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Around 53% of Australia's population (12.1 million people) are aged 25–64, and are classified as being of working age. During this life stage, many people experience major life events and transitions such as establishing themselves in the workforce, purchasing a home, raising a family, changing careers and retirement planning. Restrictions to their health can reduce their earning capacity and affect how these life events are experienced. Life events can also impact on health through, for example, stress or workplace injuries. It is also during working age that many long-term health conditions emerge and behaviours and patterns that can influence longevity or health in later years are established.

The aim of this article is to present an overview of the health of Australia's working-age population (aged 25–64) and the factors that influence it. Because health issues faced by the working-age population change between the ages of 25 and 64, this article explores patterns in the health and lifestyles of people aged 25–44 and 45–64 separately. Measures of health, such as long-term health conditions, causes of death and self-assessed health are investigated, along with behavioural risk factors and social and economic factors related to employment, housing and family. The relationship between work and physical and emotional wellbeing is also explored.

The health of people of working age is important because it affects not only them, but their families, workplaces and society in general. Gaining a better understanding of this group's health and lifestyles can lead to improvements in their wellbeing and to overall improvements in productivity and planning for future health needs.

Policy development for, and research into, the health and wellbeing of working-age Australians are sometimes approached from the viewpoints of men's health and women's health, or people studying or in the workforce. Such approaches, however, may miss the long-term conditions, behavioural risk factors and life stressors common to all people at this age. A more holistic approach to this age group integrates the effects of life events and transitions experienced during these ages on physical and emotional wellbeing. It also recognises the diversity of experiences within this age group, and how different life paths can have different effects on health.

# Australians aged 25–44

During the ages of 25–44, many Australians are likely to be establishing themselves in the workforce, forming long-term relationships and buying their first home. It is also the age when they may start a family and may adjust their working arrangements to care for their children. Others might be studying while working to extend their skills and improve their employment prospects. At the same time, there are Australians in this age group who face barriers and are unable to find work or afford a home of their own, or they may be under housing stress. This can create a cycle whereby these challenges affect their physical and emotional wellbeing, which in turn can affect their work engagement.

### **Milestones and transitions**

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Employment rates are at their highest in this age group. Around 8 in 10 Australians (79%) aged 25–44 were employed according to the 2011 Census, and men in this age group were almost twice as likely as women to work full time (71% compared with 38%). Unemployment for both men and women in this age group was 4%; however, women were less likely to be in the labour force than men (76% compared with 91%) since many women have children at this age and, as outlined later, are more likely to be caring for children than men. As earning capacity increases, another important milestone for people in this age group is the purchase of a home. Six out of 10 people (61%) aged 25–44 in 2011 owned or were purchasing their home. Having a secure home has been found to be beneficial for both physical and mental health (Foster et al. 2011).

Long-term relationships and child rearing are also important aspects of life during this period. In 2011, marriage rates were highest among men and women aged 25–29, but Australians are tending to marry later, as indicated by more men and women marrying in their thirties and early forties in 2011 compared with 1991 (ABS 2012b).

Figures from 2011 indicate that, on average, Australian women were 28 when they had their first baby. However, the proportion of women having children later in life is increasing. The proportion of women aged 35 and over giving birth to their first child increased from 11% in 2001 to 14% in 2011 (Li et al. 2013). In 2011, Australia's fertility rate was 1.92 children per woman (ABS 2013c).

Women aged 25–44 are more likely to be caring for children than men. In the 2 weeks before the 2011 Census, 58% of women spent time caring for a child or children aged under 15 without pay, compared with 43% of men. Of these women, 86% were caring for their own child or children, as were 91% of these men. Women of this age group were also more likely than men to provide care or assistance to family members who have a disability, long-term illness or problems due to old age (12% compared with 8%).

Caring responsibilities can weigh heavily on people's emotional and physical health and wellbeing. Carers often need to reduce their working hours or leave the workforce completely due to their responsibilities and this reduction in income can affect their savings and superannuation, while also limiting their career prospects (Austen 2013; Nepal et al. 2008). In addition to the change in their financial circumstances, about one-third (32%) of informal carers in 2009 reported that their wellbeing had changed due to their caring role, specifying weariness, depression, stress and sleep interruption as some of the adverse effects they experienced (AIHW 2013a).

