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ABBREVIATIONS

ABS	Australian Bureau of Statistics
AFL	Australian Football League
AIHW	Australian Institute of Health and Welfare
ALLS	Adult Literacy and Life Skills Survey
ANCNPAS	Australian National Children's Nutrition and Physical Activity Survey
ASHR	Australian Study of Health and Relationships
BEACH	Bettering the Evaluation and Care of Health
BMI	Body Mass Index
DALY	Disability Adjusted Life Year
DoHA	Department of Health and Ageing
DRE	Digital Rectal Examination
DVD	Digital Versatile Disc/Digital Video Disk
FOBT	Faecal Occult Blood Test
GP	General Practitioner
HALE	Health Adjusted Life Expectancy
HIV	Human Immunodeficiency Virus
MBS	Medicare Benefits Scheme
NBCSP	National Bowel Cancer Screening Program
NDSHS	National Drug Strategy Household Survey
NHMRC	National Health and Medical Research Council
NHS	National Health Survey
OECD	Organisation for Economic Co-operation and Development
PSA	Prostate Specific Antigen
PSS	Personal Safety Survey
SDAC	Survey of Disability and Carers
SES	Socio-Economic Status
SMHWB	Survey of Mental Health and Wellbeing
STI	Sexually Transmissible Infection
SWA NOSI	Safe Work Australia National Online Statistics Interactive
WHO	World Health Organization

SUMMARY

There is increasing awareness that males and females have distinct health needs and concerns related to their biology and roles in society. This is illustrated by different rates of injury, illness and mortality; different attitudes towards health and risks; and the way each group uses, or does not use, health services. In this context, in May 2010 the Australian Government launched the National Male Health Policy, which provides a framework for improving the health of Australia's males (DoHA 2010a). This report is the first in a series funded under the Policy.

Drawing on a range of data sources, this report presents a snapshot of the health and wellbeing of Australia's males. It is not intended to be exhaustive, but to provide a summary for policymakers, researchers and others interested in male health issues, and set the scene for future reporting and research.

Australia's males at a glance

In June 2010, there were 11.1 million males living in Australia—just under half of the total population (ABS 2010a). The median age was 36 years; 20% of males were aged under 15 years and 12% were aged 65 years and over. The male population is continuing to age, associated with increasing life expectancy.

Some males make healthy lifestyle choices and have positive health outcomes...

- around two-thirds of males participate in sport or physical activity (2009–10)
- nearly 40% of males discuss healthy lifestyle issues with a health professional (2007–08)
- 20% of males rate their health as excellent (2007–08)
- survival rates for prostate and testicular cancer have improved overall (1998–2004).

But many males are still at risk of poor health...

- 5% of adult males consume sufficient fruit and vegetables (2007–08)
- around two-thirds of adult males (18 years and over) and one-quarter of boys (5–17 years) are overweight or obese (2007–08)
- half of all males report being a victim of violence at least once in their lifetime (2005).

And many males are already experiencing poor health...

- 4% of males rate their health as poor (2007–08)
- nearly half have ever had a mental health condition (2007), nearly one-quarter have a disability (2009) and nearly one-third have a chronic health condition (2007–08).

With under-use of some health services...and over-representation in others

- males make up a smaller proportion of GP encounters (2009–10), hospitalisations (2008–09) and some mental health services (2008–09) compared with females
- males make up a greater proportion of emergency department presentations (2008–09) and some other mental health services (2007–08) compared with females
- 16% of males do not use any Medicare services in a year (2008–09).



1 INTRODUCTION

Background

There is increasing awareness that males and females have distinct health needs and concerns related to their gender and biological sex. This is illustrated by different rates of injury, illness and mortality; different attitudes towards health and other risks; and the way each group uses, or does not use, health services. In many (but not all) areas of health, Australia's males have poorer outcomes than their female counterparts.

The health of Australia's males has received greater attention in recent years. A number of organisations (such as Andrology Australia, Box 4.2) and events (such as 'Movember', Box 4.1) focus on the promotion of male health and provide information on key health concerns. In May 2010, the Australian Government launched Australia's first National Male Health Policy to further improve the health of males in Australia (DoHA 2010a) (Box 1.1).

This policy, and the attention given to male health in recent years, sets the scene for this report which is the first in a series on male health in Australia.

This first report brings together a wide range of data sources to provide a health snapshot of Australia's males as a distinct population group. As male health data are often spread across condition- or life course-based publications, this report is a useful summary for policymakers, researchers and others interested in male health issues. To support this broad brush picture, future reports in this series will examine how health status varies among sub-populations of males and across the life course.

Box 1.1: Australia's first National Male Health Policy

In May 2010, the Australian Government launched Australia's first National Male Health Policy, *National male health policy: building on the strengths of Australian males* (DoHA 2010a). The policy provides a framework for improving the health of males and achieving equal health outcomes for population groups of males with the poorest levels of health. It encourages governments, health organisations, communities and individuals to work together to take action on multiple fronts.

Following public consultation, six priority areas for action were developed:

- Priority area 1: optimal health outcomes for males
- Priority area 2: health equity between population groups of males
- Priority area 3: improved health for males at different life stages
- Priority area 4: a focus on preventive health for males
- Priority area 5: building a strong evidence base on male health
- Priority area 6: improved access to health care for males.

In order to build the evidence base on male health (priority area 5), the Australian Government will fund a series of statistical bulletins and a National Longitudinal Study on Male Health. This work will inform professionals, policy makers and consumers about key issues in this emerging field.

Why focus on male health?

Males are one of the largest population groups of interest to health researchers in Australia. In June 2010, there were 11.1 million males living in Australia—49.8% of the total population (ABS 2010a). Males make a substantial contribution in cultural, economic and political spheres, as well as in the family and community. Males can be fathers, partners, carers, sons, grandfathers, friends and role models. Having a healthy male population is important for the individuals concerned, their family and friends, and Australian society more broadly.

Research has consistently shown a sex differential in illness and mortality. Males have a shorter life expectancy, higher mortality from most causes of death (particularly injuries and intentional self-harm) and a higher lifetime risk of many cancers and chronic conditions (AIHW 2010a). Overall, males are more likely than females to engage in risky lifestyle behaviours such as smoking and illicit drug use, and are more likely to be overweight and obese. Health service use is also generally lower among males, particularly services associated with preventive health, such as lifestyle modification or cancer screening. Lifestyle, health status and health service use among males is explored in detail within this report.

While sex-specific biological factors may explain some of this difference, broader consideration should also be given to gender and the roles, behaviours and attributes considered to be masculine and feminine (RACGP 2006).

Sex-specific factors include health conditions that only males will experience, such as prostate and testicular cancer, male pattern baldness and genetic conditions associated with a Y chromosome. Gender-related factors that affect health status include traditional stereotypes and expectations around appropriate male behaviour in relation to risk, the experience of health and ill health, and engagement with preventive and curative health services. As an example, young males are more likely than young females to take risks in areas such as conflict or violence, sexual behaviour, drinking, gambling and accident prevention (Thom 2003; Pawlowski & Atwalk 2008).

By understanding the influence of gender on male health status, programs, campaigns and interventions can be developed to help break down gender-based barriers to good health among Australian males.

The focus on males in this report is not to imply that female health is not of concern or importance. Females also engage in risky lifestyle behaviours, are at risk of a wide range of chronic and acute conditions and may not feel comfortable or be able to seek help from health services. The second National Women's Health Policy was released in December 2010 with a similar focus on gender-specific priority areas and funding for targeted programs and/or studies on women's health in Australia (DoHA 2010b).

A conceptual framework for male health

This report takes a holistic view of health as a state of complete physical, mental and social wellbeing. As such, the scope of male health is very broad and made even more so by the fact it encompasses males of all ages, not just adult men (Box 1.2).

Box 1.2: Male health or men's health?

The term 'male health' has been used throughout this report in preference to 'men's health'—the term used in previous publications such as the 2010 AIHW report *A snapshot of men's health in regional and remote Australia* (AIHW 2010b). 'Male health' has been used to recognise that males of all ages experience the health conditions and risk factors discussed in this report. Furthermore, the age when a boy is considered an adult (man) depends upon cultural norms around gender, roles and ageing. The data sources used in this report may also identify male adulthood as commencing at different ages.

A conceptual framework for male health (as shown in Figure 1.1) can help define the 'universe' of male health.

The determinants of male health and wellbeing presented in the framework are complex and varied. They include broad features of society (such as the media and levels of social cohesion), the built and natural environment, socioeconomic characteristics (such as education, occupation and income), health knowledge and behaviours (such as dietary behaviour and sexual practices) and biomedical measures (such as body weight and blood pressure). These determinants interact with a person's individual physical and psychological make-up (including their age, gender and genetics) and a range of health policies and interventions.

Over time, these factors will determine the health and wellbeing of individuals and population groups, which in turn can also feed back into policies and interventions. The 'universe' as presented in this figure is not exhaustive: it is intended to provide an indication of broadly grouped key concepts in male health and selected examples of these concepts.

The framework is a snapshot of the interactions that occur throughout the life-course and across the many roles that males occupy. Health and lifestyle may be affected (positively or negatively) by transitions between roles—for example, moving from adolescence to adulthood, starting a family or retiring. These transitions and interactions are more complex than can easily be represented by the linear relationships in the framework.

The framework and this report

This report draws on aspects of the conceptual framework, shown in Figure 1.1, to present a broad overview of the health and wellbeing of Australia's males, including:

- lifestyle factors that contribute to good health or poor health
- health conditions, disability and death
- services that promote or restore good health and prevent or ameliorate poor health.

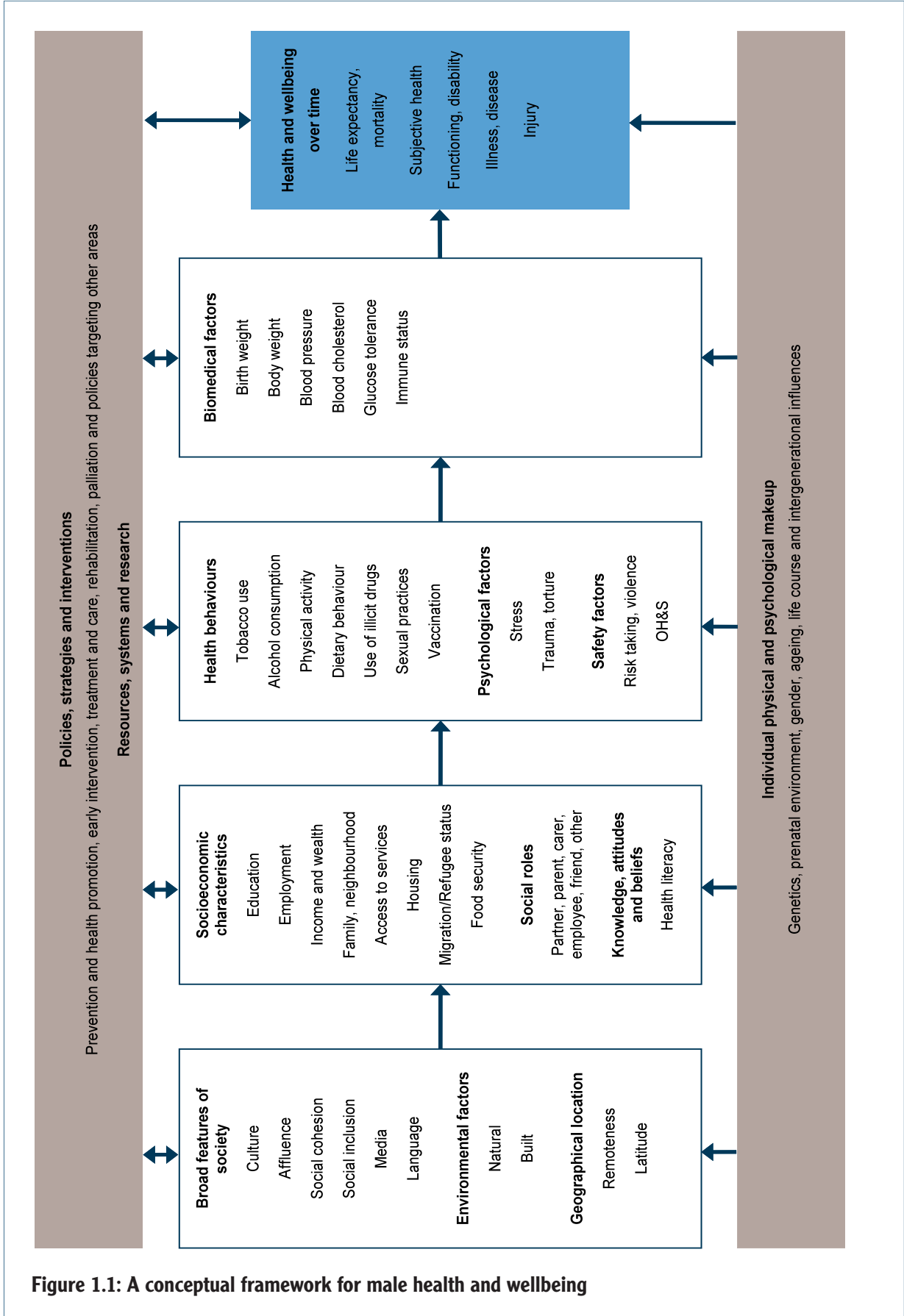


Figure 1.1: A conceptual framework for male health and wellbeing

What is included

The report presents information on male health using a broad sample of data sources that cover much of the male health 'universe' as defined by the conceptual framework. The areas of the framework that are addressed to some degree in this report (with chapter reference) are below:

- policies, strategies and interventions—introduction, chapter 5 and text boxes throughout
- socioeconomic characteristics—chapter 2
- social roles—chapter 2
- knowledge, attitudes and beliefs—chapter 3
- health behaviours—chapter 3
- safety factors—chapter 3, chapter 4
- biomedical factors—chapter 3
- health and wellbeing over time—chapter 4.

What is not included

Not every aspect of male health could be covered in this report. In some instances, data were not available. In other instances, the available data were not sufficient, recent or reliable enough for inclusion. Aspects of male health that are included broadly satisfy four criteria (beyond data quality): specific to males, frequently reported by males, of concern to males, or place a substantial health burden on males.

In addition, the focus on male health means that comparisons with females are included only where they provide meaningful context. There are some sub-populations of males that are at increased risk of poor health, including Aboriginal and/or Torres Strait Islander males, males living in rural and remote areas, males from a non-English speaking background and males from low socioeconomic areas (AIHW 2010a; AIHW 2010b; AIHW 2011a). Reporting on the disparities in health between these groups and other males are limited in this report both because the focus of this report is males as a distinct population group and because these groups will be examined in detail in future reports (see *Future directions*, below).

Those sections of the conceptual framework that were not reported on at all, or for which the reporting was mostly incomplete, include:

- policies, strategies and interventions; resources, systems and research
- broad features of society, environmental factors and geographical location
- access to services; food security (that is, access to healthy, affordable foods); social roles
- psychological factors
- biomedical factors
- individual physical and psychological makeup (including genetics and prenatal conditions).

Some of these areas may be included in future reports, either through updates to existing data or through new surveys and studies.

Population-level information on biomedical factors will become available through the Australian Health Survey 2011–13, while information on transitions and roles could be derived from the longitudinal study on male health, funded in the 2010 National Male Health Policy (DoHA 2010a).

For other areas—such as psychological factors and individual physical and psychological makeup—the lack of available and reportable data may indicate a need for future research and data development to facilitate reporting or monitoring of these aspects of male health.

How to access this information

This report is part of a suite of products which aim to increase the accessibility of male health data in Australia. These include:

- the full report, available in hardcopy, or online from the AIHW website <www.aihw.gov.au/publications>
- appendix materials, including information on data sources (Appendix 1) and data tables (Appendix 2), available from the AIHW website
- a four-page report profile which summarise the information in this report, available in hardcopy, or online from the AIHW website
- a summary webpage on the AIHW website.

Future directions

This report is the first under the 2010 National Male Health Policy to report holistically on male health in Australia, and presents a very broad view of health determinants, health status and health service use. A second report on the health of specific population groups of males is planned, and may draw on the 'socioeconomic characteristics', 'broad features of society' and 'geographical location' sections of the conceptual framework, which were not covered in any depth in this report.

Subsequent topics for reporting could focus on health across the male life course, drawing on the 'social roles' and 'individual and psychological makeup' sections of the conceptual framework. This would add to the evidence base for male health in Australia and highlight groups of males who experience good health and groups at risk of poor health.



2 AUSTRALIA'S MALES AT A GLANCE

To understand the health of a population group such as males, it is useful to start with their demographic and socioeconomic characteristics.

This chapter provides an outline of 'who' Australia's males are—where and how they live, work and use their leisure time, their ethnicity and religious affiliations, and the roles and relationships they form within their communities. This provides an important context for the health statistics presented in this report and more broadly for policy development and the planning and provision of health services.

Age distribution

In June 2010, there were 11.1 million males living in Australia (49.8% of the total population) (ABS 2010a). The median age was 36.0 years and around 70% were aged less than 50. From 0–4 years up to 50–54 years, the proportion of males within each age group is similar, after which the percentages decrease. This creates a 'beehive' or 'column' shape reflective of a population that has a low birth rate and low mortality and infant mortality rates (Figure 2.1). This paints a dramatically different picture from that of a century ago (Table 2.1).



In 1911, there were approximately 2.3 million males living in Australia (51.9% of the total population). The median age of males was 24.6 years, 11 years younger than in 2010, and 86% were aged less than 50 (ABS 2008a, Table 2.1). This age distribution represents a typical population 'pyramid'. It describes a population where high mortality is compensated by high fertility as a means of creating a stable population size and structure.

Table 2.1: Selected age characteristics of males, 1911 and 2010

Characteristic	1911	2010
Median age	24.6	36.0
Less than 50 years (%)	86	70
0–14 years (%)	31	20
15–64 years (%)	65	68
65 years and over (%)	4	12

Sources: ABS 2008a; ABS 2010a.

The change in the Australian male population over the century is the combined result of historical, social and economic factors, which include:

- a shift from an agricultural to industrial economy
- a shift from infectious to chronic diseases as a leading cause of morbidity
- the end of World War Two—the return of soldiers, the influx of migrants and the birth of the Baby Boomer generation
- changing social attitudes related to family and work, particularly for women.

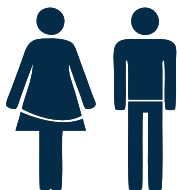
Collectively, these changes led to low fertility and mortality levels and longer life expectancy, causing the population to assume its current beehive shape. This trend toward an ageing population is likely to continue with the median age of males predicted to increase to around 40 years by 2026 (ABS 2008b).

Demographic characteristics

Demographic characteristics include where a person lives, their age, Indigenous status, and ethnic background. Examining the size and composition of the male population, including trends in demographic data, is important for the planning and provision of services, both now and in the future. See Table 2.2 for a summary of the demographic characteristics of Australian males.

Table 2.2: Demographic characteristics of males

As of 30 June 2010, there were 11.1 million males living in Australia (49.8% of the total population).



There were 99.2 males for every 100 females in 2010.



The median age of Australian males was 36.0 years in 2010.



In 2010, there were 1.4 million males aged 65 years and over (12% of the total male population) and 2.2 million males under 15 years (20%).



Approximately 2.5% of the total male population identified as Aboriginal and/or Torres Strait Islander in the 2006 Census.



In the 2006 Census, 17% of males spoke a language other than English at home; 24% were born overseas.



In 2009–10, 7,962 humanitarian visas were granted to males, comprising 57% of all humanitarian visas granted that year.



Just over two-thirds of males (68%) live in capital cities, numbering 7.5 million in June 2009.

Sources: ABS 2007a, ABS 2009a, ABS 2010a, DIAC 2011.

Socioeconomic characteristics

Socioeconomic characteristics include a person's living conditions, the level of education achieved, their income level, employment status and social capital. These factors are often closely related and can act alone or together to influence health and wellbeing (AIHW 2010a). With reference to health outcomes, socioeconomic status (SES) generally follows a positive gradient, with overall health tending to improve as SES increases (AIHW 2010a). Individually, socioeconomic characteristics can provide an indication of a person's ability to engage with and access health information, participate and manage their own health, and pay for preventive and treatment services.

Social capital is a measure of connectedness between individuals and communities and is an important predictor of health, wellbeing and resilience. Proxy measures of social capital can include the nature and number of groups and networks individuals and communities are involved with, the level of trust within a community, and collective action and social inclusion within community groups (World Bank 2011). In this instance, we have taken measures of social capital to include relationship status, household living arrangements, participation in volunteering and sporting groups, the provision of unpaid care, religious affiliation and incarceration. See Table 2.3 below for a summary of the socioeconomic characteristics of Australian males.

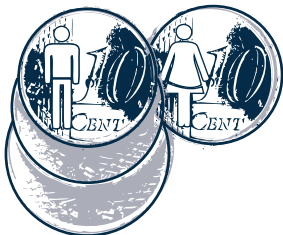
Table 2.3: Socioeconomic characteristics of males



In the 2006 Census, 45% of all males lived in the highest socioeconomic areas and 35% lived in the lowest socioeconomic areas.



