AHPC is a 20% reduction by 2025 from the prevalence rate of 20.1% in 2010, measured in the National Drug Strategy Household Survey (41), that is, a reduction in prevalence to 16.1% by 2025 (Table 8).

Table 8 AHPC target and indicator for lifetime risky alcohol consumption (aged 15 years and over)

Risk factor	Latest Australian data	AHPC 2025 target	Indicator
Lifetime risky drinking	16.8%	20% reduction in 2025 from 2010, that is a 16.1% target rate.	Proportion of the population aged 15 years and over reporting average alcohol consumption of more than 14 standard drinks per week (or
			more than two standard drinks per day on average)

#### **Evidence**

Since 2010, the proportion of people drinking alcohol in quantities<sup>4</sup> that exceed the lifetime risk guideline has reduced from 19.5% to 16.8% in 2019<sup>5</sup> (42).

In the 2010 NDSHS, lifetime risky drinking was reported by 18.7% of the most disadvantaged socioeconomic quintile with the most advantaged quintile reporting 20.8%. Other quintiles reported lifetime risky drinking of 20.0 to 20.75% (41).

In 2013 and 2016, 18.4% and 17.6% respectively in the most advantaged quintile were reported to consume more than two standard drinks per day on average, compared to 15.9% in 2013 and 15.8 in 2016 in the most disadvantaged quintile (43,44). The second quintile (advantaged) reported 19% lifetime risky drinking in 2013 and 19.9% in 2016.

In the 2019 NDSHS, risky drinking (lifetime risk) was reported by 15.3% of the most disadvantaged quintile and by 17.4% of the most advantaged quintile, with reported rates of 18.1% of the 4th quintile (disadvantaged); 16.3% of quintile 3 and 16.8% of the 2nd quintile (advantaged) (42).

<sup>&</sup>lt;sup>4</sup> In the NDSHS, quintile one refers to people living in the most disadvantaged areas and quintile five to people living in the most advantaged areas. This report presents the NDSHS data in line with our presentation off quintiles (quintile one: most advantaged areas and quintile five: most disadvantaged areas).

<sup>&</sup>lt;sup>5</sup> In 2010, the NDSHS measured risky drinking from aged 12 years and over. From 2013, the survey reports on people 14 years and over. In 2010, in the age category 12-15 years, approximately 1% had more than two standard drinks per day on average (41).



Figure 4 Percentage of Australians (aged 14 years and over) consuming two or more alcoholic drinks per day on average, by socioeconomic quintile

Table 9 Percentage of Australians (aged 14 years and over) consuming two or more alcohol drinks per day on average, by socioeconomic quintile

	Q 1 (most				Q 5 (most	
Years	advantaged)	Q 2	Q 3	Q 4	disadvantaged)	Target
2010^	20.8	20.1	20.7	20	18.7	16.1
2013	18.4	19	19.2	18	15.9	16.1
2016	17.6	19.9	17.3	16.8	15.8	16.1
2019	17.4	16.8	16.3	18.1	15.3	16.1

<sup>&</sup>lt;sup>^</sup> aged 12 years and over

Research points towards the complex relationship between SES and alcohol consumption. While the most advantaged group consistently reports the highest rates of harmful alcohol consumption, people within the disadvantaged quintiles account for a greater portion of alcohol-attributable harm than people living in higher socioeconomic areas, despite similar or lower amounts of alcohol consumption (45). Moreover, people with low SES are two to five times more likely to die from an alcohol-attributable cause of death than people with high SES (46). This is commonly referred to as the alcohol-harm paradox.

The paradox can be explained by various factors. One explanation is that other behavioural risk factors, such as obesity and smoking, cluster in individuals with low SES. Additionally, variations in safety of drinking context, differences in access to health services, and differential drinking cultures all contribute to elevated risks related to alcohol-related harm, negatively affecting people in disadvantaged groups (47,48).

#### Tobacco use

Since the peak of cigarette smoking in Australia in 1945 when 72% of men and 26% of women were smokers, the systematic approaches taken by Australian governments to tobacco control, involving multiple policy levers and tools including regulation, taxation and pricing, advertising and educational campaigns, have resulted in substantial reductions in smoking rates (49).