While this period is characterised by first-time marriages and starting a family, it is also the time when most divorces occur. People aged 40– 44 had the highest percentage of divorces granted in 2011, with about 17% of men and women in this age group being granted a divorce. Almost half of all divorces (48%) in 2011 involved couples with children (ABS 2012b). A long-term Australian study found that the end of marriage, either through separation or widowhood, significantly worsened the mental health of both men and women (Hewitt et al. 2012).

The proportion of lone-person households is also increasing in Australia, which can mean that these people have fewer financial and emotional supports, which could have a negative impact on their health (Kharicha et al. 2007). The ABS has also projected that more men and women between the ages of 25 and 49 will be living alone in 2031 than in 2006 (ABS 2010).



Around 10% of people aged 25–44 reported that they had a disability in the ABS 2012 Survey of Disability, Ageing and Carers, and of these people, around two-thirds (67%) had a disability that restricted their employment participation (ABS 2013d). People with employment restrictions may be restricted in the type of work that they can do or the number of hours they can work. They may also require ongoing assistance at work or modifications to their work environment.

## How healthy are Australians aged 25-44?

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Around 6 in 10 Australians (61%) aged 25–44 rated their health as excellent or very good in the 2011–12 Australian Health Survey (AHS), and only 10% considered their health to be fair or poor. The remaining 29% rated their health as good. The same proportion of young adults (aged 15–24) rated their health as excellent or very good (61%). Men and women in the 25–44 age group were similar to each other in the way they assessed their health (Figure 6.22). There was a difference, however, between men and women in levels of psychological distress experienced in the 4 weeks before the 2011–12 AHS. About 9% of men aged 25–44 were assessed as having high or very high levels of psychological distress, compared with 13% of women of the same age (ABS 2013a). These levels were similar to those found in the 2007–08 National Health Survey (ABS 2009b).





The most common chronic health conditions reported by this age group in the 2011–12 AHS were vision problems, hay fever and allergic rhinitis, and back pain—the same as in the ABS 2007–08 National Health Survey (ABS 2009b). About 1 in 4 Australians aged 25–44 (25%) were short-sighted and almost 1 in 8 (12%) were long-sighted. Hay fever and allergic rhinitis affected 22% of this age group, and around 15% had back pain, back problems or disc disorders. Mood problems such as depression also affected 12% of this age group and anxiety affected 5% (see Chapter 4'Chronic disease—Australia's biggest health challenge').

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Although people aged 25–44 experience fewer long-term health conditions than older age groups, they can put themselves at a greater risk of developing these conditions later in life if their lifestyles and behaviours are unhealthy (see Chapter 5' Behavioural risk factors'). For example, smoking and not exercising can increase their risk of developing high blood pressure, heart disease and some types of cancer. Figure 6.23 shows that key behavioural risk factors are common in men and women aged 25–44 according to the 2011–12 AHS.





Inadequate fruit and vegetable consumption was very common among this age group. The NHMRC recommends that adults consume 2 serves of fruit and 5 serves of vegetables each day. According to the 2011–12 AHS, 96% of men and women aged 25–44 did not meet those requirements. Compared with other age groups, adequate fruit and vegetable consumption improved with age from 4% in people aged 18–24 to 8% in people aged 65–74.

Low levels of exercise were also common in this age group, as 60% of men and 70% of women reported that they were sedentary or undertook low levels of exercise in the week before the survey. Compared with other age groups, men aged 25–44 were less physically active than those aged 24 and under, but more physically active than older age groups. For men, sedentary or low levels of exercise increased with age from 45% in those aged 15–24 to 69% in those aged 65–74. There was a more gradual change for women from 69% in those aged 15–24 to 74% in those aged 65–74.

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Poor nutrition and low levels of exercise may have an impact on the high levels of overweight and obesity in this age group, which were 70% for men and 49% for women. Findings from the 2011–12 AHS suggest that most of the increase in men's body mass index (BMI) occurred around the ages of 25–34; however, for women the increase in BMI was more gradual across the decades. Rates of overweight and obesity have increased for men in this age group from 66% in 2007–08 to 70% in 2011–12; however, for women the rates were similar (50% in 2007–08 compared with 49% in 2011–12). On a positive note, rates of smoking have fallen from 2007–08 when 24% of people aged 25–44 were daily smokers, compared with 20% in 2011–12 (ABS 2009b, 2013a).