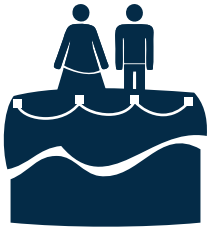
In 2006, 46% of males had completed Year 12 or equivalent and 26% had completed Year 10 or equivalent. Around half of males (57%) had a non-school qualification.



The average weekly earnings of a full-time adult male employee was \$1,342 per week in 2010. This was \$230 more than for a full-time adult female employee.



In 2010, over half of all males (55%) aged 15 years and over were employed full-time or part-time; 3% were unemployed and looking for work; and 42% were not in the labour force.



In 2006, 52% of males were in a registered marriage, while 9% lived in a de facto relationship.



There were around 58,600 homeless males in 2006 (less than 1% of the total male population). Males comprised 56% of the homeless population in Australia in 2006.



In 2009, 17% of males performed unpaid voluntary work for an organisation or group.



Around one-third (28%) of males aged 15 years and over participated at least once in an organised sport in the year 2009–10.



Around 1 in 10 adult males (11%) provided informal unpaid assistance to a person with a disability in 2009.



Around three-quarters of males (77%) report having a religious affiliation, with Christian denominations comprising the majority (70%).



There were 27,472 males serving time in prison at June 2010 (0.2% of the total male population). This was 12 times the proportion of females in prison.

Note: Proportions exclude 'missing' or 'not stated' categories.

Sources: ABS2007a, ABS 20010a, ABS2010b, ABS 2010c, ABS 2010d, ABS 2010e, ABS 2011a, ABS 2011b.



3 WHAT LIFESTYLE FACTORS INFLUENCE MALE HEALTH?

It is generally recognised that our lifestyles can influence how healthy we are in the short and long term. A lifestyle incorporating exercise and a well-balanced diet (among other protective factors) may reduce the risk of poor health. Conversely, risk factors such as smoking and alcohol misuse may lead to an elevated risk of certain diseases. In some cases, population groups (such as males) may have higher levels of risk factors, placing them at greater risk of poor health and mortality.

Monitoring risk and protective factors (known together as health determinants) can help explain and predict trends in health and provide insight into why some groups have worse health than others. Likewise, as many health determinants are modifiable, it provides opportunities to alter the disease risk of individuals and the wider population. For males and other population groups, this may involve policies and programs which encourage healthy lifestyle practices in those groups. Examples of these programs are presented in boxes throughout this report.

This chapter examines the prevalence of health determinants among males by age and other characteristics. Much of this information is based on self-reported data from population surveys (for example, the National Health Survey and National Drug Strategy Household Survey). When using these data, it is important to consider that self-reported data may be limited by respondents' knowledge of and/or willingness to report information related to some risk behaviours.

Fruit and vegetable intake

The food we eat plays an important role in our health and wellbeing. A healthy diet may protect against cancers including cancer of the bowel, liver, oesophagus, lung and stomach, as well as other chronic diseases such as heart disease and Type 2 diabetes (Cancer Council Australia 2009; AIHW 2011b). Guidelines for fruit and vegetable consumption are shown in Box 3.1. In some circumstances, limited access to affordable fresh fruit and vegetables (among other food products) may be an important factor influencing dietary choice (Turrell et al. 2002; Burns 2004).

Based on self-reported data from the 2007–08 National Health Survey (ABS 2010f), it is estimated that among adult males (aged 18 years and over):

- over half (54%) did not usually consume sufficient serves of fruit
- more than 9 in 10 (92%) did not usually consume sufficient serves of vegetables
- fewer than 1 in 20 (5%) usually consumed sufficient fruit and vegetables.

When analysed by age groups, fruit and vegetable intake was generally highest among males aged 65 years and over and lowest among those aged 25–34 years. Overall, adult males were less likely than adult females to eat sufficient fruit and vegetables.

The recommended daily intake of fruit and vegetables for children is less than for adults (Box 3.1). Based on self-reported data from the 2007–08 National Health Survey, it is estimated that among boys and male adolescents (aged 5–17 years):

- more than half (55%) did not usually consume sufficient serves of fruit
- nearly two-thirds (62%) did not usually consume sufficient serves of vegetables
- less than one-quarter (22%) usually consumed sufficient fruit and vegetables.

Similar to the adult population, males aged 5–17 years were less likely than females of the same age group to eat sufficient fruit and vegetables.

Box 3.1: What are the recommendations for fruit and vegetable consumption?

The *Australian Guide to Healthy Eating* recommends that male and female adults consume two to four serves of fruit ('sufficient fruit') and four to eight serves of vegetables ('sufficient vegetables') per day (Smith et al. 1998). Children should consume two to four serves of fruit and two to four serves of vegetables.

For the purpose of analysis in this report we use the following groupings:

Age group (years)	Sufficient serves of fruit	Sufficient serves of vegetables
5–7	2 or more	2 or more
8–11	2 or more	3 or more
12–17	3 or more	3 or more
18 and over	2 or more	5 or more

By convention, a serve of fruit is 150 grams, and a serve of vegetables is 75 grams. Some examples of what constitutes a 'serve' are provided below.

Fruit	Vegetables
1 medium apple, orange, banana	1 medium potato
2 items of small fruit such as apricots, plums	1 cup of salad vegetables
About 8 strawberries	½ cup tomatoes, capsicum, cucumber
1 cup of canned fruit	½ cup carrots, swede, turnip
½ cup of fruit juice	½ cup peas, broad beans, lentils
About 20 grapes or cherries	½ cup spinach, cabbage, broccoli

Source: Adapted from DoHA & NHMRC 2003.

Physical activity

Sport and other forms of physical activity can improve male psychological wellbeing and may foster social networks which provide support and opportunities for development (see Box 3.2). Regular sufficient physical activity is also associated with a healthy body weight and a reduced risk of many chronic conditions and injuries (AIHW 2010a).

Box 3.2: Indigenous participation in Australian Rules Football

Australian Rules Football is extremely popular among many Indigenous males and their communities. Furthermore, Indigenous Australians are well represented in professional teams in the Australian Football League (AFL). While Indigenous Australians account for around 2–3% of the Australian male population, they accounted for 11% of playing personnel in the 2010 AFL season (Judd 2010).

The AFL has a number of programs that use the sport as a vehicle to promote healthy lifestyles in Indigenous communities. These programs may also increase school attendance, provide mentoring and leadership, and facilitate career opportunities in the AFL. Examples of current programs include the Auskick program (a national youth development program to introduce AFL to children 5 to 12 years), football academies and camps for promising young players, Footy Means Business (a leadership development program for Indigenous Australian Rules players with strong ties to their community), and an Indigenous youth team (the 'Flying Boomerangs').

Participation in sport and physical activity

Estimates from the ABS Multi-Purpose Household Survey 2009–10 show that around two-thirds (65%) of males aged 15 years and over had participated in some form of sport or physical activity in the previous 12 months (ABS 2010c). Overall, 28% of males had participated in an organised activity arranged by a recreation club, or sporting or non-sporting association, while around double this percentage (52%) had participated in a non-organised activity.

Male participation in any sport or physical activity differed by age:

- the highest participation rate (86%) was among males aged 15–17 years
- the lowest participation rate (50%) was among males aged 65 years and over.

The most popular sport or physical activity reported by males was walking (16%), followed by aerobics/fitness/gym (11%), cycling and boxing (8%). Facilities most likely to be used by males for sport or physical activity were outdoor facilities such as parks, beaches or walking trails (56%), followed closely by structured facilities such as gyms, public pools or courts (52%).

Between 2005–06 and 2009–10, male participation in sport and physical activity decreased overall, but the effect differed by age:

- participation rates among males aged 15–17 years increased by 7%
- participation rates among males aged 25–34 years decreased by 5%.

As with many other health determinants, there appears to be a strong relationship between socioeconomic status and participation in sport and physical activity (ABS 2010c). Males who earn the most, have higher levels of education, are employed, come from English speaking countries or are Australian born are more likely to participate in regular physical activity and organised sports. However, males living outside of *Major cities* are more likely to participate than with those living within them (ABS 2010c).

'Sufficient' physical activity

Physical activity for adult males

The National Physical Activity Guidelines for Australians recommend minimum levels of daily activity for Australians of all ages to gain a health benefit. For Australian adult males, 'sufficient' physical activity is generally interpreted as 30 minutes of moderate or vigorous physical activity on at least five days of the week—a total of at least 150 minutes per week (Box 3.3). These recommendations are equivalent for males and females.

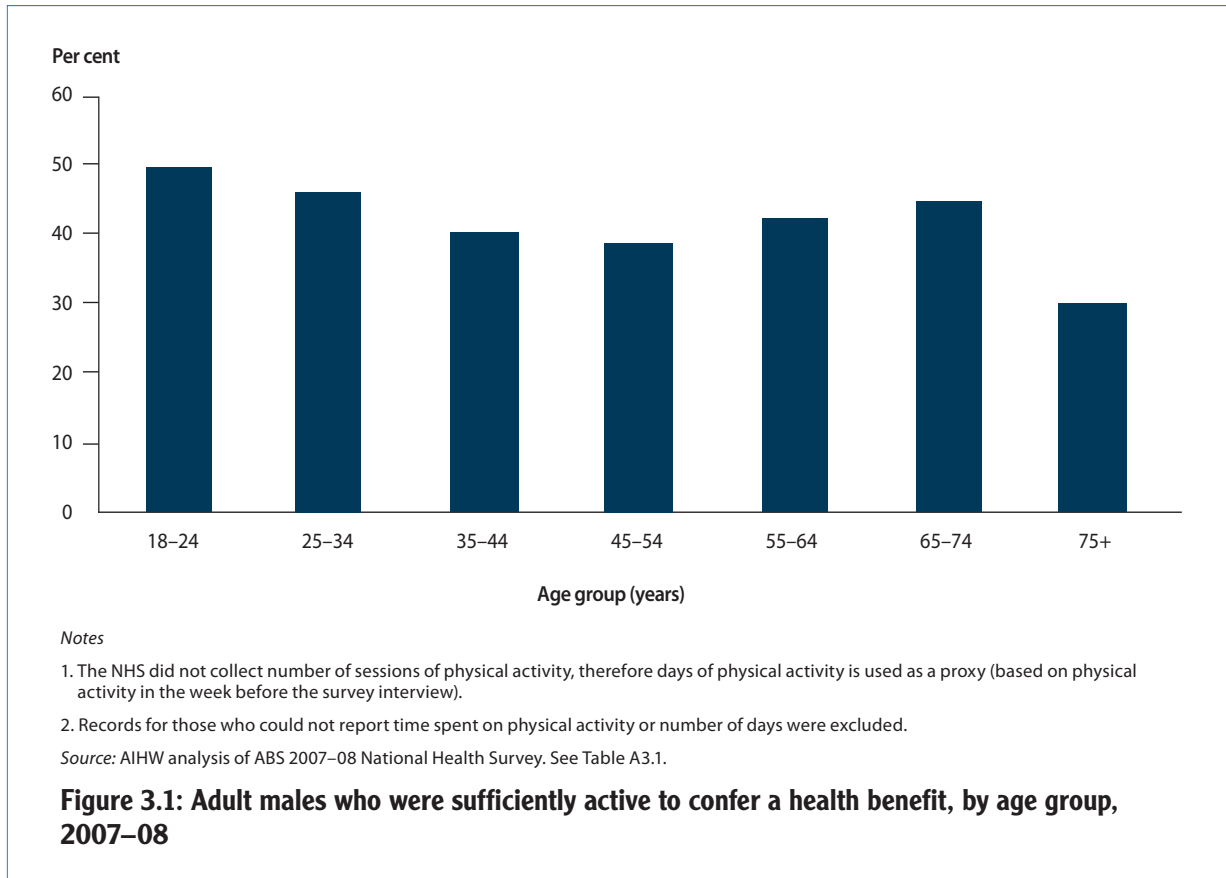
Box 3.3: What are the recommendations for physical activity?

The *National physical activity guidelines for adults* sets out steps to better health for Australian adults (DHAC 1999). These are:

- think of movement as an opportunity, not an inconvenience
- be active every day in as many ways as you can
- put together at least 30 minutes of moderate-intensity physical activity on most, preferably all, days (examples of moderate-intensity activity are brisk walking, swimming, doubles tennis and medium-paced cycling)
- if you can, enjoy some regular, vigorous activity for extra health and fitness (examples of vigorous physical activity are jogging, football and basketball).

Recommendations for older adults are also available, with advice about physical activity that accommodates abilities and health problems common at older ages (DoHA 2009). Recommendations for children and adolescents advise participation in at least 60 minutes of moderate to vigorous activity every day and no more than two hours of screen-time activity each day (DoHA 2004a,b).

Respondents in the 2007–08 National Health Survey were asked about the amount of time they spent on sport, recreation and fitness, and walking for transport over a one week period. Based on this self-reported information, the proportion of adult males (18 years and over) who exercised sufficiently to obtain benefits for their health was 42%. The rate of sufficient physical activity changed with age. Activity generally decreased between ages 18–24 and 45–54 years, increased from 55–74 years and declined substantially thereafter (Figure 3.1). At all ages, males were more likely than females to exercise sufficiently.



Employment that is physically demanding or requires extended periods of walking also contributes to overall physical activity, although it is difficult to measure and generally not included in physical activity measures such as that shown in Figure 3.1.

Australian males appear to balance their leisure and work-related physical activity, with those who were employed in physically demanding work being less likely to participate in other physical activity. In 2007-08, the proportion of employed males (aged 15 years and over) who were sufficiently active in terms of sport, recreation and fitness, and walking for transport was:

- 47% for those who spent most of their work time sitting
- 38% for those who spent most of their work time standing
- 43% for those who spent most of their work time walking
- 36% for those who did mostly heavy labour and physically demanding work.

Almost two-thirds (63%) of all adult males who undertook sufficient physical activity rated their health as 'excellent' or 'very good'. Among adult males who did not do sufficient physical activity, 4% rated their health at this level.

Physical activity for boys aged 9–16 years

Data on physical activity for boys (considered here to be males 9–16 years) come from the 2007 Australian National Children’s Nutrition and Physical Activity Survey (ANCNPAS). There are four suggested ways of calculating whether a child meets physical activity guidelines and when using three out of four of these methods, results from this survey suggest that most boys meet these guidelines. In the ‘child by day’ method of interpretation, prevalence is calculated as the probability that a randomly selected child on a randomly selected day would meet the guidelines. Using this method, 80% of boys aged 9–13 years and 64% of boys aged 14–16 years met the physical activity guidelines (DoHA 2008). At all ages, boys were more likely than girls to meet the guidelines.

Screen time activity refers to the amount of time children spend watching television, including videos and DVDs, playing computer games, and using computers for other purposes. National guidelines recommend no more than 120 minutes of screen time per day (Box 3.3). Based on the 2007 ANCNPAS, boys were not likely to meet these guidelines. On average, boys aged 9–13 years engaged in 233 minutes of screen time each day and boys aged 14–16 years 272 minutes of screen time each day (DoHA 2008). Boys engaged in more screen time activities than girls of the same age, particularly when playing video games.

Excess body weight

There is growing concern about the rise in overweight and obesity in developed countries, particularly among males who generally have a higher body mass (see Box 3.4 for definitions). Males (and females) who are overweight, and especially those who are obese, have higher rates of illness than people of healthy weight, both overall and from a range of specific conditions (for example, cardiovascular disease, high blood pressure, Type 2 diabetes, sleep apnoea and osteoarthritis) (AIHW 2010a).

Box 3.4: Measuring up—Body mass index and waist circumference

Body mass index (BMI) and waist circumference are the two main measures used for monitoring body weight. Ideally data should be measured rather than self-reported.

A BMI is calculated by dividing a person’s weight in kilograms by the square of their height (kg/m^2). Using this measure, the following is used as the standard classification:

- underweight: $\text{BMI} < 18.5$
- normal weight: $\text{BMI} \geq 18.5$ and $\text{BMI} < 25$
- overweight but not obese: $\text{BMI} \geq 25$ and $\text{BMI} < 30$
- obese: $\text{BMI} \geq 30$.

This classification may not be suitable for all ethnic groups (such as those from the Asia–Pacific) and does not distinguish between muscle and fat. As such, males who have a lot of muscle bulk may be classified incorrectly as overweight or obese.

A waist circumference is measured halfway between a person’s lowest rib and the top of their hipbone, roughly in line with their belly button. The following classification is used to indicate increased risk of chronic disease among males:

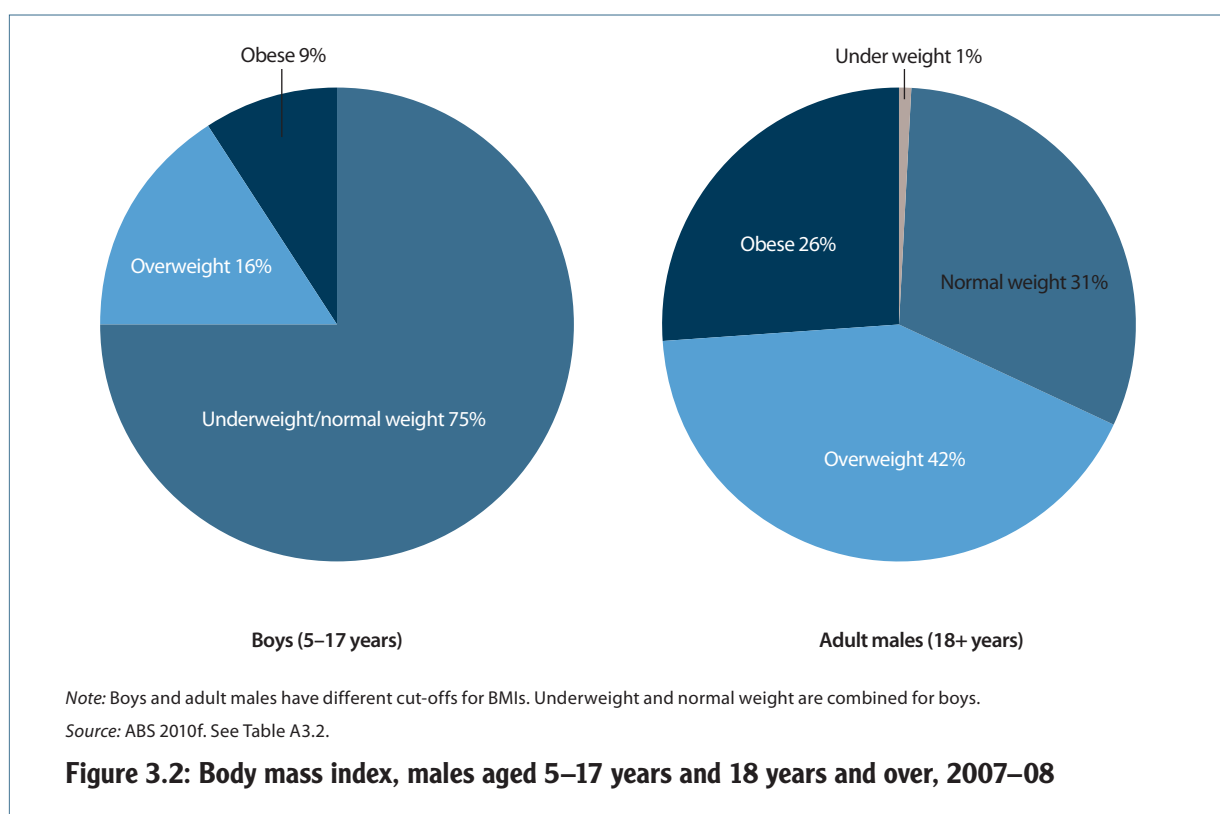
- increased risk: 94 cm or more
- substantially increased risk: 102 cm or more.

Similar to BMI, waist circumference may not be suitable for all population groups. Likewise, these measures and classifications are appropriate for adults only. For children and adolescents aged 2–17 years, a separate classification of overweight, obesity and thinness has been developed based on age and sex (AIHW 2010a).