Reduced smoking participation rates have contributed to declining death rates from coronary heart disease and stroke over the past three decades (49). However, previous smoking rates continue to influence health outcomes. In 2015-16, tobacco use contributed to 46 medical conditions (50) and was responsible for 9.3% of the overall burden of disease and injury (1). Tobacco smoking continues to be one of Australia's main causes of preventable death, chronic disease and healthcare costs (13).

#### Target for Australia

The AHPC target for the national average tobacco smoking rate is 5% or less daily smoking prevalence among people aged 18 years and over by 2025 (Table 10).

Table 10 AHPC target and indicator for daily tobacco smoking in adults (aged 18 years and over)

Risk factor	Latest Australian data	AHPC 2025 target	Indicator
Daily	13.8%	5% tobacco use prevalence	Age standardised prevalence of
tobacco		rate	tobacco use among people
smoking			aged 18 years and over

#### **Evidence**

Tobacco use has consistently declined over the past five decades with non-smoking now normalised for much of the Australian population (51). However, people living in the lowest socioeconomic areas continue to have much higher tobacco use rates compared to the rest of the population, at up to 2.8 times<sup>6</sup> more than people living in the most advantaged areas (52,53).

The Australian average daily smoking rate is currently 13.8% (29). However, daily smoking rates, and thus the burden of disease, vary considerably across Australia's socioeconomic quintiles.

<sup>&</sup>lt;sup>6</sup> Data provided by (42) shows a similar trend, but presents lower age-standardised daily smoking rates: people living in low SES (19%) areas are 3.7 times more likely to smoke on a daily basis compared to high SES areas (5.1%).

Figure 5 (and Table 11 in more detail) below shows the trends in tobacco use across the five socioeconomic quintiles from 2007 to 2018<sup>7</sup>. The daily tobacco use rate in the most advantaged population quintile was 12.2% in 2007-08 and 8.5% in 2017-18. In the most disadvantaged population quintile, the smoking rate was 29.5% in 2007-08 and 24.3% in 2017-18. Quintile 3 reported 21.4% in 2007-8 and 15.3% ten years later.

In summary, more advantaged populations continue to smoke less than more disadvantaged populations. This translates to a substantial gap in daily tobacco user rates between the least and most disadvantaged Australians. In 2017-18, as shown in Figure 5 and Table 11, people in the most disadvantaged LGAs were 2.8 times more likely to consume tobacco on a daily basis than those in more affluent communities and were 2.4 times more likely to do so in 2007-8.

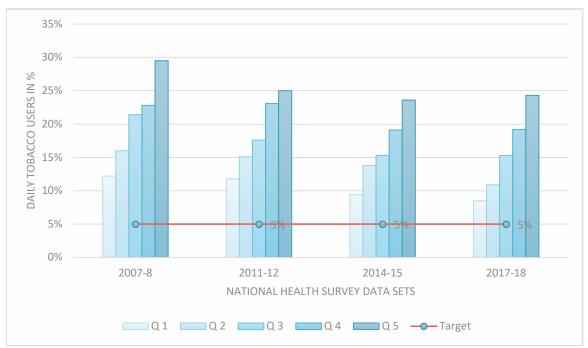


Figure 5 Percentage of adults (aged 18 years and over) smoking tobacco daily, by socioeconomic quintile

Table 11 Percentage of adults (aged 18 years and over) smoking tobacco daily, by socioeconomic quintile

Years	Q 1 (most	Q 2	Q 3	Q 4	Q 5 (most	Target
	advantaged)				disadvantaged)	
2007-8	12.2	16	21.4	22.8	29.5	5
2011-12	11.8	15.1	17.6	23.1	25	5
2014-15	9.4	13.8	15.3	19.1	23.6	5

<sup>&</sup>lt;sup>7</sup> Note: There are some wide ranges in prevalence rates above. Government reporting from general population health surveys is based on a sample of the population, rather than the entire population. Estimates provided by focused organisations such as QUIT, SANE report higher smoking prevalence rates for some groups.

		2017-18	8.5	10.9	15.3	19.2	24.3	5
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The continuing lag in reductions in smoking rates in disadvantaged population groups is attributable to a lower rate of success in attempts to stop smoking. While the most disadvantaged tobacco users are equally likely to attempt to quit, their success rates are significantly lower than among more advantaged groups (52). Moreover, it takes disadvantaged smokers significantly longer to quit, putting them at increased risk of smoking-related diseases (52).