Risky alcohol use in this age group was more common among men than women. Around 3 in 5 men (61%) reported that they had consumed alcohol at short-term risky levels (more than 6 standard drinks in a single episode) in the 12 months before the 2011–12 AHS, compared with 2 in 5 women (43%). Long-term risky alcohol consumption (regularly drinking more than 4 standard drinks per day) was also more common among men than women aged 25–44 (14% compared with 10%).

Despite the prevalence of risk factors in this age group, the majority of people aged 25–44 are yet to develop the chronic conditions that these risk factors can bring about. This is evident in the leading causes of death seen in this age group. Deaths among people aged 25–44 are predominantly due to injuries resulting from suicide, transport accidents or drug overdoses.

People aged 25–44 made up only 3.5% of all deaths in Australia in 2012 despite making up 29% of the total population (ABS 2013c). Men in this age group were almost twice as likely to die as women (104 deaths per 100,000 in 2012 compared with 54 deaths per 100,000). In 2011, suicide was the most common cause of death for both men and women, and accidental poisoning—from, for example, an overdose or unintentional contact with chemicals—was in the top 3 causes for both sexes (Table 6.1). The leading causes of death for women in this age group have remained similar since 2006; however, for men there has been a significant increase in the proportion of deaths caused by accidental poisoning in the same period (up 69%), and significant falls in the proportion of deaths caused by car accidents (down 30%) and coronary heart disease (down 16%) (AIHW analysis of National Mortality Database).



#### Table 6.1: Leading causes of death<sup>(a)(b)</sup> in people aged 25–44, by sex, 2011<sup>(c)</sup>

Rank	Men	No.	%	Women	No.	%
1	Suicide (X60–X84)	672	19.9	Suicide (X60–X84)	199	11.0
2	Accidental poisoning (X40–X49)	406	12.0	Breast cancer (C50)	173	9.6
3	Coronary heart disease (120–125)	243	7.2	Accidental poisoning (X40–X49)	103	5.7
4	Car accident (V40–V49)	138	4.1	Diseases of the liver (K70–K77)	63	3.5
5	Other forms of heart disease <sup>(d)</sup> (I30–I52)	118	3.5	Car accident (V40–V49)	54	3.0

(a) Based on ICD-10 groupings.

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(b) Excludes the category 'Event of undetermined intent' as these deaths are subject to a revision process by the ABS upon further information from the coroner.

(c) Deaths registered in 2011 are based on the preliminary version of cause of death data and are subject to further revision by the ABS.

(d) Includes diseases of the myocardium (heart muscle), endocardium (lining of the heart), heart valves and pericardium (membrane covering the heart).

Source: AIHW National Mortality Database.

## Australians aged 45–64

In the second half of their working lives, Australians are likely to be more settled in their family lives and established in their careers. By this age, most women have had their children and may have adjusted their work hours in response. However, both men and women in this age group may be contemplating or embarking on a career change, changing their working hours or planning for retirement. Others may retire from work before the age of 64, while some will elect to continue working beyond 65.

Australians aged 45–64 who have difficulty finding work or are experiencing changes to their family lives due to divorce or remarriage may face challenges such as financial stress or psychological distress that could have a negative effect on their health.

### **Milestones and transitions**

For some people, the range of major life transitions in the second half of working age can be less disruptive than in the first half; however, changes such as children leaving the family home and caring for elderly parents can affect their physical and mental wellbeing.

According to the 2011 Census, the proportion of employed people aged 45–64 was lower than for those aged 25–44 (71% compared with 79%). This is due to more people in this age group leaving the labour force, because of disability or retirement. At the same time, fewer Australians aged 45 and over got married, and fewer divorced as they got older. Around 16 out of 1,000 married men and women, respectively, aged 45–49 were granted a divorce in 2011, compared with 7 out of 1,000 married men and 4 out of 1,000 married women aged 60–64. Older men have higher rates of divorce than older



women because they are more likely than older women to remarry and remarriages tend to be less stable than first marriages (Weston & Qu 2013). It should also be noted that divorce rates do not present the complete picture of relationship breakdowns as they do not capture the number of de facto relationships that dissolve.