Body mass index

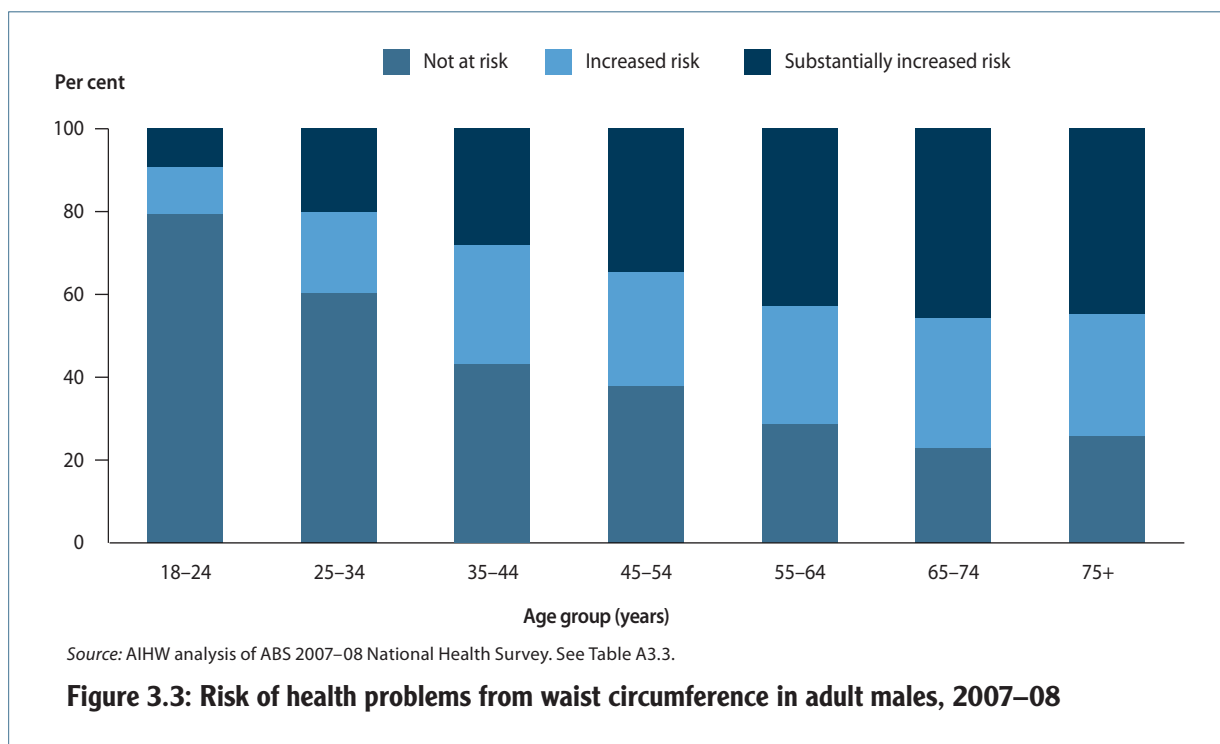
Based on measured heights and weights, around two-thirds (68%) of adult males (18 years and over) were overweight or obese in 2007–08 (Figure 3.2). Among adult males, this proportion was lower among males aged 18–24 years (40%) and higher among those aged 65–74 years (79%). Similar proportions of adult males and females were obese (26% and 24% respectively), however a larger proportion of males were classified as overweight than females (42% compared with 31%) (ABS 2010f).

Excess weight in children is a growing concern as it increases the risk of poor health during childhood and later in life. Based on measured heights and weights from the 2007–08 National Health Survey, 16% of boys (5–17 years) were overweight and 9% were obese (Figure 3.2). Rates of overweight and obesity were generally similar among boys and girls aged 5–17 years.



Waist circumference

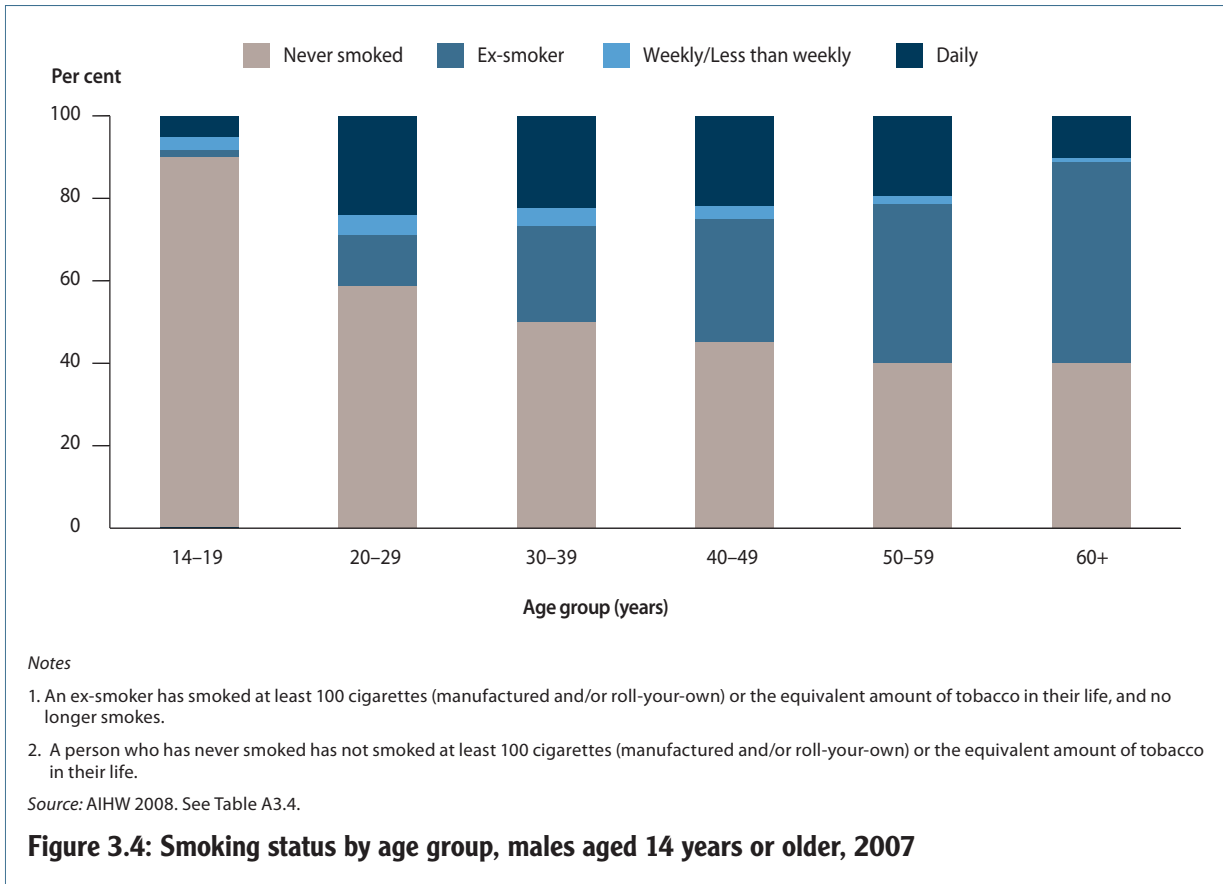
In 2007–08, around one-quarter (25%) of adult males had a waist circumference that put them at increased risk of health problems and a further 31% were at substantially increased risk of health problems (see Box 3.4 for definitions). Waist measurements leading to risk generally increased with age (Figure 3.3).



Smoking

Tobacco smoking is the single most preventable cause of poor health and death in Australia. Estimates from the 2007 National Drug Strategy Household Survey (NDSHS) show that in Australia, around 1.5 million males aged 14 years or over (18%) were daily smokers (AIHW 2008). This was higher than for females (15%). Just over half (51%) of males and around three in five (60%) females had never smoked.

Males aged 20–29 years were the most likely to be daily smokers—after this age group, daily smoking was lower in older age groups (Figure 3.4). While weekly and less than weekly smoking also peaked in the 20–29 year age group, the proportion of males who had never smoked in this age group was also one of the highest (59%). With increasing age, the proportion of males who had never smoked declined—from 90% (14–19 years) to around 40% among those aged 50 years or over. Males were more likely to be daily smokers than females at most ages, with the exception of the 14–19 year age group (AIHW 2008).



Smoking among males aged 14 years and over declined between 1991 and 2007. The proportion of males who:

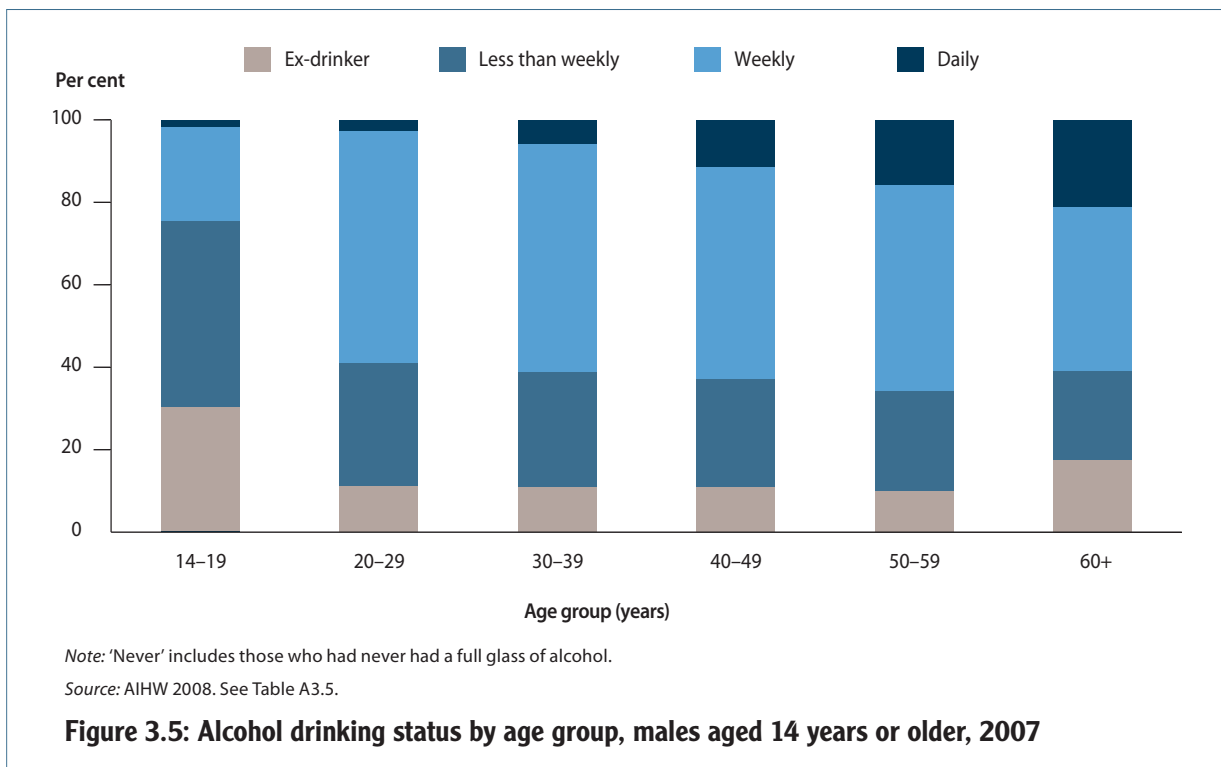
- were daily smokers decreased from 27% to 18%
- had never smoked (smoked less than 100 cigarettes in their life) increased from 42% to 51%
- were ex-smokers increased from 25% to 28%.

Males had a greater decline in daily smoking and faster growth in the proportion who had never smoked than females over this period.

In 2007, around 70% of males who had smoked in the previous 12 months reported that they had tried to change their smoking behaviour: 31% had reduced the amount they smoked each day, and 25% had tried, unsuccessfully, to quit smoking. The most common motivation for the change in smoking behaviour was that it affected health and fitness (45%).

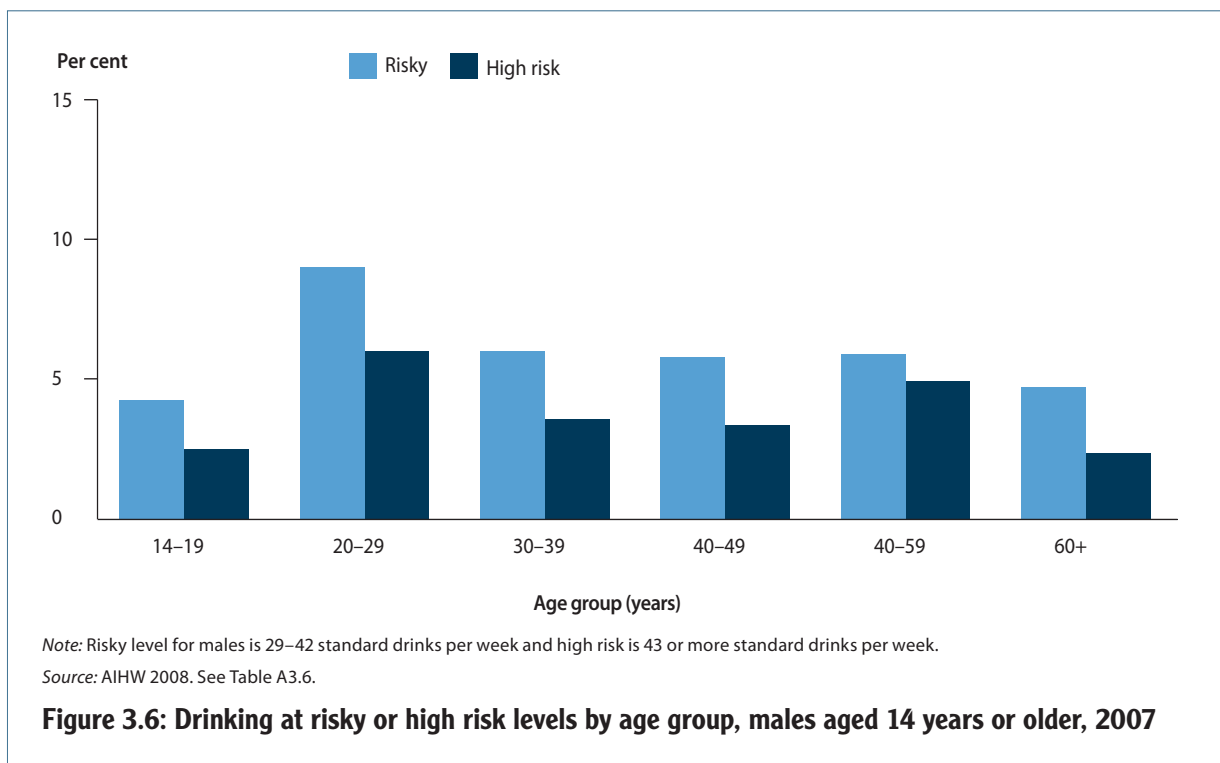
Alcohol consumption

Excessive alcohol consumption is a major risk factor for a variety of health problems and in some circumstances contributes to injuries and accidents, such as motor vehicle accidents and homicide. Over half (58%) of all males aged 14 years and over were consuming alcohol on either a daily or weekly basis in 2007 (Figure 3.5). Males aged 60 years and over were the most likely to be daily drinkers while males aged 20–29 years were the most likely to be weekly drinkers. The most preferred alcoholic beverage was regular-strength beer (AIHW 2010c).



In Australia, the National Health and Medical Research Council (NHMRC) has developed guidelines regarding risky drinking levels. Although the NHMRC recently revised the 2001 guidelines, the estimation of risk of harm in Figure 3.5 is still based on the 2001 original guidelines as these were in place during the collection of the data. In 2007, among males aged 14 years and over, 6% drank alcohol at levels that place them at risk and 4% at levels that place them at high risk in the long term (AIHW 2010c). When analysed by age groups, the proportion of males drinking at risky or high risk levels was clearly highest among those aged 20–29 years and lowest among those aged 60 years or over (Figure 3.6).

While the same level of risk is associated with fewer standard drinks for females, they were more likely than males to drink at risky levels (8%) but less likely to drink at high risk levels (3%).

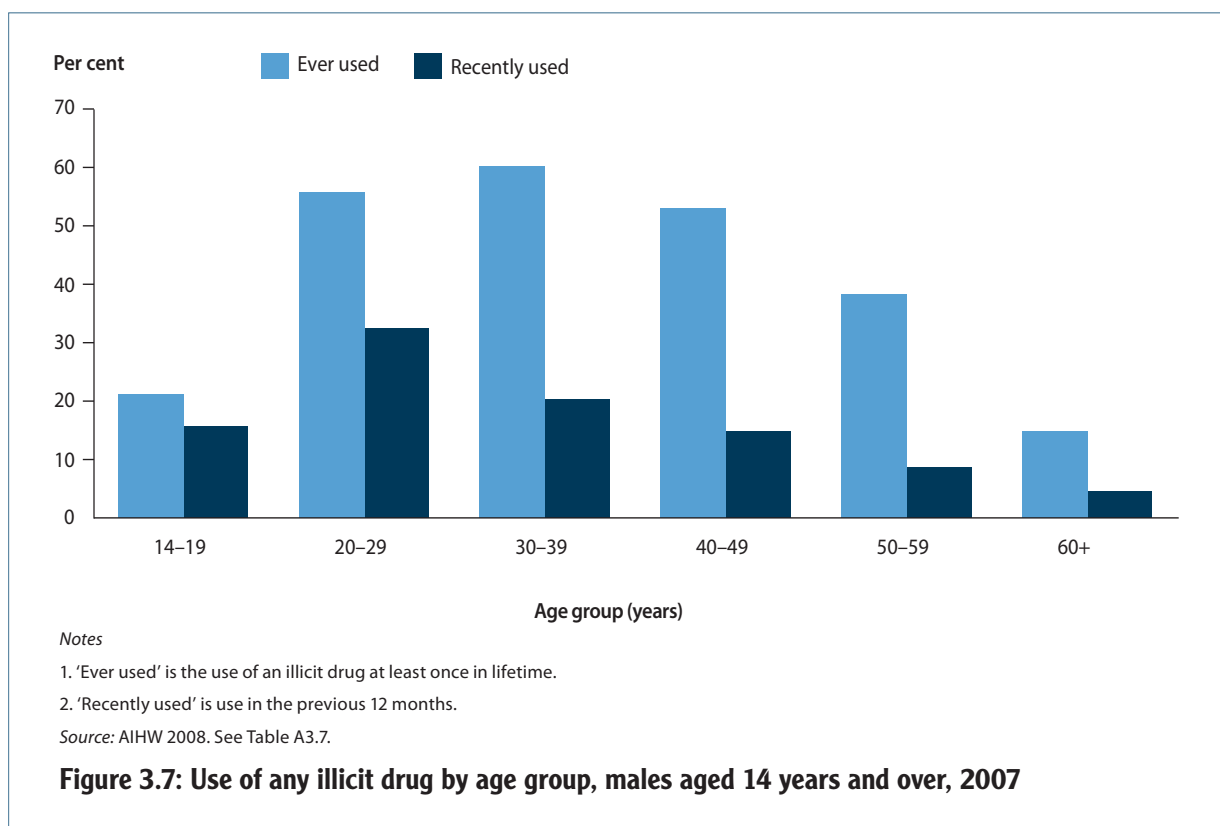


Illicit drug use

Illicit drugs include illegal drugs (such as cannabis and heroin), prescription pharmaceuticals used for illicit purposes (such as sleeping pills) and other substances used inappropriately (such as naturally occurring hallucinogens and inhalants) (AIHW 2008). Use of illicit drugs is associated with a number of health risks, including spread of blood borne viruses, malnutrition and mental illness (AIHW 2010a). There are also substantial social costs including crime, lost productivity and the provision of health care services.

In 2007, 3.5 million Australian males aged 14 years and over (41%) had used an illicit drug at some time in their life (AIHW 2008). The proportion who had ever used an illicit drug was highest among males aged 30–39 (60%) and lowest among those aged 60 years and over (15%) (Figure 3.7). In all age groups except those aged 14–19 years, males were more likely than females to have ever used an illicit drug.

In 2007, 1.3 million Australian males aged 14 years and over (16%) had used an illicit drug in the previous 12 months ('recent use') (AIHW 2008; Figure 3.7). The proportion of those who had recently used an illicit drug was highest among males aged 20–29 years (32%) and lowest among those aged 60 years and over (5%) (Figure 3.7). Males were more likely than females to have recently used an illicit drug at most ages, with the exception of teenagers (14–19 years). The most common illicit drug ever used and recently used by males was cannabis (marijuana). The most frequently reported reason for the first use of any illicit drug was curiosity (62% of lifetime users), followed by peer pressure (43%) (AIHW 2008).



Violence

Violence is the intentional threat or actual use of physical force or power against oneself, another person, or a group that results in injury, death, psychological harm, abnormal growth or deprivation (WHO 2002). Violence occurs as a result of a combination of individual, interpersonal and societal factors and has both an economic and human toll on society (ABS 2007b). There are three broad categories of violence: interpersonal violence between related or unrelated individuals; collective violence between groups, and self-directed violence by an individual toward themselves (ABS 2006). In this report, the term violence refers solely to interpersonal violence.

Violence appears to be a gendered phenomenon, with different types of violence being experienced, and perpetrated by, different sexes. For example, the 2005 ABS Personal Safety Survey found that, compared with females:

- males were far less likely to experience family and intimate partner violence
- males were more commonly the perpetrators of interpersonal violence
- males experienced higher rates of community violence (violence between unrelated parties), particularly during adolescence and early adulthood (ABS 2006).

Intimate partner violence is also an issue within same-sex relationships, particularly between males (Jeffries & Ball 2008).

Violence remains a difficult concept to define, measure and report. Due to the sensitive nature of interpersonal violence, and wider social and cultural norms, many cases go unreported (WHO 2002). Differences in definitions of violence and in the collection and reporting practices of various stakeholders mean that there are limited data available to quantify the prevalence of violence.