A few Australian studies have reported on the association between tobacco outlet density and area SES (54,55). A study in Western Australia showed that suburbs and towns with lower SES had more than four times the number of tobacco outlets compared to very advantaged areas (54). A Tasmanian study found that suburbs and towns with the greatest socioeconomic disadvantage had more than twice the number of tobacco outlets per 1000 people compared to more affluent areas (55).

#### **Biological risk factors**

#### **High cholesterol**

Cholesterol is a fat-like substance found in the blood stream as well as in bodily organs and nerve fibres. Cholesterol is commonly defined as total serum cholesterol (including high- and low-density lipoprotein) and is expressed in millimoles per litre of blood (mmol/l) (56).

High cholesterol occurs when too much low-density lipoprotein is found in the blood stream. There are often no symptoms of high cholesterol however, when left untreated, this can lead to serious health problems including heart attack or stroke (1). High cholesterol is defined as total cholesterol equal to or greater than 5.5 mmol/L (11).

Atherosclerosis, the build-up of cholesterol in arteries, begins in childhood. Children as young as two have been diagnosed with fatty streaks in coronary arteries - the earliest precursor of atherosclerotic lesions (57). Given the risks of cardiovascular diseases, it is vital to control the risks from an early age.

In Australia, three percent of the total burden of disease in 2015 was attributed to high cholesterol, contributing to coronary heart disease and stroke burden (1).

#### Target for Australia

The target agreed on by the AHPC is a 25% reduction in high cholesterol from 2011 to 2025. In the baseline year of 2011-12 (AHS 2011-13), there was a prevalence rate of 32.8% high cholesterol in the Australian population. The AHPC 2025 target (a 25% reduction) is 24.6% (19). Table 12 presents the AHPC target and indicator for high cholesterol prevalence.

Table 12 AHPC target and indicator for high cholesterol prevalence in adults (aged 18 years and over)

Risk factor	Latest Australian data	AHPC 2025 target	Indicator
High cholesterol	32.8%	25% reduction 2025 from 2011; that is a prevalence rate of 24.6% by 2025.	High cholesterol = total cholesterol greater than or equal to 5.5 mmol/L for adult aged 18 years and over.

#### **Evidence**

The currently available nationwide data on high cholesterol using biomedical data comes from the National Health Measures Survey conducted as a component of the 2011-13

Australian Health Survey (AHS) and is now ten years old<sup>8</sup>. Later reporting on high cholesterol uses self-reported data and thus is not comparable to the earlier data (29,58).

As illustrated in Figure 6 (and in Table 13 in more detail), high cholesterol prevalence in 2011-12 was relatively similar across population quintiles with the highest rate in the most advantaged areas (35.2%) and the lowest rate in the lowest socioeconomic areas (29.7%).

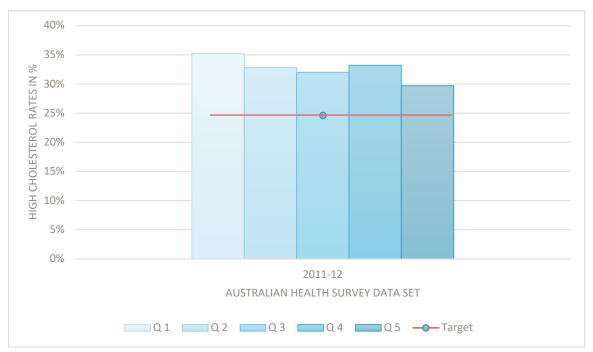


Figure 6 Percentage of adults (aged 18 years and over) with high cholesterol, by socioeconomic quintile

Table 13 Percentage of adults (aged 18 years and over) with high cholesterol, by socioeconomic quintile

Years	Q 1 (most advantaged)	Q 2	Q 3		Q 5 (most disadvantaged)	Target
2011-12	35.2	32.8	32	33.2	29.7	24.6

#### **High blood pressure**

High blood pressure, or hypertension, occurs when blood flows through the arteries at a higher-than-normal pressure. Blood pressure is measured by both systolic pressure (pressure when the ventricles pump blood out of the heart); and diastolic pressure (pressure between heartbeats). In adults an optimal blood pressure is 120/80 mmHg. The AHPC uses

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<sup>&</sup>lt;sup>8</sup> The 2017-18 NHS reports on high cholesterol. However, 2011-12 data (32.8%) has been maintained for this second edition. The results reported in the 2017-18 survey are self-reported data compared to biomedical data from the 2011-12 AHS and are therefore not comparable.

the definition of high blood pressure as elevated blood pressure equal to or above 140/90 mmHg in adults aged 18 years or more (11).