In the 2005 Personal Safety Survey, 50% of males aged 15 years and over had been a victim of violence at least once since the age of 15, with just over 1 in 10 experiencing violence within the last 12 months. Physical assault was the most commonly reported form of violence experienced in the last 12 months (7% of all males), followed by an attempt or threat of physical violence (5%). Less than 1% of males had experienced sexual violence.

Experience of violence in the last 12 months differed by age:

- males aged 18–24 years were most likely to have experienced any type of violence while those aged 55 years and over were least likely
- males aged 18–24 years reported the highest incidence of physical violence
- males aged 25–34 were most likely to experience sexual violence.

Among males who had experienced physical assault within the last 12 months, the majority (89%) of cases involved a male perpetrator. Perpetrators were most likely to be strangers to the victim (66%), while around 4% were committed by a current and/or previous partner (ABS 2006).

Of those males who were physically assaulted by another male:

- 72% reported that the perpetrator had been drinking
- 55% reported having changed at least one aspect of their lives as a result of the violence (ABS 2007b).

Sexual risk behaviours

Knowledge of current sexual behaviour is important for estimating levels of risk behaviour among males and for providing information to guide the development of interventions to promote safer sex (AIHW 2010a). Indicators of sexual risk-taking behaviour include frequency and consistency of contraceptive use, knowledge of sexually transmissible infections (STIs) and number of sexual partners. Demographic and socioeconomic characteristics, sexual identity and propensity for other risk behaviours may also influence sexual risk behaviour.

The Australian Study of Sexual Health and Relationships—a national telephone survey in 2001–02 of people aged 16–59 years—reported on levels of sexual risk behaviour among a representative sample of the population (Smith et al. 2003). In this survey, 97% of males identified as heterosexual, 93% said they were attracted exclusively to members of the opposite sex, and 91% said they had had sexual experience exclusively with the opposite sex.

In 2001–2002, among males aged 16–59 years:

- around one-fifth (22%) had their first experience of vaginal intercourse by 16 years of age: 50% with a steady partner and 42% with a casual partner/one night stand
- the lifetime average number of opposite-sex partners was 17; the lifetime average number of same-sex partners was 79, reflecting different patterns of relationships
- 55% of heterosexual males reported never using a condom for penetrative intercourse within the previous six months, for homosexual males the figure was 6%
- 20% of males reported that they had been diagnosed with an STI or a blood-borne virus (BBV).

Unprotected casual intercourse was more likely among males who were non-heterosexuals, smokers, injecting drug users, and those whose highest completed level of education was secondary school. Males reported significantly lower knowledge than females regarding STIs and BBVs. Among males, characteristics of better

STI and BBV knowledge were: being 20 years of age or older, speaking English at home, non-heterosexual identity, higher levels of education, and having been diagnosed with an STI or BBV in the past.

Health literacy

Health literacy—the ability to understand health information and use that information to make good decisions about personal health and medical care—has been recognised as an important determinant of health. The 2006 Adult Literacy and Life Skills Survey derived an overall measure of health literacy from questions that pertain to five different health activities—health promotion, health protection, disease prevention, health care information and systems navigation. Literacy is grouped into five levels, from Level 1 (very low) to Level 5 (high). Level 3 is regarded as ‘the minimum required for individuals to meet the complex demands of everyday life and work in the emerging knowledge-based economy’ (known as ‘adequate health literacy’) (ABS 2008c).

Findings from the 2006 Adult Literacy and Life Skills Survey show that 40% of Australian males aged 15–74 years had an adequate or better level of health literacy (ABS 2008c). This was a similar level to Australian females (41%). Health literacy generally increased from those aged 15–19 years to those aged 35–39 years, and then decreased for those aged 40 years and over. Furthermore, health literacy was higher among males who were employed, had higher levels of education, participated in social groups and organisations, were from a higher socioeconomic area, lived in *Major cities* and were born in mainly English-speaking countries (ABS 2008c; AIHW 2010b).



4 WHAT IS THE HEALTH STATUS OF AUSTRALIA'S MALES?

Health status is a holistic concept that is determined by more than the presence or absence of a disease (AIHW 2010a). Health status broadly includes measures of functioning, physical illness and mental wellbeing. This section presents information on life expectancy, self-assessed health status and a range of health conditions, workplace injury and mortality. Not all conditions and measures of health status can be covered in this section. Those that are presented broadly satisfy four criteria: specific to

males, frequently reported by males, of concern to males or place a substantial health burden on males.

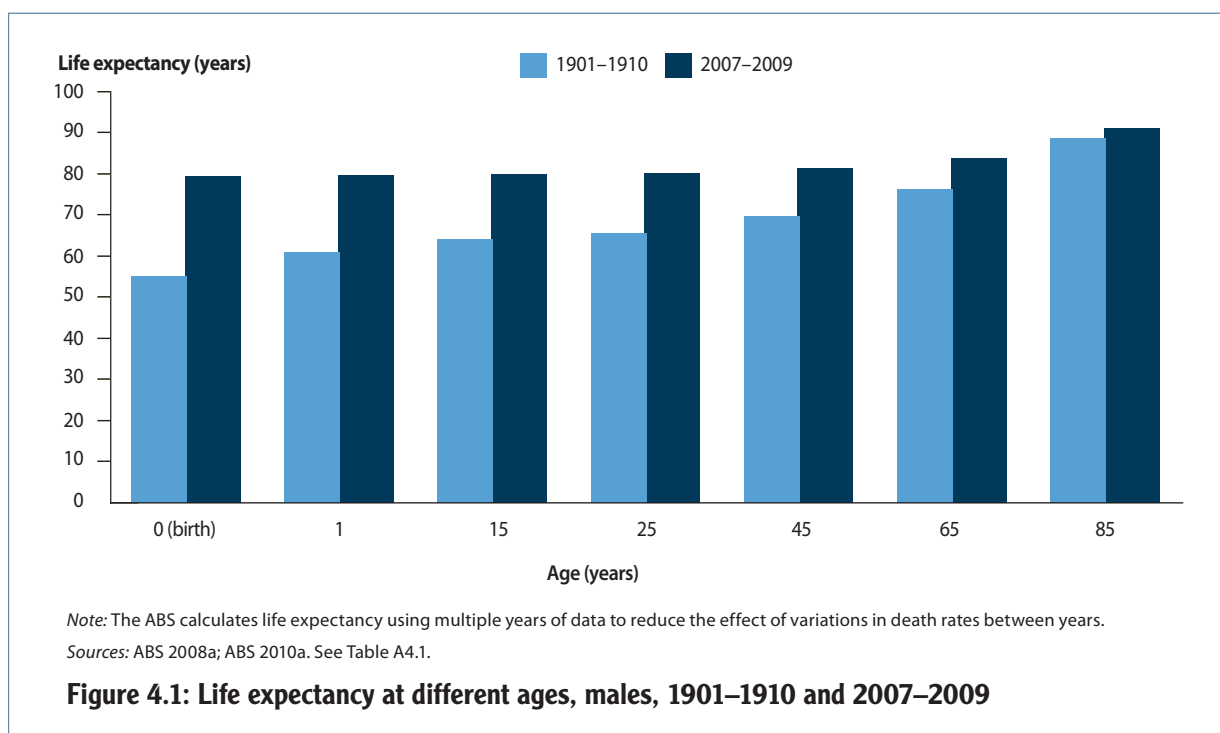
Life expectancy and healthy life expectancy

Life expectancies provide an indication of the number of years of life remaining from a given point in time. These figures change over the course of one's life, and differ between population groups. Two common points of reference are life expectancy at birth and at age 65 years, reflective of the fact that potential risks and protective factors change as one ages.

Males born in Australia in 2007–2009 could expect to live to the age of 79.3 years (ABS 2010a). Males aged 65 years in that time period could expect to live another 18.7 years (an expected age at death of 83.7 years) and those aged 85 could expect to live another 6.0 years (an expected age at death of 91.0 years).

In Australia, life expectancy for both sexes has improved dramatically in the last century, particularly life expectancy at birth. Compared with their counterparts in 1901–1910:

- males born in 2007–2009 could expect to live around 24 years longer
- males aged 65 years in 2007–2009 could expect to live around 18 years longer
- males aged 85 years in 2007–2009 could expect to live around 2 years longer (Figure 4.1).



While life expectancy has been increasing for both sexes, male life expectancy has been consistently lower than for females, and the difference currently stands at around 4.6 years. The size of the gap has varied over the twentieth century (between 3.6 and 7.0 years) and has gradually been decreasing since the early 1970s (ABS 2008a). This is partly due to narrowing of differences in risk behaviours (such as smoking) and reductions in cardiovascular disease (ABS 2004).

Life expectancy for Indigenous people is far behind that of their non-Indigenous counterparts. Indigenous males born in 2005–2007 had a life expectancy of 67.2 years, approximately 12 years less than non-Indigenous males born in the same period (ABS 2009b).

By international standards, Australian male life expectancy fares well. Based on comparable data from 30 member countries of the Organisation for Economic Co-operation and Development (OECD), Australian male life expectancy in 2007 (79.0 years) ranked fourth behind Switzerland (79.5 years), Iceland (79.4 years) and Japan (79.2 years), and well above the OECD average of 76.3 years (OECD 2009).

Healthy life expectancy

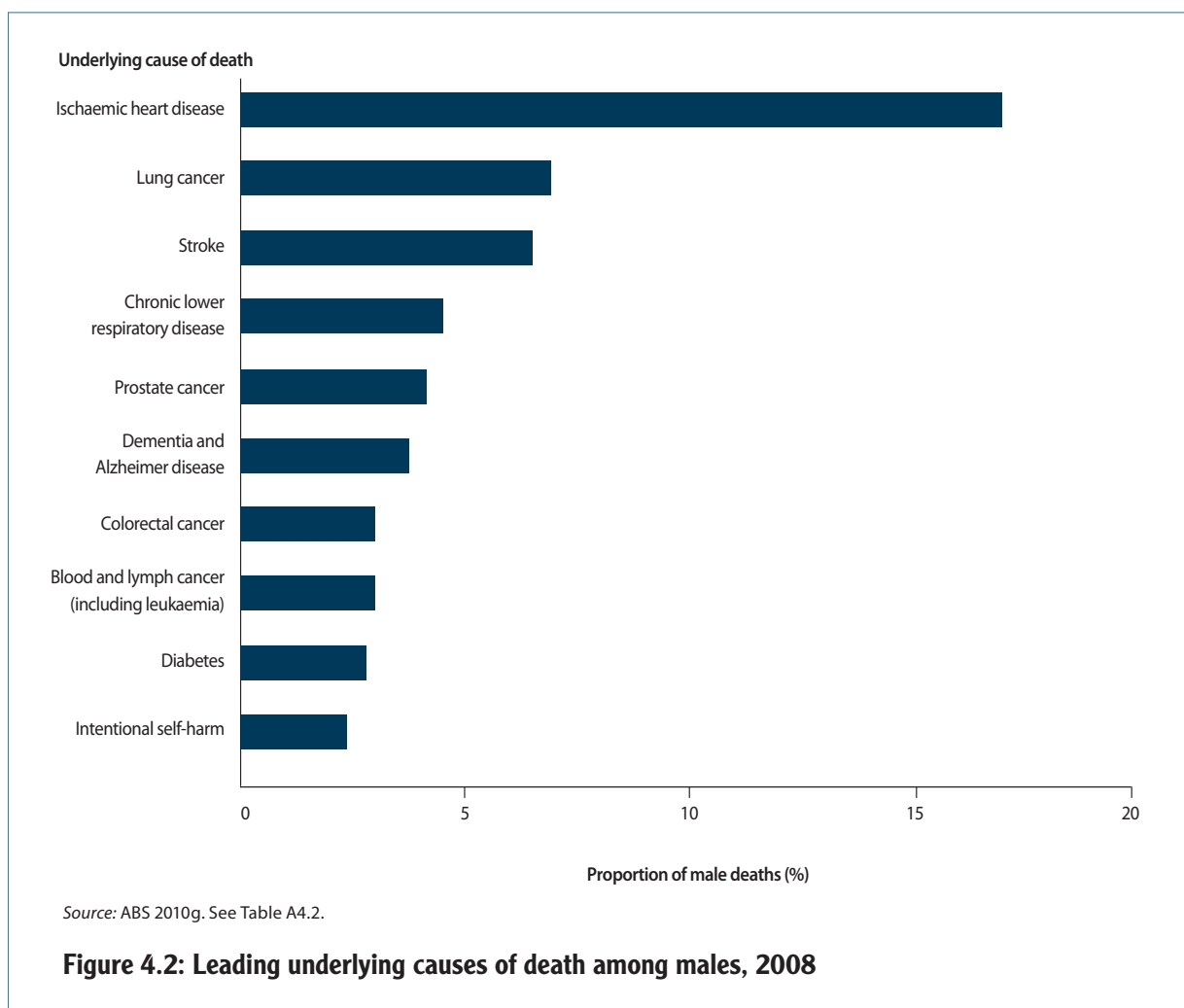
Traditional measures of life expectancy do not take into account measures of morbidity and disability. Health Adjusted Life Expectancy (HALE) is an estimate of the average number of years a person can expect to live free from disability, disease or injury and is calculated by subtracting the years spent in unhealthy states from overall life expectancy. In 2007, Australian male life expectancy at birth was 79.0 years and HALE was 72.5 years, meaning that males born in 2007 could expect to lose (on average) 6.5 years of their life due to disability, disease or injury (WHO 2010).

Mortality

Analysis of mortality data provides an important insight into male health—age at death and the conditions and associated determinants that cause or contribute to death are important measures of population health status. Death statistics can also measure the success of interventions to improve disease outcomes, signal changes in community health status and disease processes and highlight disparities and inequalities in health status between population groups.

In 2008, there were nearly 74,000 deaths among Australian males, at a rate of 688 deaths per 100,000 males. The leading cause of death among males was ischaemic heart disease. Other leading causes of death included stroke, cancer, chronic lower respiratory disease, dementia and Alzheimer's disease, diabetes and intentional self-harm (Figure 4.2).

Aside from prostate cancer (male-specific), seven other conditions in this list were more commonly listed as an underlying cause of death among males than females (male burden). The most significant of these were deaths from intentional self-harm, where males accounted for 78% of all deaths, followed by lung cancers where males accounted for 63% of all deaths. Stroke and dementia and Alzheimer's disease were more commonly recorded as an underlying cause of death among females than males.



Death rates and the leading cause of death among males differ by age. In 2008, the death rate among Australian males generally increased with age. The exception to this pattern was the higher rate of deaths among male infants (under 1 year). After this age,

- the lowest death rate occurred among males aged 1–14 years (15 per 100,000)
- the highest death rate occurred among males aged 95 years and over (30,000 per 100,000) (Table 4.1).

Leading causes of death also differed by age. Infant males were most likely to die from maternal factors (which includes maternal hypertension) or complications during pregnancy, labour or delivery, while males aged 1–14 years were more likely to die from metabolic disorders (which includes cystic fibrosis) (Table 4.1). Intentional self-harm was the leading cause of death among males aged 15–44 years, and ischaemic heart disease was the leading cause of death for males aged 45 years and over.

Table 4.1: Age-specific death rates and leading underlying cause of death among males, by age group, 2008

Age group	All-cause age-specific death rate ^{(a)(b)}	Leading underlying cause of death ^(c)
Less than 1	5	Fetus and newborn affected by maternal factors and by complications of pregnancy, labour and delivery
1–14	15	Metabolic disorders
15–24	60	Intentional self-harm
25–34	92	Intentional self-harm
35–44	142	Intentional self-harm
45–54	294	Ischaemic heart diseases
55–64	667	Ischaemic heart diseases
65–74	1,806	Ischaemic heart diseases
75–84	5,474	Ischaemic heart diseases
85–94	14,665	Ischaemic heart diseases
95 and over	29,953	Ischaemic heart diseases
All ages	688	Ischaemic heart diseases

(a) All-cause age-specific death rate calculated using the Australian estimated resident population (ERP) for 30 June 2008.

(b) Deaths among males under 1 year of age are calculated per 1,000 live births. Deaths at other ages are calculated per 100,000 population.

(c) Leading underlying cause derived according to the ABS selected causes where conditions are grouped according to 3-digit ICD-10 blocks.

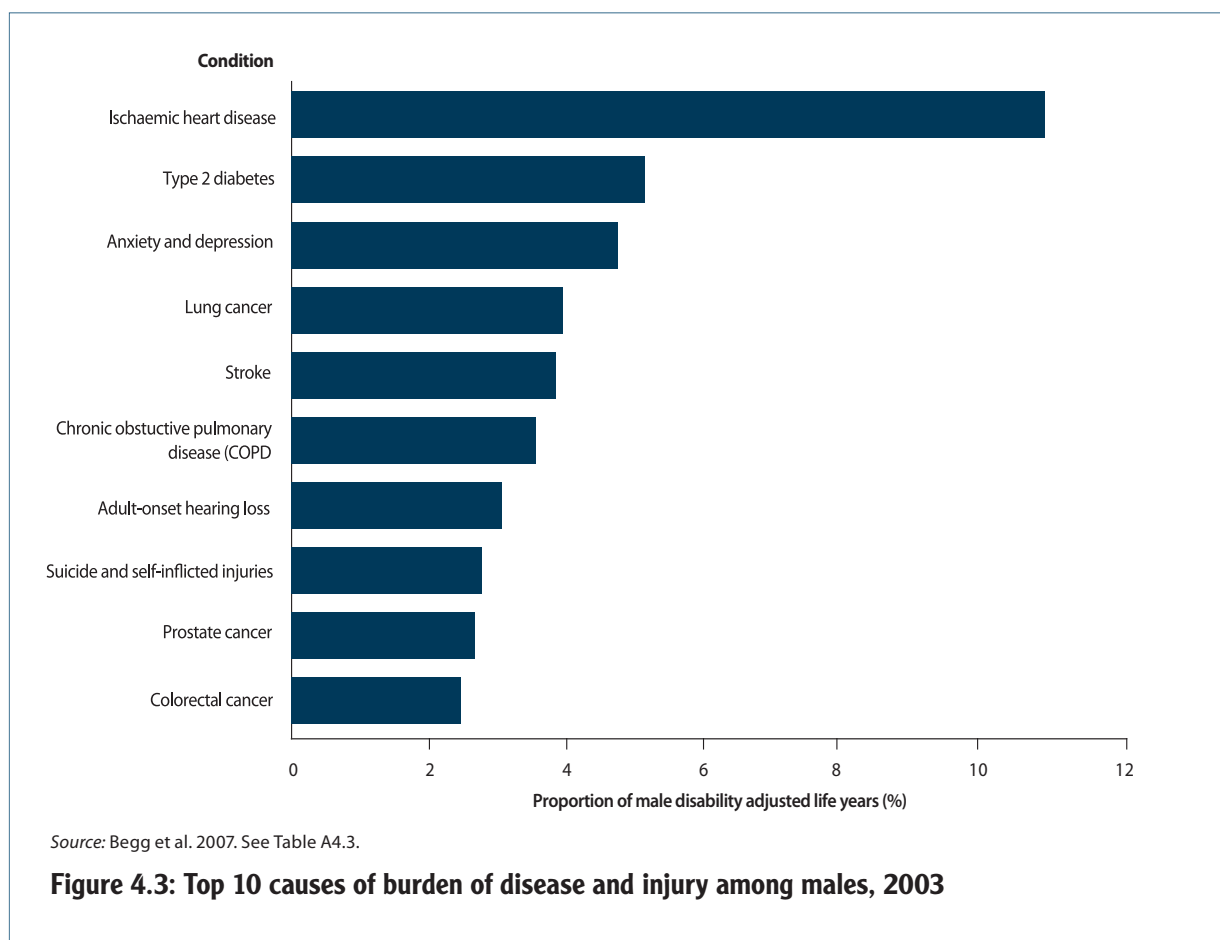
Source: ABS 2010g.

Burden of disease

The burden of disease and injury is a measure of health status that considers both fatal and non-fatal effects of a single condition, or all conditions combined (Begg et al. 2007). The measure of the burden of disease and injury is the disability adjusted life year (DALY), which includes both years of life lost to premature death (before 75 years) and healthy years of life lost to disability. The number of DALYs attributed to a condition is indicative of the effect that condition has on the life expectancy and general health and wellbeing of the population.

In 2003, Australians lost more than 2.6 million healthy years of life due to disease and around 52% of this total burden was attributed to males (1.4 million DALYs). Males accounted for 70% of the injury burden, 53% of the communicable disease burden, and 50% of the non-communicable disease burden.

In 2003, ischaemic heart disease accounted for the highest proportion of the total burden among males (11%). Other conditions accounting for a high proportion of the total burden among males were Type 2 diabetes, anxiety and depression, lung cancer and stroke. Suicide and self-inflicted injuries accounted for 3% of the burden among males (Figure 4.3).