In Australia, 5.5% of the total burden of disease in 2015 was attributed to high blood pressure, making it the fourth leading risk factor contributing to disease burden (1).

#### Target for Australia

The AHPC target for the national average rate of elevated blood pressure in adults 18 years old or more is a 25% reduction by 2025 (Table 14).

In the baseline year of 2011-12, 21.5% of adults reported elevated blood pressure; therefore the 2025 target (a 25% reduction) is a 16.1% prevalence rate of elevated blood pressure among adults aged 18 year and over (19).

Table 14 AHPC target and indicator for high blood pressure in adults (aged 18 years and over)

Risk factor	Latest Australian data	AHPC 2025 target	Indicator
High blood	22.8%	25% reduction by 2025; that	Percent of adults aged 18 years
pressure		is a prevalence rate of	or more with elevated blood
		16.1% by 2025.	pressure (≥ 140/90 mmHg)

#### **Evidence**

According to the NHS 2017-18, just over one in five Australians (22.8%; 4.3 million) aged 18 years and over reported a high blood pressure reading (ABS, 2018a). This has remained relatively unchanged since the 2014-15 reporting period (23%) (29).

As illustrated in Figure 7, currently all socioeconomic groups are above the 2025 target of 16.1%. Table 15 shows that all quintiles showed little change in the proportions of adults reporting elevated blood pressure over the reporting period.

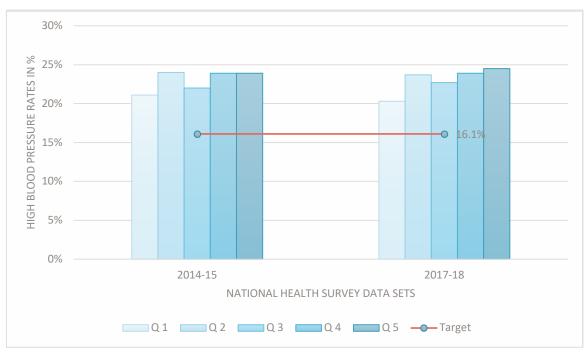


Figure 7 Percentage adults (aged 18 years and over) with high blood pressure, by socioeconomic quintile

Table 15 Percentage adults (aged 18 years and over) with high blood pressure, by socioeconomic quintile

	Q 1 (most advantaged)	Q 2	Q 3		Q 5 (most disadvantaged)	Target
2014-15	21.1	24	22	23.9	23.9	16.1
2017-18	20.3	23.7	22.7	23.9	24.5	16.1

High blood pressure is well above the target in all socioeconomic groups.

#### **Diabetes**

Diabetes, or raised glucose levels, contributes to premature mortality and a range of complications (59). Diabetes is a major cause of kidney failure, heart attacks, blindness and strokes (60). The three most common types of diabetes are type 2, type 1 and gestational diabetes (diabetes developed during pregnancy) (60). In 2017-18, 144,800 people (0.6% of the Australian population) had type 1 diabetes and 998,100 people reported type 2 diabetes (or 4.1%) (29). The risk for type 2 diabetes increases with increasing weight (61).

In Australia, 2.2% percent of the total burden of disease in 2015 was attributed to type 2 diabetes (1).

#### Target for Australia

The AHPC target for 2025 is to halt the rise in the age-standardised incidence and prevalence of diabetes in people aged 25-64 years. In the baseline year of 2007-08, the prevalence of diabetes among adults aged 25-64 years was 4.1% (19). The AHPC target is focused on reducing prevalence throughout the lifecycle and particularly the age range 25-64

in which the onset for diabetes should be prevented. Table 16 shows the AHPC target of 4.1% for 2025 and relevant indicators.

Table 16 AHPC target and indicators for diabetes in adults (aged 25-64 years)

Risk factor	Latest Australian data	AHPC 2025 target	Indicators
Diabetes	4.2% in adults 25-64 years	Halt in new diabetes (type 1, type 2 and type unknown), that is diabetes prevalence of 4.1% by 2025.	<ul> <li>Age-standardised incidence and prevalence of diabetes in persons 25-64 years.</li> <li>Use of HbA1c≥6.5% to the current criteria of fasting glucose and taking blood glucose lowering medications as a tool for the early diagnosis of type 2 diabetes.</li> </ul>

#### **Evidence**

In the 2017-18 NHS report, almost one in twenty Australians of all ages (4.9%), were estimated to have diabetes mellitus. This includes diabetes type 1, type 2 and type unknown. The estimates also include persons who reported they had diabetes, but not currently at the point of data collection.