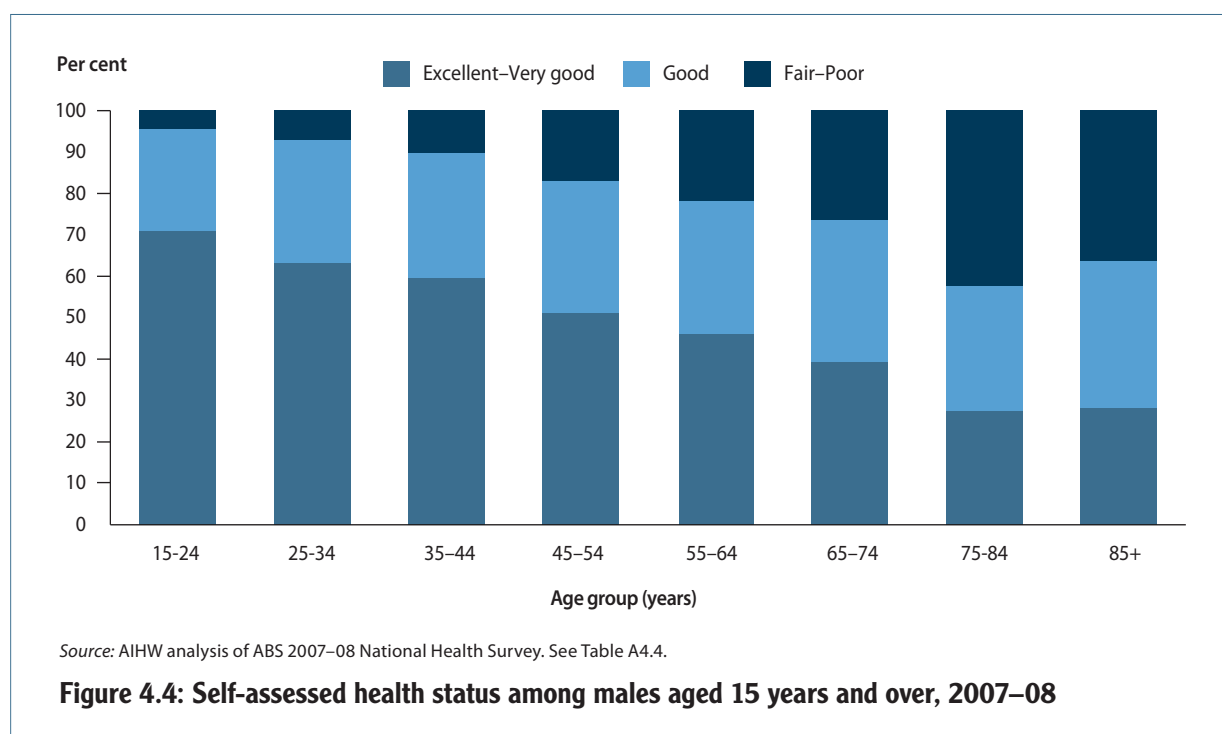


Self-assessed health status

An important and generally reliable measure of health status is how an individual rates their own health. This self-assessment provides a general measure of the combined effects of physical, social, emotional and mental health and wellbeing. The 2007–08 National Health Survey asked respondents to rate their health as excellent, very good, good, fair or poor.

In 2007–08, 20% of Australian males aged 15 years and over rated their health as excellent and only 4% rated their health as poor. Males were less likely than females to report their health as excellent or very good, more likely to report their health as good or fair, and equally likely to report their health as poor.

Self-assessed health status among males varied with age. The proportion of males reporting excellent or very good health generally decreased with age, and those reporting good health and fair or poor health generally increased with age (Figure 4.4).

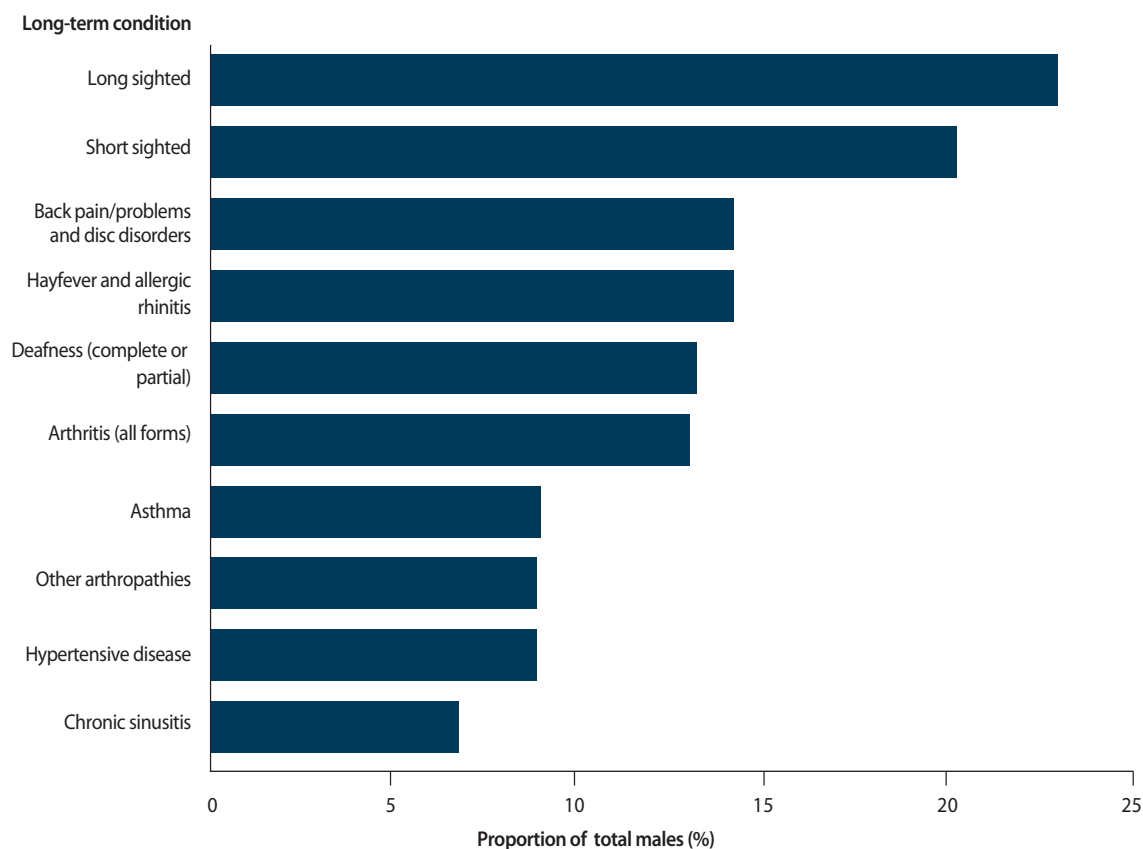


Long-term conditions

A long-term condition is a condition that has lasted or is expected to last six months or more. These conditions can place a substantial financial, resource and social burden on individuals and communities over a long period of time. This section uses data from the 2007–08 National Health Survey to describe long-term conditions among Australian males.

In 2007–08, nearly 7.5 million males (73%) had at least one long-term condition. The most commonly reported long-term conditions among males were:

- long-sightedness (23%) and short-sightedness (20%)
- back problems (14%)
- hayfever and allergic rhinitis (14%) (Figure 4.5).



Source: ABS 2010f. See Table A4.5.

Figure 4.5: Top 10 long-term conditions reported by males, 2007–08

The most commonly reported long-term conditions are not necessarily those that impose the greatest burden on the health and wellbeing of males (see *Burden of disease*). Conditions such as arthritis, osteoporosis, asthma, cancer, diabetes, heart and circulatory conditions, mental health and obesity are not as commonly reported by males as sight problems, back pain, allergies and deafness, but present a greater burden to the individual in terms of premature death and disability. These more serious conditions are commonly termed ‘chronic conditions’.

Mental health and obesity are also considered to be chronic diseases and are addressed separately in this chapter and in Chapter 3, respectively.

In 2007–08, 3.2 million males (31%) reported they had a chronic condition. Heart and circulatory conditions were the most commonly reported chronic disease among males, followed by arthritis, asthma, diabetes, cancer and osteoporosis (Table 4.2).

Table 4.2: Prevalence of selected chronic conditions among Australian males, 2007–08

Chronic condition	Number ('000)	Per cent
Heart and circulatory diseases	1,557	15.2
Arthritis	1,321	12.9
Osteoarthritis	604	5.9
Rheumatoid arthritis	159	1.6
Asthma	910	8.9
Diabetes mellitus	464	4.5
Type 2 diabetes mellitus	416	4.1
Malignant neoplasms (cancer)	190	1.9
Osteoporosis	125	1.2
Any chronic condition^(a)	3,227	31.4
Total males	10,261	100.0

(a) An individual may report more than one chronic condition and therefore the total number of males reporting any of the selected chronic conditions will not match the sum of individual conditions.

Source: ABS 2010f.

Cancer

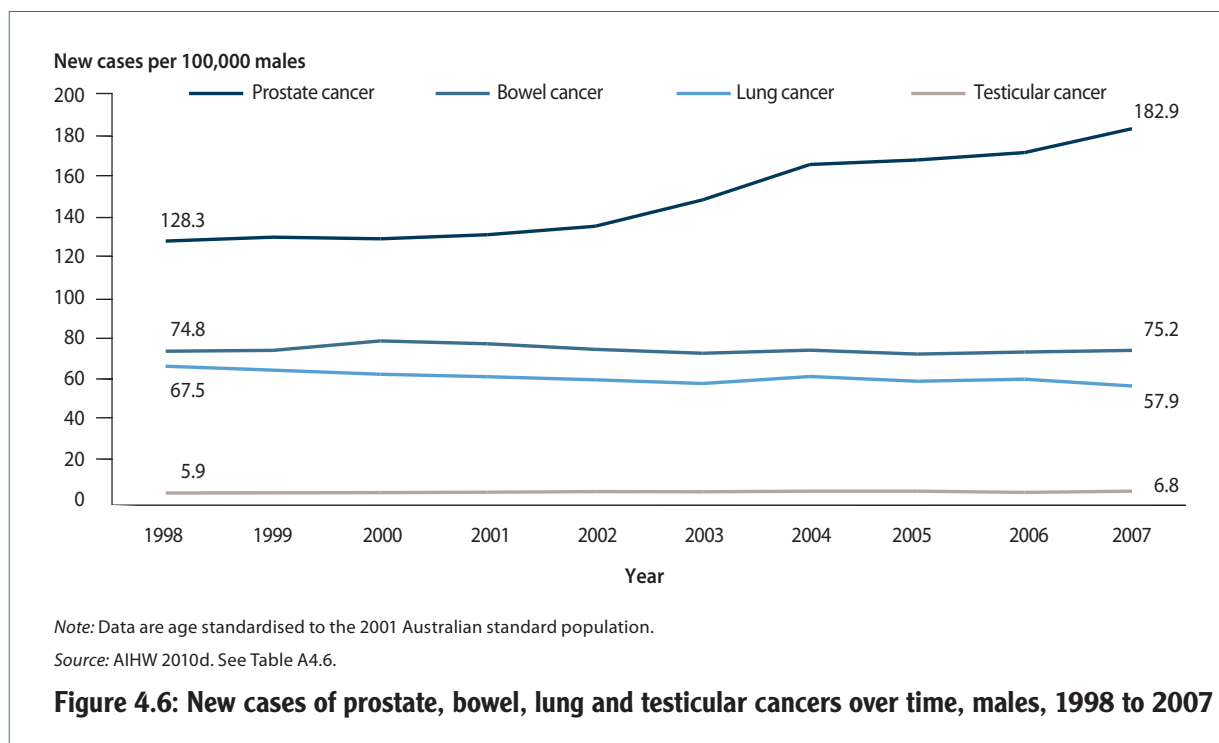
Cancer is the general term for a condition where defective cells in the body multiply out of control. These multiplying cells can invade the blood stream, lymphatic system or surrounding organs and tissues. Some cancers are easily diagnosed and treated, others are harder to diagnose and treat, and most can be fatal. Cancers are named by the type of cell involved or the location in the body where the disease begins.

In 2007, there were more than 62,000 new cases of cancer and nearly 22,600 cancer deaths among Australian males (AIHW 2010d). Males accounted for 57% of all new cases of cancer and 57% of all cancer deaths in that year. The most common cancers among males were prostate cancer, bowel cancer, melanoma of the skin, and lung cancer. Lung cancer was the leading cause of cancer death.

This section presents more detailed data on two male-specific cancers—prostate and testicular cancer—and two other important cancers for males—lung cancer and bowel cancer (AIHW 2010d).

In 2007, more than 19,000 males were diagnosed with prostate cancer, more than 7,800 with bowel cancer, more than 5,800 with lung cancer and nearly 700 with testicular cancer. The rate of diagnosed prostate cancer, lung cancer and bowel cancer increased with age, and was highest among males aged 75 years and over, while testicular cancer was most commonly diagnosed among younger males, aged 30–34 years.

The rate of new prostate, bowel and testicular cancer diagnoses increased in the 10 years from 1998 to 2007, while the rate of lung cancer declined (Figure 4.6). Some of the increase in prostate cancer diagnoses is attributed to the availability of the prostate-specific antigen (PSA) test, with more males being tested over time. See the section on prostate cancer screening in Chapter 5.



While cancer incidence is increasing, deaths from cancer are generally decreasing with 5- and 10-year survival rates improving (AIHW et al. 2008).

In 2007, more than 4,700 males died from lung cancer, nearly 3,000 from prostate cancer, more than 2,300 from bowel cancer and 26 from testicular cancer. Deaths from lung, prostate and bowel cancer increased with age, and were highest in males aged 80 years and over. The small number of testicular cancer deaths makes it difficult to draw strong conclusions about differences by age at death. In the 10 years from 1998 to 2007, lung cancer, prostate cancer and bowel cancer mortality decreased and testicular cancer mortality remained steady (Figure 4.7).

The 5-year relative survival rate for males diagnosed with cancer from 1998–2004 was: 97% for testicular cancer, 85% for prostate cancer, 61% for bowel cancer (colorectal) and 11% for lung cancer (AIHW et al. 2008). Survival rates for these four cancers have increased over time.

Improved survival may be due to earlier diagnosis through screening, improved treatment and management, or a combination of both these factors (AIHW et al. 2008). Initiatives such as Movember (Box 4.1) are encouraging males to be more proactive about seeking advice on their health, with a fundraising and awareness focus on prostate cancer and depression.

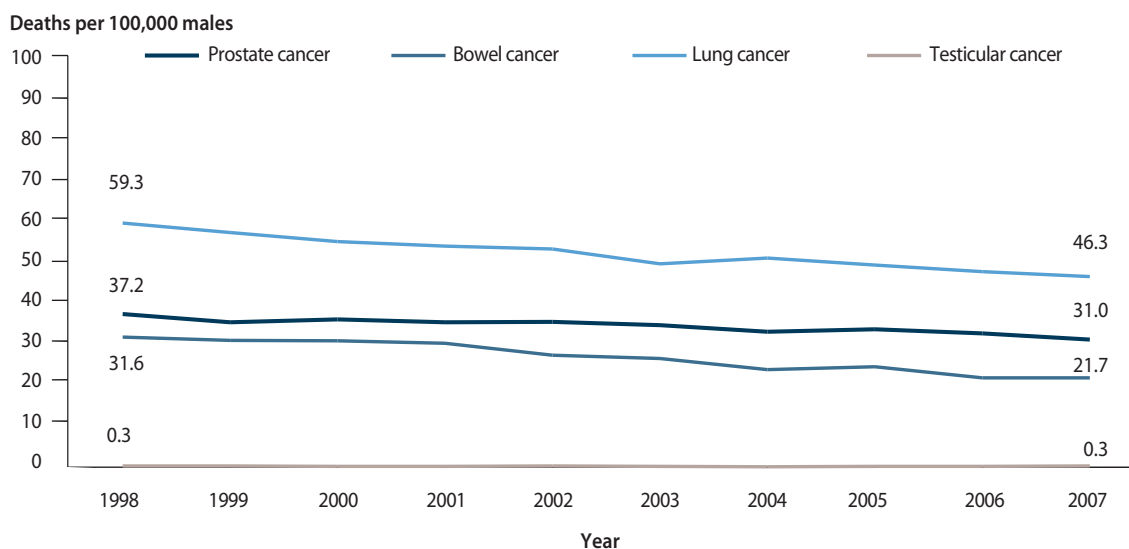


Figure 4.7: Deaths from prostate, bowel, lung and testicular cancers over time, males, 1998 to 2007

Box 4.1. Movember

Movember is a not-for-profit organisation that aims to raise awareness about male health. From humble beginnings in Australia in 2003, Movember has grown to become an international initiative with official campaigns in 11 countries and over 255,000 participants in 2009 (Movember Foundation 2010). In Australia, the Movember Foundation supports charities such as the Prostate Cancer Foundation of Australia and Beyondblue—the national depression initiative.

The Movember Foundation has also established a research arm, designed to assess motivations for participation and any behavioural changes arising from participation in the program. Examples of these behaviours include increased access to health care services, improved health literacy and increased discussion of male health issues. In 2009, research found that:

- 54% of participants had talked about male health with others, with 30% attributing this to direct involvement with Movember
- 22% of participants had conducted their own research into male health issues, with 51% attributing this to Movember
- 35% had sought medical advice, with 10% attributing this to Movember
- 38% of participants encouraged someone else to seek medical advice, with 20% attributing this to Movember (Movember Foundation 2010).

Movember, along with initiatives such as Pit Stop (Box 5.1) and Men's Sheds (Box 5.2) are providing males with opportunities to address their health issues in a manner that is both engaging and relevant to them. With participants acting as walking billboards, the 'mo' serves as a catalyst for conversation, giving males an opportunity to engage with their health issues (Movember Foundation 2010).

Mental health

Mental health is an important component of the health and wellbeing of males and comprises a wide spectrum of disorders with varying degrees of severity. Good mental health is characterised by a person's ability to recognise their strengths and values, cope with daily stressors, and make a productive and positive contribution to the community. Poor mental health may adversely affect any or all of these areas and has consequences for an individual, their family and society. Initiatives such as Movember are raising awareness of mental health among males and are working to break down barriers to males recognising and seeking help for mental health conditions, in particular depression (Box 4.1).

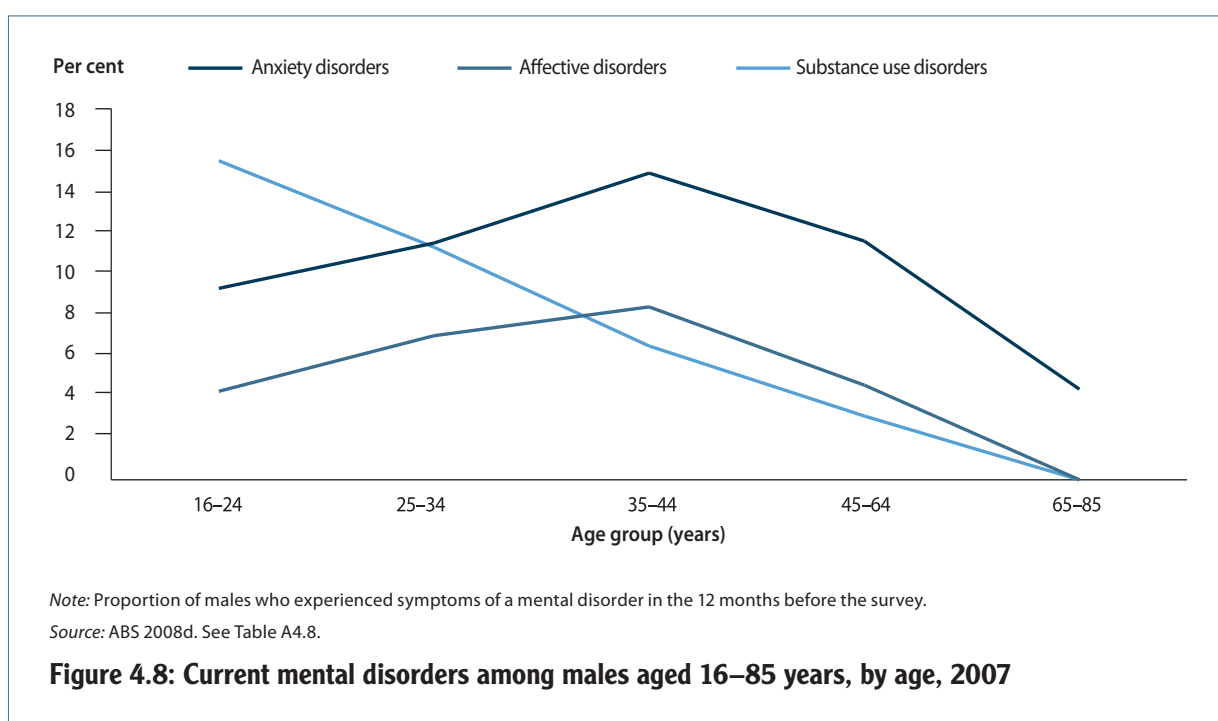
This section uses data from the 2007 Survey of Mental Health and Wellbeing to describe the mental health of Australian males.