Socioeconomic status data for the prevalence of diabetes is based on adults 18 years and over. This data shows, as illustrated in Figure 8 and in Table 17 that, in 2017-18, only the most advantaged areas show a prevalence rate below the 2025 target of 4.1%. Table 17 shows that this quintile and the next most advantaged quintile have remained relatively stable between 2014-15 and 2017-2018 with rates of 3.5% and 4.5%. The most disadvantaged quintile had the highest prevalence rate at 7.2% in 2017-18 having previously reported 5.6% in the 2011-12.

This socioeconomic data includes younger adults 18-24 years and older aged adults 65+, with the latter group having the highest prevalence of diabetes in the population. In 2017-18, the diabetes prevalence rates for adults aged 65-74 was 15.8% and for adults aged 75 and over 18.7% (29).

Notably, biomedical data collected in the National Health Measures Survey component of the 2011-13 AHS showed higher rates of diabetes in four out of five quintiles compared to the 2011-12 NHS. The overall prevalence rates identified by the AHS was 5.1% in comparison with 4.1% by the NHS. Furthermore, the 5.1% was comprised of 4.2% with known diabetes and 0.9% with diabetes newly diagnosed by the blood test results. This suggests that there was approximately one newly diagnosed case of diabetes for every four diagnosed cases. A further 3.1% of Australian adults were identified by their test results to be at high risk of diabetes.

As Table 17 shows, the results from the NHS and the AHS show that self-reported identification of diabetes was consistently below the prevalence indicated by blood test results, with the gap between the two rising with increasing socioeconomic disadvantage.

This suggests that the prevalence rate of diabetes as measured through the self-reported NHS is potentially underreported and particularly for the most disadvantaged quintile. A biometric measures survey is to be conducted in 2021-23 as part of the Intergenerational Physical and Mental Health Survey currently being undertaken by the ABS. Data from this survey will be able to indicate the extent to which underdiagnosed diabetes may be a significant health issue.

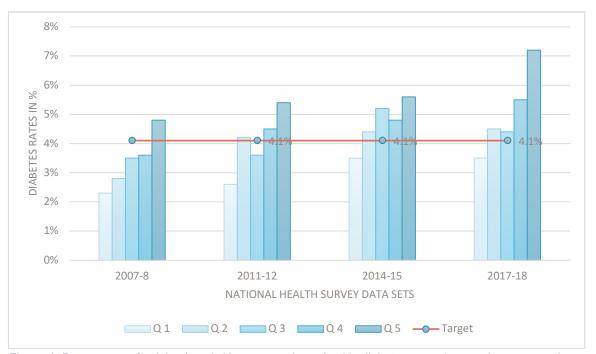


Figure 8 Percentage of adults (aged 18 years and over) with diabetes type 1, type 2 or type unknown, by socioeconomic quintile

Table 17 Percentage of adults (aged 18 years and over) with diabetes type 1, type 2 or type unknown, by socioeconomic quintile

Years	Q 1 (most advantaged)	Q 2	Q 3	Q 4	Q 5 (most disadvantaged)	Target
2007-8	2.3	2.8	3.5	3.6	4.8	4.1
2011-12 NHS	2.6	4.2	3.6	4.5	5.4	4.1
2011-13 AHS	3.1	4.1	5.1	6.4	8.9	4.1
2014-15	3.5	4.4	5.2	4.8	5.6	4.1
2017-18	3.5	4.5	4.4	5.5	7.2	4.1

The most disadvantaged quintiles consistently have been identified with the highest rates of diabetes. As previously discussed, rates of risk factors for diabetes such as smoking and physical inactivity are higher for people living in socioeconomic disadvantaged areas.

People living in the lowest socioeconomic areas had the largest increases in potentially preventable hospitalisation rates for diabetes complications between 2012-13 and 2017-18, for both type 1 (18% increase) and type 2 diabetes (27% increase) (13).

Overall, people living in the lowest socioeconomic areas are 1.8 times more likely to be hospitalised for diabetes and twice as likely to die from diabetes when compared to those living in the highest socioeconomic areas (62).

#### **Obesity**

Obesity is a risk factor for developing long-term health conditions such as cardiovascular disease, high blood pressure and type 2 diabetes, asthma, back pain and some cancers (63). Body Mass Index (BMI) is the recognised standard for classifying obesity in adult populations and is calculated by dividing a person's weight in kilograms by the square measure of their height in metres (63). Obesity is classified as a BMI greater than or equal to 30; a BMI greater than 35 is classified as severely obese (63).

In Australia, 8.4% percent of the total burden of disease in 2015 was attributed to overweight and obesity, making it the second leading risk factor contributing to disease burden (1).

#### Target for Australia

The AHPC target for the national average rate of obesity in adults 18+ is to halt the rise in obesity. In the baseline year of 2007-08, the rate of obesity among adults was 24.6%; therefore the 2025 target ('halt the rise') is 24.6% (19).

Table 18 AHPC target and indicators for obesity in adults (aged 18 years and over)

Risk factor	Latest Australian data	AHPC 2025 target	Indicators
Obesity	31.3%	Halt the rise in obesity, that is 24.6%.	<ul> <li>Age-standardised prevalence of normal weight, overweight and obesity class I, II, III in persons 18 years or older.</li> </ul>

#### **Evidence**

According to the 2017-18 NHS, 67% of Australian adults aged 18 years and over were overweight or obese and 31.3% were obese (29).

As illustrated in Figure 9 and Table 19, currently only the most advantaged population areas sit below the 2025 target of 24.6%. The continuing rise in the prevalence of obesity in the population is evident in all socioeconomic quintiles between 2014-15 and 2017-18.

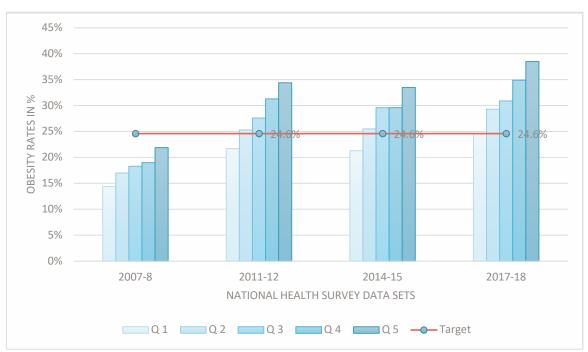


Figure 9 Percentage of adults (aged 18 years and over) with obesity, by socioeconomic quintile

Table 19 Percentage of adults (aged 18 years and over) with obesity, by socioeconomic quintile

Years	Q 1 (most	Q 2	Q 3	Q 4	Q 5 (most	Target
	advantaged)				disadvantaged	l)
2007-08	14.4	17.0	18.3	19.0	21.9	24.6
2011-12	21.7	25.3	27.6	31.3	34.4	24.6
2014-15	21.3	25.5	29.6	29.6	33.5	24.6
2017-18	24.6	29.3	30.9	34.9	38.5	24.6

The most disadvantaged quintile has consistently reported the highest rates of obesity. National data indicate that obesity is more prevalent amongst those at highest risk of food insecurity. This can be explained by energy density (MJ/kg) and energy costs (\$/MJ) being inversely linked; therefore food insecure or low-income consumers are more likely to select less expensive but more energy dense foods (64). This is consistent with a UK study which explored the extent to which food expenditure mediates socioeconomic inequalities in healthiness of household food choices (65). The results of this study indicated that lower food expenditure is likely to be a key contributor to less-healthy food choices among socioeconomically disadvantaged groups (65).

Place also plays a role in dietary choices and physical activity opportunities. For example, findings from a Victorian statewide study identified greater locational access to fast food restaurants in more socioeconomically disadvantaged areas (66). Similarly, in an evaluation of Australia's most populous cities, results indicated less green space availability in more disadvantaged areas (67).

#### Mental ill-health and participation

#### **Employment among people living with mental health conditions**

Almost half of all Australians (aged 16-85 years) experience mental ill-health at some point in their life and it is estimated that one in five Australians have experienced a common mental health disorder in the previous twelve months (68). The three most common mental disorders in the 16-85 years age group are anxiety (afflicting 14.4% of the population), affective disorders (such as depression, afflicting 6.2% of the population), and substance use disorders (e.g., alcohol dependence, afflicting 5.1% of 16-85 years old) (69).