In 2007, more than 3.8 million (48%) males aged 16–85 years had experienced a mental disorder in their lifetime and 1.4 million (18%) had experienced symptoms in the 12 months before the survey (a current mental disorder). The most common group of current mental disorders among males was anxiety disorders (11%), followed by substance use disorders (7%) and affective disorders (5%).

While anxiety and affective disorders were more common in females, males accounted for 68% of all cases of substance use disorders.

Post-traumatic stress disorder was the most common condition overall (5%) and the leading anxiety disorder among Australian males. Harmful use of alcohol (4%) and depressive episodes (3%) were the leading substance use and affective disorders, respectively.

In 2007, younger males were more likely to report current symptoms of any mental disorder compared with older males. This is most striking for substance use disorders, where 16% of males aged 16–24 years reported a substance use disorder compared with 3% of males aged 45–64 years and very few (nominally zero) males aged 65–85 years (Figure 4.8). The prevalence of anxiety and affective disorders increased to 'middle age' and then decreased again: these disorders were most common among males aged 35–44 years, and least common among males aged 65–85 years.



Disability

Disability can be broadly defined as a physical, mental, intellectual or sensory condition or state that limits activity and/or restricts participation due to physical, social, cultural or environmental barriers (AIHW 2009). In 2009, nearly 2 million males (18%) had a disability, as reported by the 2009 Survey of Disability, Ageing and Carers (ABS 2010d). This rate of disability is significantly lower than that reported in 2003 (20%).

Two broad categories of disability are core activity limitations (difficulties with communication, mobility and self-care) and school or employment restrictions (difficulties with schooling or work). In 2009, nearly 14% of Australian males had a core activity limitation, and 8% were restricted in their schooling or employment opportunities (Table 4.3).

Table 4.3: Disability status of males, 2009

Disability status	Number ('000) ^(a)	Per cent
Profound core activity limitation	300	2.5
Severe core activity limitation	300	2.8
Moderate core activity limitation	300	2.7
Mild core activity limitation	600	5.6
School or employment restriction	900	7.9
Total with specific limitations or restrictions ^(b)	1,700	15.3
Total with disability ^(c)	2,000	18.1
No reported disability	8,900	81.9
Total	10,800	100.0

(a) Rounded to nearest 100.

(b) Total may be less than the sum of the components as persons may have both a core activity limitation and a schooling or employment restriction.

(c) Includes those without a specific limitation or restriction.

Notes

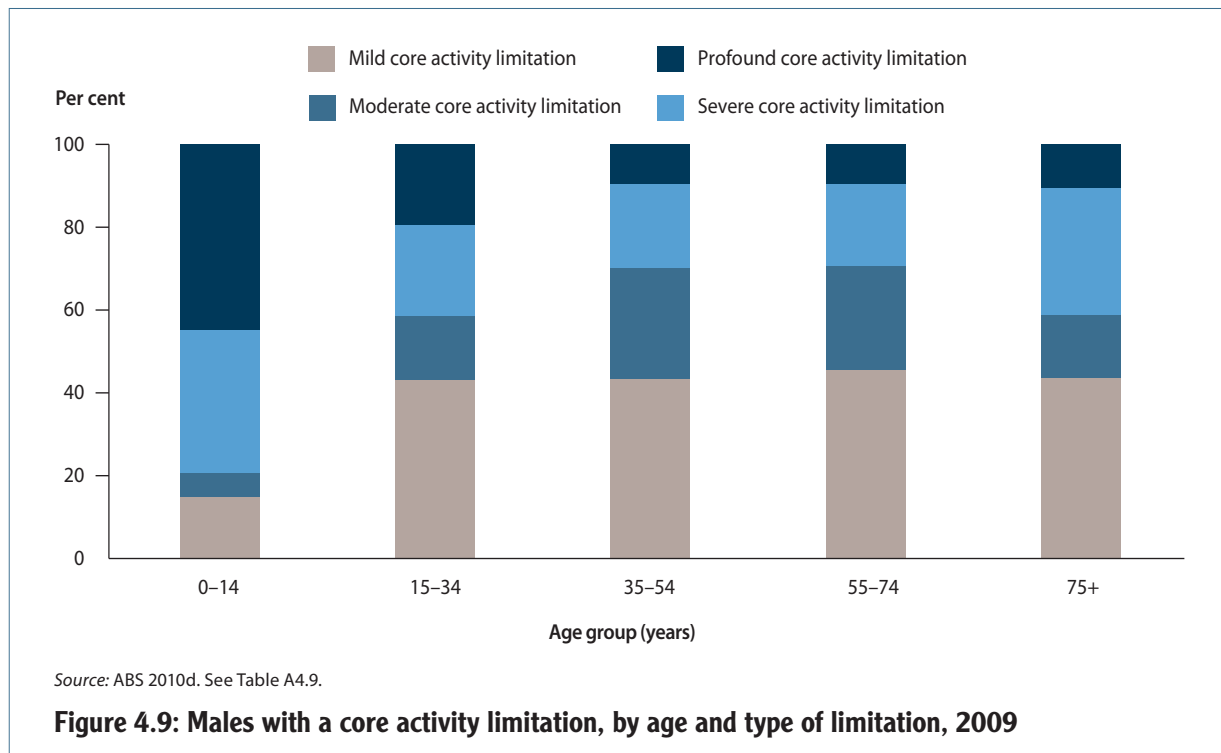
1. Profound core activity limitation means an individual is unable to perform or always requires help with communication, mobility and/or self-care.
2. Severe core activity limitation means an individual often requires help with communication, mobility and/or self-care.
3. Moderate core activity limitation means an individual has difficulty with, but does not require help with, communication, mobility and/or self-care.
4. Mild core activity limitation means an individual has no difficulty with and does not require help with communication, mobility and/or self-care, but uses aids and equipment.

Source: ABS 2010d.

Males were more likely to have a core activity limitation as they aged: in 2009, 3% of males aged 0–4 years had a core activity limitation, compared with 90% of males aged 90 years and over.

Among males with a core activity limitation, severity differed by age group:

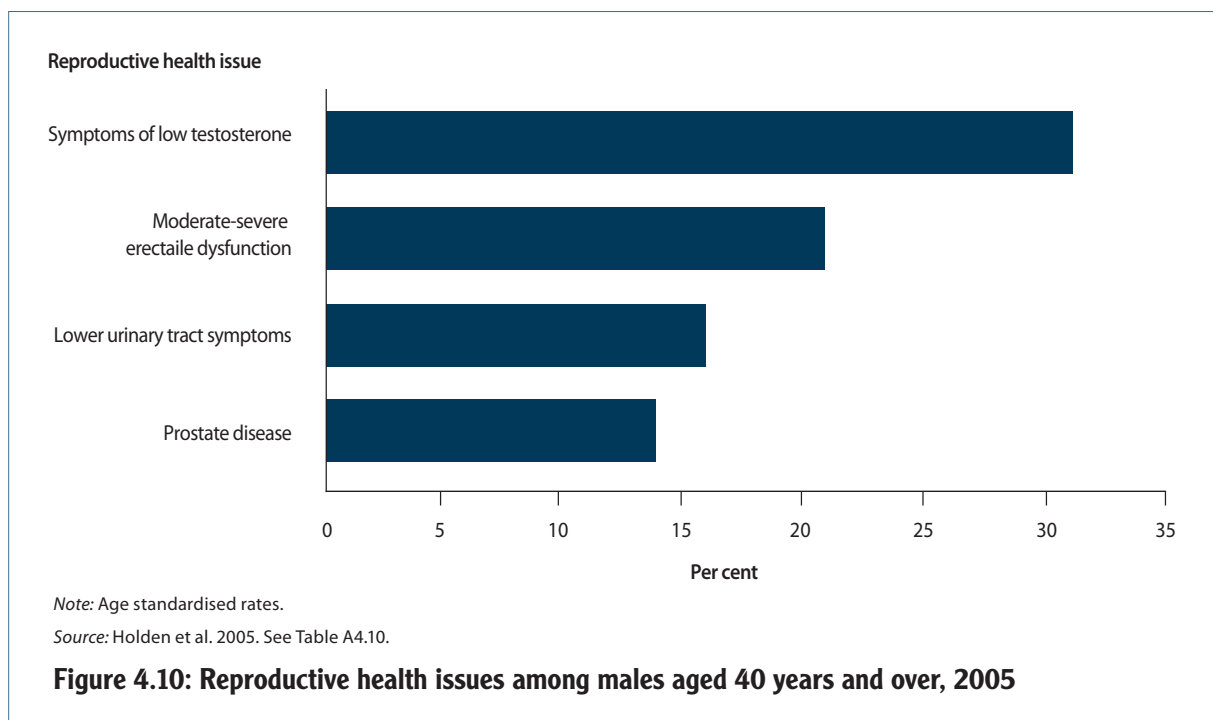
- younger males (0-14 years) were more likely to have a profound or severe limitation than a moderate or mild limitation
- those aged 15-34 years were more likely to have a mild limitation than a moderate, profound or severe limitation
- those age 35-54 years and 55-74 years were more likely to have a mild or moderate limitation than a profound or severe limitation
- older males (75 years and over) were more likely to have a mild or profound limitation than a moderate or severe limitation (Figure 4.9).



Male reproductive and sexual health

The reproductive health status of Australian males examined in this section includes measures of infertility, prostate disease, erectile dysfunction, low testosterone and concerns males have about developing and managing these conditions. Prostate and testicular cancers are also male reproductive health issues and are addressed separately in the section on male-specific cancers. The data presented are for males aged 40 years and over from the 2003 Men in Australia Telephone Survey run by Andrology Australia (Holden et al. 2005; Box 4.2).

In 2003, one-third of males surveyed reported they had at least one reproductive health issue, with the most commonly reported issues being symptoms of low testosterone, moderate-severe erectile dysfunction, lower urinary tract symptoms and prostate disease (Figure 4.10). The proportions of males reporting these issues increased with age.



Although not among the more commonly reported male reproductive health issues, it has been estimated that approximately 40% of all infertility among Australian couples can be attributed to male reproductive function (McLachlan and de Kretser 2001).

In 2003, among males 40 years and over:

- 8% reported they had tried unsuccessfully to have children
- 9% reported they had been tested for infertility.

Infertility can be medically induced through a vasectomy procedure as a means of birth control or family planning. In 2003, one-quarter (25%) of males aged 40 years and over reported they had undergone a vasectomy procedure.

Reproductive health issues are of concern to males. In 2003, 80% of males aged 40 years and over with no or mild erectile dysfunction were concerned about losing erectile function, nearly 60% were concerned about developing prostate cancer and around 20% were concerned with developing symptoms of low testosterone (colloquially 'male menopause').

Box 4.2: Andrology Australia

Andrology is the study of functions and diseases specific to males, especially of the reproductive organs. It is equivalent to gynaecology for women.

Established in 2000, Andrology Australia (the Australian Centre of Excellence in Male Reproductive Health) is the peak Australian authority on male reproductive health and associated conditions. It provides evidence-based information and resources to males and health professionals on a range of health issues. Current priority areas include prostate disease, testicular cancer, male infertility, use and abuse of testosterone treatments and sexual dysfunction. To raise awareness of these health issues and conditions, the Andrology Australia website provides free resources such as comprehensive fact sheets for consumers and guidelines for health professionals.

Visit: <www.andrologyaustralia.org>

The sexual health status of Australian males examined in this section includes measures of the prevalence of sexual problems and sexually transmissible infection rates.

The 2001–2002 Australian Study of Health and Relationships (ASHR) asked adults aged 16–59 years about their sexual health, behaviours, identity and their relationships (Smith et al. 2003). The study found that almost half (47%) of males had experienced some sexual difficulty lasting at least one month in the 12 months before the study: 25% had lacked interest in having sex, 24% had come to orgasm too quickly and 16% had felt anxious about their ability to perform sexually (Table 4.4). The most commonly-reported type of sexual difficulty differed by age group:

- males aged 16–19 years most commonly reported having felt anxious about their ability to perform sexually (25%) or having lacked interest in having sex (25%)
- males aged 20–29 and 30–39 years most commonly reported having come to orgasm too quickly (24% and 26%, respectively)
- males aged 40–49 and 50–59 years most commonly reported lacking interest in having sex (29% and 32%, respectively).

Table 4.4: Sexual difficulty among males, by age group, 2001–2002

Age group (years)	Sexual difficulty ^(a)	Per cent ^(b)
16–19	Felt anxious about ability to perform sexually	25.2
	Lacked interest in having sex	24.5
	Worried during sex whether body looked unattractive	21.7
20–29	Came to orgasm too quickly	23.6
	Lacked interest in having sex	19.5
	Felt anxious about ability to perform sexually	16.2
30–39	Came to orgasm too quickly	25.6
	Lacked interest in having sex	22.1
	Worried during sex whether body looked unattractive	16.7
40–49	Lacked interest in having sex	29.1
	Came to orgasm too quickly	24.0
	Felt anxious about ability to perform sexually	15.5
50–59	Lacked interest in having sex	31.7
	Came to orgasm too quickly	25.7
	Felt anxious about ability to perform sexually	20.8
Total	Lacked interest in having sex	24.9
	Came to orgasm too quickly	23.8
	Felt anxious about ability to perform sexually	16.0

(a) Sexual difficulty experienced for at least one month in the 12 months before the study.

(b) Proportion of males in each age group. Note that males may report more than one sexual difficulty.

Source: Richters et al. 2003.

Sexually transmissible infections

Sexually transmissible infections (STIs) are infectious diseases that are spread from person to person through sexual contact. Four important STIs in Australia are HIV, chlamydia, infectious syphilis and gonorrhoea. In 2009, chlamydia was the most common STI among Australian males, followed by gonorrhoea, infectious syphilis and HIV (Table 4.5).

Although not as common as chlamydia, males carry the burden of new cases of HIV and infectious syphilis. In 2009, more than 90% of all new cases of these STIs were diagnosed in males, compared with 41% of all new cases of chlamydia.

Table 4.5: New cases of selected sexually transmissible infections among males, 2009

Sexually transmissible infection	Number	Per cent ^(a)	Rate ^(b)
Chlamydia	25,634	40.9	234.5
Gonorrhoea	5,392	67.1	49.3
Infectious syphilis	1,177	91.0	10.8
HIV	274	94.8	2.5

(a) New cases among males as a percentage of all new cases.

(b) Crude rate of new cases among males per 100,000 males.

Source: NCHECR 2010.

Workplace injury and fatalities

The workplace can play an important role in whether males are healthy or not. Males are more likely to incur a workplace injury than females. According to the 2007–08 National Health Survey, just over 7% of males reported that they had a long-term condition as a result of an injury sustained in the workplace, compared with less than 3% of females.

The following section examines compensation claims data from Safe Work Australia for workplace injury and fatality claims accepted in 2007–08 (SWA NOSI 2011).

In 2007–08, over 131,000 workers' compensation claims were accepted for a workplace injury, disease or condition. Of these, nearly 89,000 (68%) were for Australian males—equivalent to 17 claims for every 1,000 male employees.

The manufacturing industry accounted for nearly one-quarter (23%) of all claims by male employees, with a rate of 28 claims per 1,000 male employees in that industry. While the transport and storage industry accounted for only 11% of claims by male employees, it had the highest rate of claims, at 29 claims per 1,000 male employees in that industry (Table 4.6). The agriculture, forestry and fishing industry, construction industry, and personal and other services industry were also ranked among those with the highest rate of claims among males.

Table 4.6: Workers' compensation claims among males, 2007–08

Industry ^(a)	Number	Per cent	Rate ^(b)
Transport and storage	9,845	11.1	29.4
Manufacturing	20,715	23.3	27.6
Agriculture, forestry and fishing	3,370	3.8	26.9
Construction	14,080	15.8	24.1
Personal and other services	3,635	4.1	20.7
<i>Other industries</i>	37,220	41.9	<i>n.a.</i>
Total, all industries	88,865	100.0	17.4

n.a. not available.

(a) Industries with highest rate of compensated claims are shown.

(b) Compensated claims per 1,000 males employed in the industry.

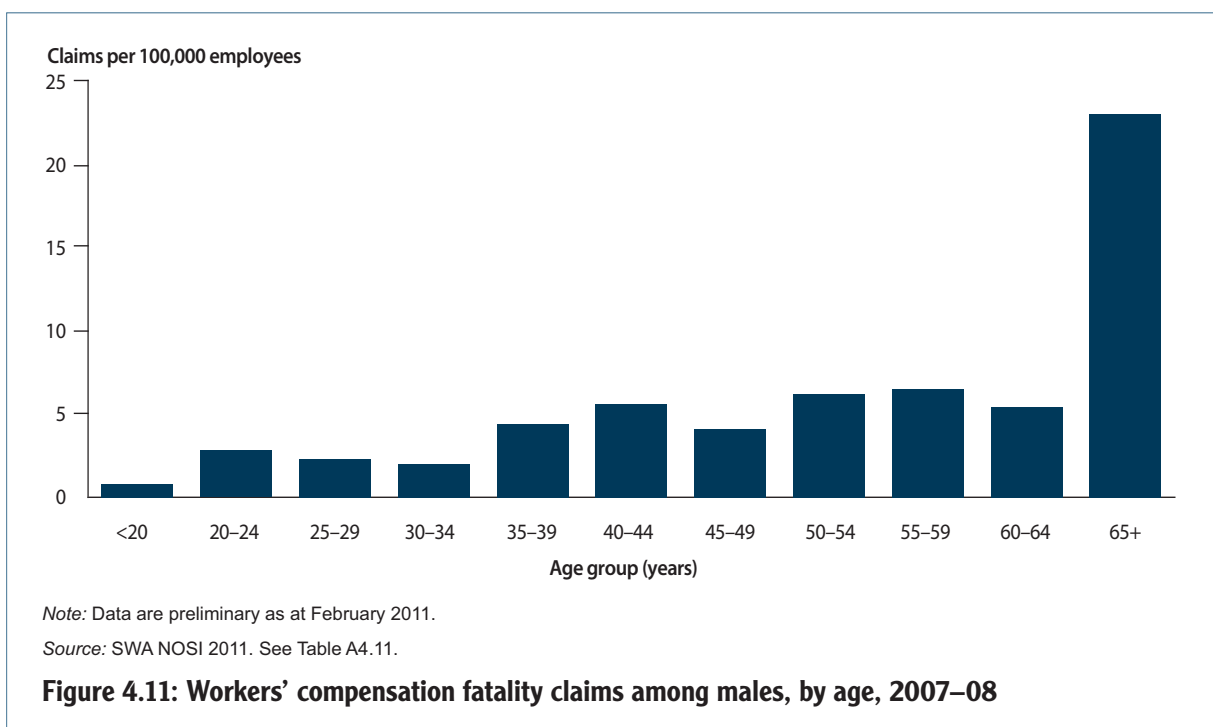
Note: Data are preliminary as at February 2011.

Source: SWA NOSI 2011.

The rate of claims among males generally increased with age: from 13 per 1,000 male employees aged less than 20 years, to 23 per 1,000 male employees aged 60–64 years. The rate of claims then decreased to 15 per 1,000 male employees aged 65 years and over.

In 2007–08, there were 218 compensated fatality claims for males, at a rate of 4 deaths for every 100,000 male employees in 2007–08. The transport and storage industry had both the highest proportion (31%) and the highest rate (20 per 100,000) of fatalities among male employees. Agriculture, forestry and fishing, construction, mining, and government administration and defence were also ranked among the industries with the highest rate of fatal claims among males.

The rate of fatality claims also generally increased with age: from 1 per 100,000 male employees aged less than 20 years, to 7 per 100,000 male employees aged 55–59 years (Figure 4.11). The rate of fatal claims then significantly increased to 23 per 100,000 male employees aged 65 years and over.





5 WHAT HEALTH SERVICES DO AUSTRALIA'S MALES ACCESS?

The Australian health system provides a wide range of preventive, treatment and palliative health care services (AIHW 2010a). Access to these services by all groups according to need is essential for the prevention and management of disease, and for the maintenance of good health. In some circumstances, existing and available health services may not be used by those who can substantially benefit. In other cases, appropriate services may not exist or may be inaccessible due to geography, financial constraints and time constraints, among other reasons.

This chapter examines health services used by Australian males, a population group which generally has much lower levels of health service use compared with Australian females. It presents a broad spectrum of data sources covering preventive health programs, general practice activity, emergency department services and in-patient hospital care. A number of specialised health services (mental health services, and alcohol and other drug treatment services) are also covered, although due to the scope of the report, many other types of specialised care (for example, reproductive health, hearing and palliative care services) have not been included.

Examining health service use—in terms of who, what, when, where and why—is an important facet of determining the health status of Australian males. Administrative and survey data sources can highlight the health needs and help-seeking behaviours of different groups and may be used to inform policies and programs which target inequalities in access. Understanding current patterns in health service use may also assist in predicting the future needs of the population.

Barriers to accessing health services

While administrative and survey data can help to reveal which population groups are, or are not, using particular health services, they cannot easily shed light on the barriers that limit or prevent some individuals and groups from using health services. These are important factors to understand when examining health and health care statistics.

A range of biological, psychological, sociological and structural reasons have been put forward to account for males' lower use of health services (Tudiver & Talbot 1999; Courtenay 2003; Galdas, Cheater & Marshall 2005; Smith, Braunack-Mayer & Wittert 2003). The following factors may act (and interact) as barriers to males' use of health services, particularly those aimed at early intervention:

- limited opening hours outside of work (such as evenings and weekends)
- a lack of male health professionals, and embarrassment in discussing sensitive, emotional or reproductive health issues with a female professional
- discomfort in the waiting room environment and in stating a reason for visiting
- social norms and values associated with a traditional view of masculinity—self-reliance, suppression of emotion and perseverance in the face of pain or discomfort.

These factors, among others, may mean that males are reluctant to seek help. When help is sought from a GP, consultations involving males are often shorter than those involving females and there may be a greater focus on physical problems with less disclosure of mental or emotional issues (Schofield et al. 2000; Britt, Valenti & Miller 2005).

More recently, the view that males are less interested in or concerned about their health has been challenged (Smith et al. 2008). It has been noted that, before seeking advice from a health professional, males will actively monitor their health and may use partners or friends as the primary source of help. This assistance may not be captured in administrative datasets or population surveys focused on official health service use.

Preventive health

Preventive health includes actions taken to reduce or eliminate the onset, causes, complications or reoccurrence of ill health and injury. Activities may involve immunisation, risk assessment and management, patient education and screening. While preventive health programs often occur within a medical context, innovative methods to engage population groups such as males have also been developed for other settings (for example, workplaces, social activities and community events) (see Box 5.1 and 5.2).

Box 5.1: Pit Stop

Pit Stop is a men's health screening tool delivered in non-medical settings throughout rural areas (for example, shows, field days and workplaces). Appealing to male interests by using a mechanical theme, Pit Stop uses a series of stations (non-invasive medical tests) to check the 'roadworthiness' and 'maintenance' needs of male participants. Trained health mechanics check or discuss participant's chassis (hip to waist ratio), oil pressure (blood pressure), fuel additives (alcohol consumption), exhaust (smoking), spark plugs (testicles) and shock absorbers (coping skills). If participants fail two or more stations, they are given a work order and encouraged to get a prompt tune-up with a health professional.

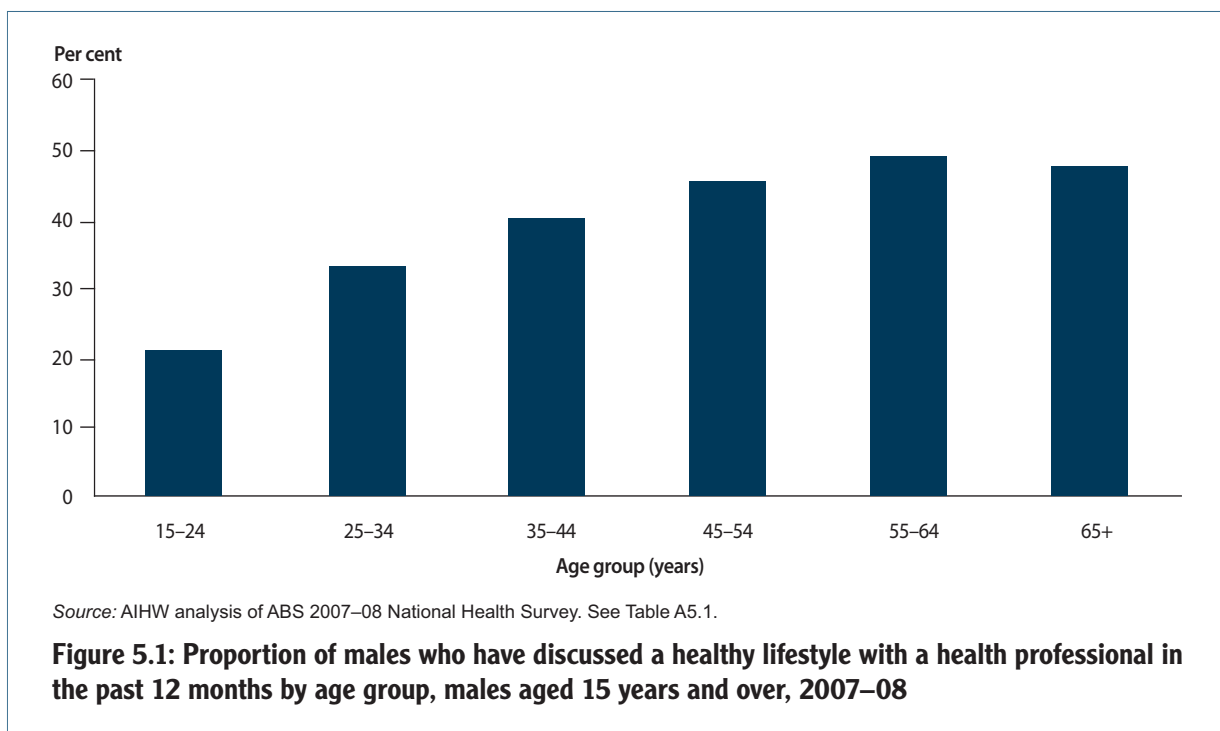
Evaluations of the program have shown a positive impact on male health. An evaluation of three regions in Western Australia found that Pit Stop had reached 40–50% of males with substantial health risks (PHCRIS 2005). Recall of Pit Stop performance was high and for 43% of participants, the experience had resulted in behavioural change and/or follow up with a health professional. Since its conception in Western Australia in 1999, the Pit Stop program has been adopted in a variety of forms in other states and territories around Australia.

Visit: <www.wacountry.health.wa.gov.au/pitstop>

Advice on a healthy lifestyle

The 2007–08 National Health Survey asked whether a person had discussed healthy lifestyle issues with a GP or other health professional in the 12 months before the survey interview. Discussing healthy lifestyle issues included talking about reducing or quitting smoking, drinking alcohol in moderation, increasing physical activity and improving their diet.

In 2007–08, 39% of males aged 15 years and over had discussed a healthy lifestyle with a health professional (slightly less than females at 42%) (ABS 2010f). This proportion generally increased with age (with the exception of males aged 65+ years)—from 21% of males aged 15–24 years to 49% of those aged 55–64 years (Figure 5.1). Males who reported that their health was poor or fair were more likely to have had such a discussion (62%) compared with those who reported their health as good (44%) or as very good or excellent (29%).



Recent health initiatives have been developed which encourage patients to discuss lifestyle changes with their general practitioner. The 45–49 year old health check was introduced to the Medicare Benefit Schedule in November 2006 to assist GPs in detecting and preventing chronic disease. This one-off check is available to males and females aged 45–49 years who have one or more identifiable risk factors for chronic disease, such as lifestyle or biomedical risk factors or a family history of chronic disease (Chan, Amoroso & Harris 2008). During the health check, the patient is asked about specific lifestyle factors and conditions such as smoking, diet, physical activity levels and depression, and measurements are taken for a set of biomedical characteristics such as body weight, blood pressure and blood cholesterol.

Despite overall heavier usage of GP services by females, there have not been substantial differences by sex in uptake of the 45–49 year health check. In 2009, more than 45, 119 45–49 year old health check claims were made by males (50% of all claims for this item) (Medicare Australia 2010).

Cancer screening and checks

Screening and check-ups can reduce illness and death from certain cancers—through early detection of cancers and pre-cancerous abnormalities and by triggering effective follow up treatment. National cancer screening programs are a form of population-based screening which involves the comprehensive testing of a target population within a certain age range. National screening programs have been proven to be effective and they have been established for bowel cancer (males and females), cervical cancer and breast cancer (females). Although there are no national population-based screening programs for cancers such as prostate and skin cancer, males can ask their health professional to carry out individualised screening tests.

This section looks at male participation rates in the National Bowel Cancer Screening Program, the proportion of males who received prostate cancer tests from a health professional, and the proportion of males who regularly check their skin for changes in freckles and moles—a potential sign of skin cancer.

Bowel cancer

The National Bowel Cancer Screening Program (NBCSP) began in 2006, screening people aged 55 and 65 years. The program was extended in 2008 to also include people aged 50 years. Eligible people are provided with a faecal occult blood test (FOBT) kit that allows a person's faeces to be tested for blood that may be a sign of cancer (AIHW 2010a).

More than 343,000 males aged 50, 55 or 65 years were invited to participate in the NBCSP in 2008. Of these, 126,054 completed the FOBT, resulting in a participation rate of 37% (AIHW & DoHA 2010). This was lower than the female participation rate of 43%. Among invited males, characteristics of higher NBCSP participation rates were: identifying as non-Indigenous, speaking English at home, having a severe or profound core activity limitation, living in an *Inner regional* or *Outer regional* area and older age.

Among males invited in 2008 who completed the FOBT, the positivity rate was 7.7%—1.4 times the rate of females (5.7%) (AIHW & DoHA 2010). In general, abnormalities (polyps, adenomas and cancers) were 1.4 times more likely to be diagnosed in males than females (AIHW & DoHA 2010). This is consistent with patterns in the incidence of bowel cancer found in the population.

Prostate cancer

Currently there is not a national screening program for prostate cancer as tests that may detect the disease have not been shown to be suitable for a population-based screening program (Cancer Council Australia 2010). The most common tests available are the prostate specific antigen (PSA) blood test and a digital rectal examination (DRE). The PSA test measures the amount of PSA in the blood which alerts health professionals to any abnormal growths in the prostate. In a DRE, a health professional inserts a gloved finger into the rectum to feel and assess the prostate gland.

An Andrology Australia study on the reproductive health of 6,000 males in 2003 found that 49% of males over the age of 40 years had had at least one PSA/DRE test (Holden et al. 2006). This study showed that some socio-demographic factors may impact on participation in testing, with males who were divorced or separated or working in a blue collar occupation less likely than other males to undergo testing.

Following the introduction of PSA testing in the late 1980s, there were sharp increases in the age-standardised incidence rate of prostate cancer as large numbers of previously undiagnosed prostate cancers were detected (AIHW 2010a). See Chapter 4 for further information on the incidence and mortality of prostate cancer.

Box 5.2: Men's Sheds

Men's Sheds have long been recognised as meeting places where men can find social support and camaraderie. This community-based initiative is aimed at providing an informal environment where males can talk to each other about issues of concern, including health and wellbeing, while working together on traditional 'shed' projects. Each shed is unique and caters to the needs of its individual members—projects can include restoring furniture, fixing machinery and small construction tasks for local schools and community groups.

Men's Sheds address issues of social inclusion by:

- providing a space to establish friendships and social networks
- fostering a sense of community and purpose within its members
- creating a forum where skills can be learned and shared.

The Men's Shed movement in Australia is growing, bringing with it increasing international attention. Sheds have been established in New Zealand, Ireland and England, and interest has been expressed in Men's Sheds or similar workshops in parts of Europe, Asia and the Pacific (AMSA 2009). It is estimated that in 2009, there were 40,000 individual users of Men's Sheds in Australia (DoHA 2010a).

In Australia, Men's Sheds have the opportunity, if they choose, to be affiliated with two not-for-profit organisations that provide a variety of services to individual Men's Sheds and their members. More information on these organisations can be found on their websites or by telephoning them:

- Mensheds Australia: <www.mensheds.com.au> or 02 9890 8351
- Australian Men's Shed Association: <www.mensshed.org> or 1300 550 009.

Men can also access The Shed Online which is an online social community for men founded by Beyondblue: the national depression initiative, The Movember Foundation and the Australian Men's Shed Association.

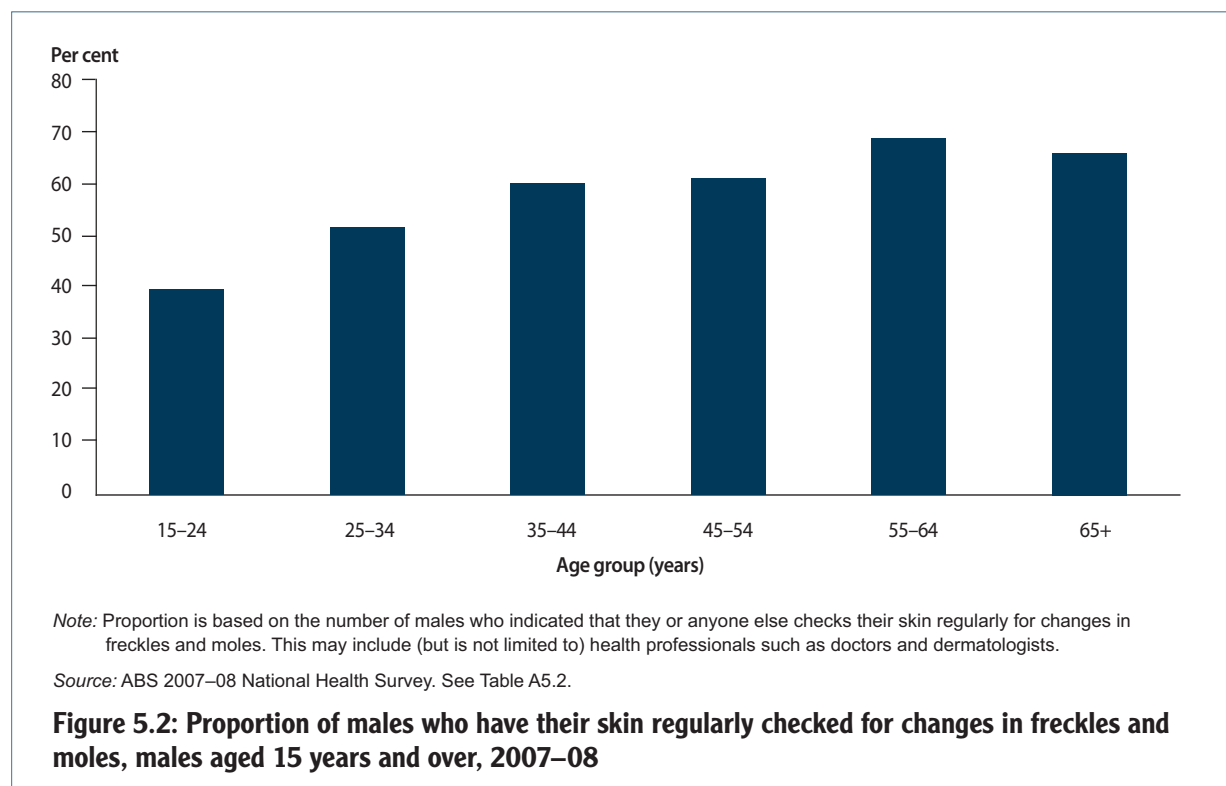
The Shed Online is a place for men to socialise, network, make friends and share skills. It aims to recreate the atmosphere of 'real life' Men's Sheds – a safe place where men can feel confident to discuss and exchange information. The Shed Online aims to foster a sense of community and build men's social networks.

As well as being a place for men to interact, The Shed Online provides men with information on health and wellbeing. Good health is based on many factors including feeling good about yourself, being productive and valuable to your community, connecting with friends and maintaining an active body and mind. Becoming a member of The Shed Online gives men a safe environment where they can find many of these things in the spirit of 'old-fashioned mateship'.

Skin cancer

Mass or population-based screening has not been established for melanomas and other skin cancers (Cancer Council Australia 2007). However, Australians, particularly those aged 40 and over, are encouraged to have all areas of their skin checked on a regular basis. This may involve self-examination or checks by a spouse, family member or health professional such as a general practitioner or dermatologist. Changes in the size and appearance of freckles or moles should receive appropriate follow-up examination and care.

There is a lack of data on the proportion of males who seek medical assistance for unusual changes in freckles and moles or those who have their skin checked by a health professional. From the 2007–08 ABS National Health Survey, it is estimated that over half (57%) of males aged 15 years and over regularly check their skin for changes in freckles and moles—slightly less than for females (64%). The proportion of males who regularly check their skin generally increases with age, with the exception of the 65 years and over age group (Figure 5.2).

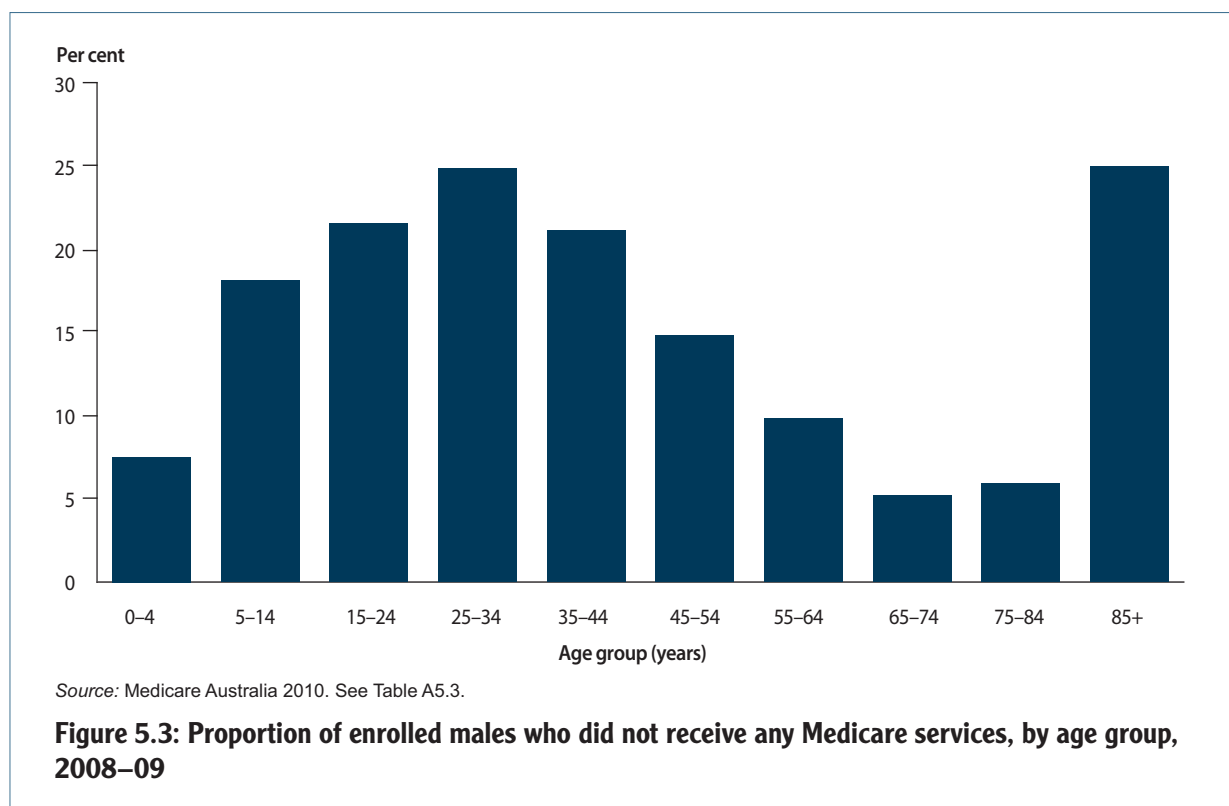


Use of Medicare

The Medicare Benefits Scheme (MBS) data records information on medical services and tests subsidised by the Australian Government. People who reside in Australia and are Australian or New Zealand citizens or hold a permanent visa are eligible for Medicare enrolment.

In 2008–09, more than 10 million males were enrolled in Medicare and received an average of 11 Medicare services in that year. Sixteen per cent of enrolled males were non-users (0 services), 5% were average users (11–12 services) and 3% were heavy users (51 or more services).

Males aged 25–34 years and 85 years and over were least likely to use Medicare services, with one-quarter of enrolled males in those age groups not receiving any Medicare services in 2008–09 (Figure 5.3).