#### Targets for Australia

The AHPC has identified two targets for improvement and economic social participation in relation to mental health improvement: improvement of employment/education rates in young people living with mental illness and improvement of employment rates in adults living with mental illness. Data reported on employment rates is provided through the NHS and is the focus of this report.

The AHPC target for 2025 is to halve the participation gap in employment of people of working age (16-64) living with long-term mental and behavioural problems when compared with the general population. The 2011-12 NHS identified that 60.6% of people aged 16-64 years who reported that they had current and long-term mental and behavioural problems were employed, compared to 79.1% of the general population. Halving the gap by 2025 is a target of 70.5% rate of participation in employment (19).

Table 20 AHPC target and indicator for mental vocational engagement in adults (aged 16-64 years) with long-term mental and behavioural conditions

Risk factor	Latest Australian data	AHPC 2025 target	Indicator	
Unemployment	63.8%	Halve the	<ul> <li>Participation rates by people with</li> </ul>	
rates in people		participation gap,	mental illness of working age (aged	
with mental		which is an	16-64 years) in employment.	
and		unemployment		
behavioural		rate of 70.5% by		
conditions		2025.		

#### **Evidence**

The prevalence of poor mental health is increasing in Australia. In 2017-18 one in five in the population were found to have a mental or behavioural condition, indicating an increase of 17.5% when compared to 2014-15 data (29). The highest rates of mental health conditions are reported in the lowest socioeconomic quintiles of disadvantage (29).

Socioeconomic status data for employment of people living with an identified mental health or behavioural condition is based on adults 18 years and over. Figure 10 and Table 21 present NHS data from 2014-15 and 2017-18 on adults (18-64 years old) and their engagement in employment.

In 2014-15, 76.3% of people in quintile 1 (most advantaged) with mental or behavioral conditions reported they were working, compared to 45.1% in quintile 5 (most disadvantaged). Four years later (2017-18), 75% of people in quintile 1, living with mental and behavioral conditions quintile, were engaged in paid employment, compared to only 45% of people in quintile 5.

Less than half of the people living with mental illness in most disadvantaged areas (quintile 5) are employed, whereas, in the most advantaged areas (quintiles 1 and 2), rates of participation in employment by people living with a mental or behavioral condition are above the AHPC target and have been over the two reporting periods.

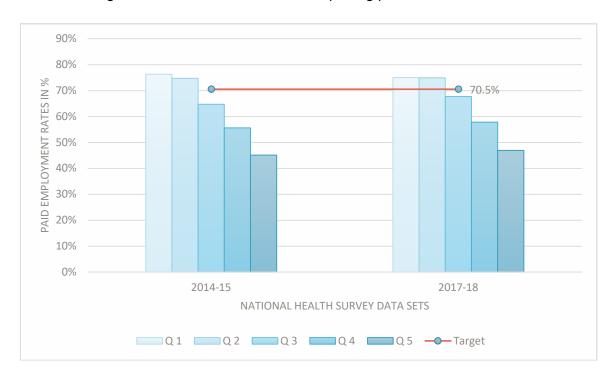


Figure 10 Percentage of adults (aged 18-64 years) with long term mental and behavioural conditions currently engaged in employment, by socioeconomic quintile

Table 21 Percentage of adults (aged 18-64 years) with long term mental and behavioural conditions currently engaged in employment, by socioeconomic quintile

	Q 1 (most advantaged)	Q 2	Q 3		Q 5 (most disadvantaged)	Target
2014-15	76.3	74.7	64.7	55.6	45.1	70.5
2017-18	75	74.9	67.7	57.8	46.8	70.5

Social, environmental policies, political and economical conditions shape the conditions in which people are born, work, and also shape the health care that people can access and the conditions under which people live (70). Studies confirm the data presented above that people living in more disadvantaged areas are disproportionately affected by mental health conditions (70). In high-income countries, income inequality is associated with increased prevalence of mental disorder and low socioeconomic status is associated with a higher risk of developing a mental disorder (71). Financial distress can add to mental health conditions and anxiety (70,72). Unemployment can exacerbate economic and social isolation often experienced by people living with mental conditions (73).

The positive impact, in turn, of employment participation (as well as financial security (71)) on mental health is well established. Engagement in employment has the potential to provide people with meaningful everyday activities (73). Both young people and adults with mental illness report a desire to gain and sustain work or education (74,75).

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