General practice

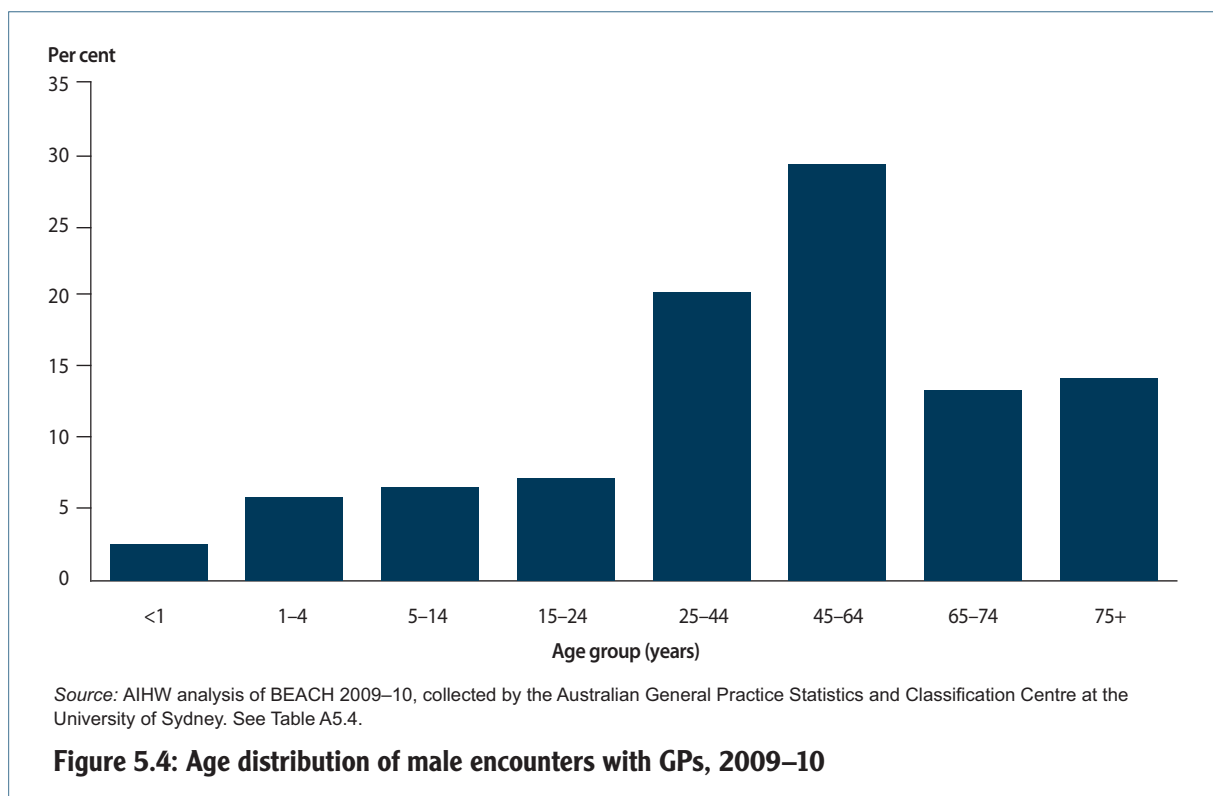
A visit to a general practitioner (GP) is often the first point of call for males (and females) with a health concern (RACGP 2006). There are many reasons for a male to visit a GP, including getting a prescription, having a general check-up or following the development of symptoms (Bayram et al 2003; RACGP 2006). As the front line of health care, GPs play an important role in monitoring and managing the physical and mental health of males.

This section presents data sourced from the Bettering the Evaluation and Care of Health (BEACH) survey. The BEACH is a continuous survey of a representative sample of GPs who report on consecutive patient encounters and record, among other things, the patients' reasons for coming to see the GP, the problems diagnosed and managed by the GP and the actions taken by the GP to manage those problems.

The 2009–10 BEACH dataset contains information on approximately 1,000 GPs and 100,000 patient encounters (Britt et al. 2010).

In 2009–10, there were more than 43,300 GP encounters with male patients, accounting for less than half (43%) of all GP encounters that year. Of those:

- Nearly one-quarter (23%) were with males aged less than 25 years
- One-fifth (20%) were with males aged 25–44 years
- Around one-third (29%) were with males aged 45–64 years
- Around one-third (29%) were with males aged 65 years and over (Figure 5.4).



In 2009–10, 64,844 problems were managed by GPs at male patient encounters, at a rate of nearly 150 problems managed for every 100 encounters (Table 5.1). Respiratory conditions were the problems most frequently managed, accounting for 15% of all problems managed, at a rate of 23 respiratory problems managed per 100 male patient encounters. Other commonly managed problems among males were: general and unspecified problems, cardiovascular conditions, skin conditions and musculoskeletal conditions. In terms of male-specific problems, problems related to the male genital system accounted for 2.9% of all problems managed, and 4.4 were managed per 100 male encounters.

Table 5.1: Most frequent problems managed by GPs at male patient encounters, 2009–10

Problems managed	Per cent problems managed	Problems managed per 100 encounters
Respiratory	15.3	22.9
General and unspecified	13.2	19.7
Cardiovascular	12.5	18.8
Skin	12.0	18.0
Musculoskeletal	11.0	16.4
<i>Subtotal</i>	<i>64.0</i>	—
Total	100.0	149.7

Note: Problems managed are grouped by ICPC-2 chapter.

Source: AIHW analysis of BEACH 2009–10, collected by the Australian General Practice Statistics and Classification Centre at the University of Sydney.

In 2009–10, at more than 90% of all male patient encounters at least one management activity was recorded. At least one medication was prescribed, advised or supplied at 64% of encounters, one or more pathology tests were ordered at 16% of encounters and the patient was referred at 12% of encounters with male patients.

Admitted patient care

Hospitals are an important part of the Australian health system—public and private facilities provide a range of services to a large number of Australians every year. This section covers services provided to admitted patients rather than services that do not require formal admission, such as emergency department services or outpatient clinics. Patients may be admitted for emergency or elective care involving medical or surgical procedures. These may be provided on a same-day basis or involve a stay in hospital of one night or longer.

An 'admitted patient' is defined as a patient who undergoes a hospital's formal admission process (AIHW 2010e). Statistics on admitted patients are compiled when patients complete an 'episode of care' and are therefore considered to have 'separated' from that episode. A 'separation' can be:

- a total hospital stay, from admission to discharge, transfer or death
- a portion of a hospital stay, starting or finishing with a change in the care type, such as from acute care to rehabilitation.

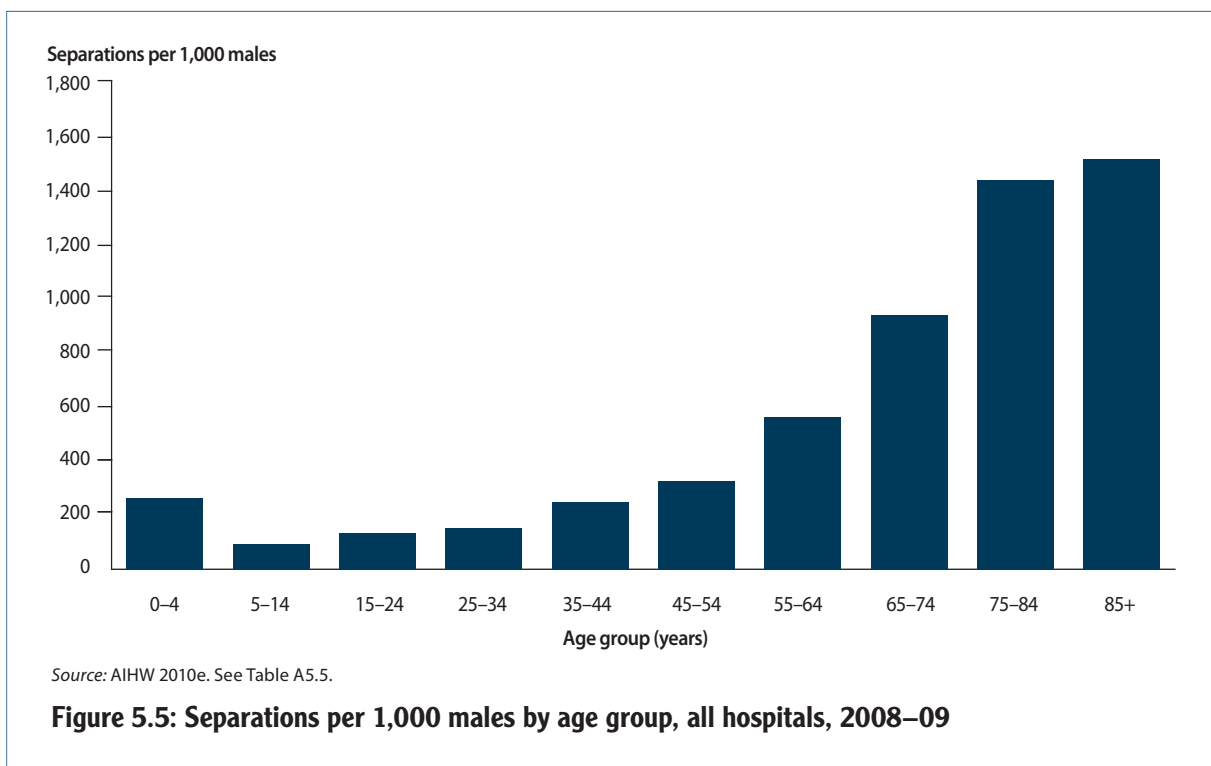
For each separation, patients are assigned a principal diagnosis, which describes the main reason for the patient's episode of care. While this section covers only principal diagnoses, additional diagnoses may also be recorded.

In 2008–09, there were 8.2 million separations recorded in Australian hospitals. Males accounted for 3.9 million (47%) of these, equivalent to 12.1 million patient days (AIHW 2010e).

Separation rates (per 1,000 males) generally increased with age (with the exception of young children) with the highest rates found among males aged 85 years and over (Figure 5.5). Among the 3.9 million male separations in 2008–09:

- 8% were for boys (0–14 years)
- 40% were for older men (65 years or over).

Between 2004–05 and 2008–09, separation rates among males increased, with the most marked increases in separations being for males aged 0–14 years and those aged 55–84 years (AIHW 2010e).



The conditions that males are treated for in hospital provide an indication of the health needs of this population group and are recorded in the National Hospital Morbidity Database for the information of consumers, researchers and planners. This section looks firstly at the most common principal diagnoses among males and then at hospitalisations for a particular group of diagnoses called external causes, in which males are over-represented.

In 2008–09, care involving dialysis was the most common reason for hospitalisation among males, accounting for 16% of all male separations, and up to 26% among males aged 75–79 years.

The other most common reasons for hospitalisation differed by age group (Table 5.2). When 'care involving dialysis' was excluded, the most common cause was:

- disorders related to short gestation and low birth weight among infants (less than 1 year old)
- asthma among boys aged 1–4 years
- fracture of forearm among boys aged 5–14 years
- embedded and impacted teeth among younger males aged 15–24 years and 25–34 years
- contraceptive management among males aged 35–44 years
- pain in throat and chest among males aged 45–54 years
- care involving use of rehabilitation procedures among older males aged 55–64 years, 65–84 years and 85 years and over.

Table 5.2: Three most common reasons for hospitalisation^{(a)(b)} among males, by age group, 2008–09

Age group (years)	Reason for hospitalisation ^(c)	Number ^(d)	Per cent ^(e)
< 1	Disorders related to short gestation and low birth weight (nec)	11,900	13.4
	Acute bronchiolitis	8,200	9.2
	Live born infants according to place of birth	6,600	7.5
1–4	Asthma	8,100	7.8
	Nonsuppurative otitis media	6,800	6.6
	Chronic diseases of tonsils and adenoids	6,000	5.8
5–14	Fracture of forearm	8,100	6.1
	Chronic diseases of tonsils and adenoids	7,500	5.6
	Dental caries	6,400	4.8
15–24	Embedded and impacted teeth	17,700	8.4
	Fracture at wrist and hand level	5,900	2.8
	Fracture of skull and facial bones	5,200	2.5
25–34	Embedded and impacted teeth	6,500	2.8
	Schizophrenia	6,300	2.7
	Internal derangement of knee	5,600	2.4
35–44	Contraceptive management	8,900	2.6
	Pain in throat and chest	8,500	2.4
	Internal derangement of knee	7,500	2.2
45–54	Pain in throat and chest	12,700	2.6
	Care involving use of rehabilitation procedures	8,400	1.7
	Internal derangement of knee	8,100	1.7
55–64	Care involving use of rehabilitation procedures	16,100	2.3
	Pain in throat and chest	13,300	1.9
	Malignant neoplasm of prostate	11,100	1.6
65–84	Care involving use of rehabilitation procedures	48,000	7.5
	Other cataract	39,500	6.2
	Other malignant neoplasms of skin	26,800	4.2
85+	Care involving use of rehabilitation procedures	12,100	6.2
	Other malignant neoplasms of skin	6,500	3.3
	Heart failure	5,800	3.0
Total	Care involving use of rehabilitation procedures	94,600	2.5
	Pain in throat and chest	57,700	1.5
	Other cataract	55,700	1.4

(a) Separations for which the care type was reported as Newborn with no qualified days and records for *Hospital boarders* and *Posthumous organ procurement* have been excluded.

(b) Most common reason for hospitalisation excludes 'care involving dialysis', 'other medical care' and 'other'.

(c) Principal diagnosis based on 3-character ICD-10-AM grouping.

(d) Rounded to nearest 100.

(e) Per cent of all hospital separations for age group.

Source: AIHW National Hospital Morbidity Database 2008–09.

In 2008–09, there were 498,300 male hospitalisations with an external cause of injury or poisoning, accounting for around 13% of all male hospitalisations (AIHW 2010e). Among males, the most common external cause diagnoses were:

- complications of medical and surgical care (176,200 separations)
- falls (102,800)
- exposure to mechanical forces (66,400)
- transport accidents (48,400).

While there were fewer hospitalisations, intentional self-harm is of considerable public interest and policy relevance due to its substantial social and economic cost. In 2008–09, there were around 12,000 male separations due to intentional self-harm. The greatest number were among males 25–34 years (3,040 separations) followed by 35–44 years (2,900 hospitalisations) (AIHW 2010e). See Chapter 4 for data on deaths from intentional self-harm.

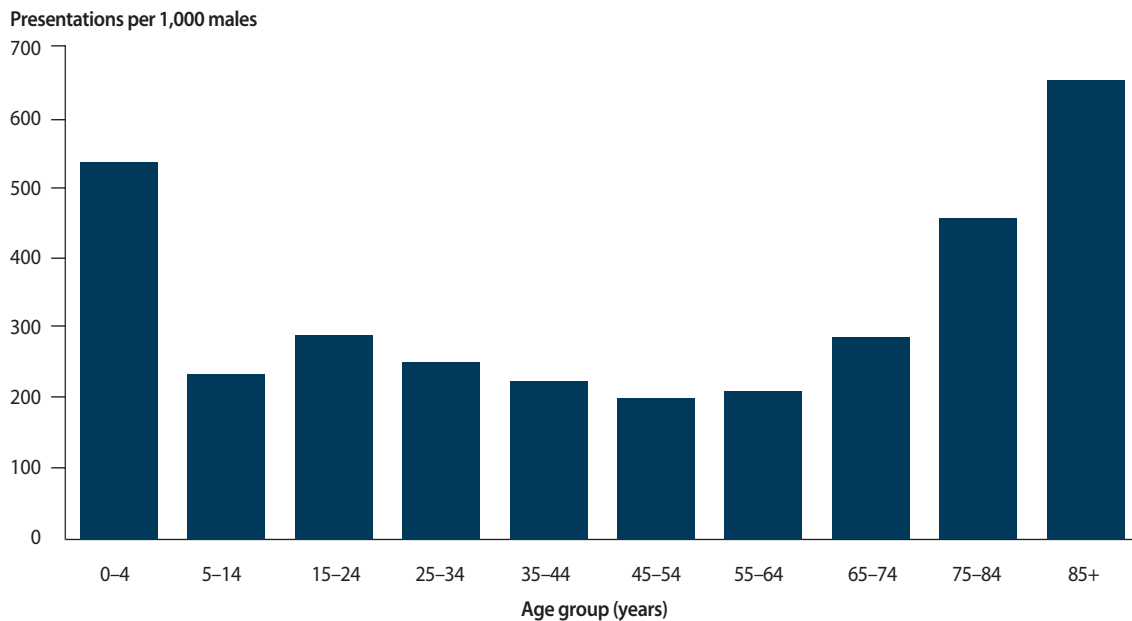
Emergency department services

Hospital emergency departments provide care for patients who may have an urgent need for medical or surgical care. Emergency departments may also provide services for patients returning for further care (such as the removal of bandages or stitches) or for patients waiting to be admitted.

The National Non-admitted Patient Emergency Department Care Database is a compilation of data for emergency department presentations in public hospitals. In 2008–09, this database provided detailed information for about 80% of all hospital accident and emergency occasions of service.

In 2008–09, there were over 5.7 million emergency department presentations in public hospitals for which data on sex was available. Males accounted for 3.0 million of these presentations—just over half (52%) (AIHW 2010e). Unlike admitted patient care which generally increases with age, emergency department presentations were highest among males aged 0–4 years and 85 years and over, and lowest among those in middle age (Figure 5.6). Among the 3.0 million male emergency department presentations in 2008–09:

- 24% were for boys (0–14 years)
- 28% were for young males (15–34 years)
- 17% were for older males (65 years or over).



Source: AIHW 2010e. See Table A5.6.

Figure 5.6: Non-admitted male patient emergency department presentations by age group, public hospitals, 2008–09

Mental health services

As discussed in Chapter 4, mental health is essential to the overall health of Australian males. It is estimated that in 2007–08, almost half (48%) of males had experienced a mental disorder at some stage in their lifetime. Some (but not all) of those who experience a mental health problem will seek the help of a GP. According to estimates from the 2008–09 BEACH survey, 11% of all GP encounters with male patients involved a mental health-related problem (AIHW 2010f).

A wide variety of public and private providers operate mental health services in Australia and fund initiatives such as Headspace (Box 5.3) and Beyondblue.

Box 5.3: Headspace

Headspace is Australia's National Youth Mental Health Foundation. Established in 2006 and funded by the Australian Government, Headspace aims to deliver improvements in the mental health, social wellbeing and economic participation of young Australian males and females aged 12–25 years (Headspace 2011). Headspace does this using a three-pronged approach:

- a youth-friendly website providing information about mental health and wellbeing issues and detailing relevant services across Australia
- 30 'one-stop shops' catering to a wide range of health needs (such as drug and alcohol services, sexual health, mental health, and education and employment services)
- the collation of an international evidence base for best practice in the treatment of mental health and substance use disorders in young people.

Visit: <www.headspace.org.au>

Males were less likely than females to use many of the mental health services summarised in Table 5.3. For example, males made up a smaller proportion of:

- subsidised GP services related to mental health (36%), psychologist services (36%) and psychiatrist services (46%)
- ambulatory-equivalent hospital separations related to mental health (47%).

However, males made up a greater proportion of:

- government-operated community mental health services contacts (55%)
- residential mental health services care episodes (57%).

The proportion of emergency department occasions of service specifically related to mental health were generally equivalent between males and females.

Table 5.3: Summary of mental health-related service use, latest year of data available

Mental health service	Year	Number ^(a)	Proportion of service use by males (%)
Subsidised mental health-related services			
General practitioner services	2008–09	566,100	35.4
Psychiatrist services	2008–09	769,900	39.1
Psychologist services	2008–09	854,000	34.3
Other allied mental health services	2008–09	48,900	32.6
Mental health-related emergency department services ^(b)	2007–08	81,700	50.2
Ambulatory-equivalent mental health-related hospital separations ^(c)	2007–08	48,800	40.1
Admitted patient mental health-related hospital separations	2007–08	100,200	47.1
Community mental health service contacts ^(d)	2007–08	3,407,400	54.5
Residential mental health care episodes ^(e)	2007–08	1,900	57.4

(a) Rounded to nearest 100.

(b) Mental health-related emergency department occasion of service has a principal diagnosis that falls within the Mental and behavioural disorders chapter (Chapter 5) of ICD-10-AM. An occasion of service refers to the period of treatment or care between when a patient presents at an emergency department and when the non-admitted emergency department treatment ends.

(c) Ambulatory-equivalent mental health-related separations involve same-day separations where no procedure or other intervention was recorded, the mode of admission did not include a care type change or transfer, and the mode of separation did not include a transfer (to another facility), a care type change, the patient leaving against medical advice or death.

(d) Community mental health care refers to government-operated specialised mental health care provided by community mental health care services and hospital-based ambulatory care services, such as outpatient and day clinics.

(e) Residential mental health care is focused on providing rehabilitation, treatment or extended care for live-in patients in a domestic-like environment.

Source: AIHW 2010f.

Alcohol and other drug treatment services

Alcohol and other drug treatment services may include detoxification and rehabilitation programs, information and education courses, pharmacotherapy and counselling treatments. As discussed in Chapters 3 and 4, alcohol and illicit drug use are health risk factors and may be associated with mental health disorders. In 2007, 10% of males had consumed alcohol at risky or high risk levels, and 16% had used illicit drugs in the previous 12 months. In the same year, 7% of males with a current (12-month) mental health disorder had a substance use disorder (ABS 2008d).

Data in this section are based on the Alcohol and Other Drug Treatment Services National Minimum Data Set and cover completed treatment episodes—that is, a contact between a client and a treatment agency that has a defined start and end date.

In 2008–09, males accounted for over two-thirds (67% or 96,000) of all alcohol and other drug treatment episodes (AIHW 2010g). The proportion of all treatment episodes provided for males differed according to the principal drug of concern: males accounted for 80% of episodes where ecstasy was the principal drug of concern and 76% of episodes for cocaine, but only 50% of episodes relating to benzodiazepines (tranquilisers and sleeping pills) as the principal drug of concern.

The median age of males who sought help for substance use disorder was 32 years—although this was older when alcohol was the principal drug of concern (36 years) and younger when ecstasy was the principal drug of concern (22 years).

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