Caring responsibilities at 45–64 also differ to those during the ages of 25–44. Around 1 in 4 people aged 45–64 (27%) spent time caring for a child or children without pay in the 2 weeks before the 2011 Census, compared with 1 in 2 people aged 25–44 (51%). However, people in the older age group were more likely to be caring for other children, such as grandchildren, than people aged 25–44 (41% compared with 8%). Research shows that more Australian grandparents are caring for their grandchildren since parents feel more comfortable leaving their children with a trusted relative and find them more flexible and less expensive than formal child care (Jenkins 2010). In some cases, grandparents may look after their grandchildren due to circumstances in their children's lives, such as relationship breakdowns, mental health problems, substance abuse, death or incarceration.

While people aged 45–64 were less likely to be caring for children than those aged 25–44, they were more likely to be providing care or assistance to a partner or family members who had a disability, long-term illness or problems due to old age (17% of people aged 45–64 compared with 10% of people aged 25–44). About 1 in 5 women aged 45–64 (21%) provided this type of assistance compared with about 1 in 8 men (13%). As mentioned earlier, caring responsibilities can have a negative impact on the physical and mental wellbeing of carers.

Around 23% of people aged 45–64 reported that they had a disability in the ABS 2012 Survey of Disability, Ageing and Carers, and of these people, 69% had a disability that restricted their employment participation (ABS 2013d).

Another major transition faced by females in this age group is menopause, which is the end of the reproductive years marked by the ending of menstruation. This generally occurs between the ages of 45 and 55. Symptoms may include flushes, aches and pains, headaches, irritability, loss of sex drive and difficulty sleeping.

### How healthy are Australians aged 45-64?

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Australians aged 45–64 were 1.7 times as likely to rate their health as fair or poor compared with those aged 25–44 in the 2011–12 AHS, suggesting that there is some deterioration of health as people of working age get older. The proportion of this age group assessing their health as fair or poor in 2011–12 was similar to the proportion in 2007–08 (17% compared with 18%). Figure 6.24 shows that there were similarities in the way that men and women aged 45–64 tended to rate their health. Levels of psychological distress were the same for both age groups, with 9% of men and 13% of women having high or very high levels in the 4 weeks before the survey (ABS 2013a). In comparison, 11% of men and 15% of women aged 45–64 had high or very high levels of psychological distress in 2007–08 (ABS 2009).





Although self-assessed physical health tends to decrease with age, self-assessed mental health does not follow this pattern (AIHW 2010)—and both are influenced by socioeconomic status (SES). Data from the Australian Longitudinal Survey of Women's Health (ALSWH) show that among ALSWH participants aged 45–50, *physical health* was poorer among those of low SES at the start of the study and declined more quickly over the following 15 years than among those of higher SES. *Mental health* in this cohort was poorer at the start for women of low SES and improved more slowly in ensuing years among those of low SES compared with women of high SES (Williams et al. 2013).

Chronic diseases are more common in the second half of working life than in the first, and this can have an impact not only on people's health, but also on their working and earning capacity, and ability to care for other family members. As with the younger group, vision problems (90%) and back pain (20%) were in the top 3 most common long-term health conditions experienced by people aged 45–64, according to results from the 2011–12 AHS. The proportion of people who reported long-sightedness was much higher in people aged 45–64 than those aged 25–44 (57% compared with 12%).

Hay fever and respiratory conditions (such as asthma and sinusitis) were less prominent in this older age group, with high blood pressure (17%) and osteoarthritis (15%) being more prominent.

Vision problems, back pain, high blood pressure and osteoarthritis were also the most commonly reported chronic conditions among people aged 45–64 in the earlier 2007–08 National Health Survey. About 14% of the 45–64 age group reported mood problems such as depression in 2011–12, and 5% reported experiencing anxiety-related problems.

According to the 2011–12 AHS, the health of people aged 45–64 was at risk due to poor nutrition and lack of exercise. Figure 6.25 shows the proportion of men and women with selected health risk factors.





While more people in this age group met the NHMRC guidelines for fruit and vegetable consumption than in the 25–44 age group, the majority still fell short. In addition, overweight and obesity rates were higher among people aged 45–64, as were rates of physical inactivity. However, the greatest change was seen in the proportion of people with high blood pressure. Men aged 45–64 were twice as likely to have high blood pressure as men aged 25–44, and women were nearly 3 times as likely. In contrast, the proportion of men aged 45–64 who smoked daily was lower than for men aged 25–44 (19% compared with 22%), and the proportion for women was also slightly lower (15% compared with 17%).

Alcohol consumption at short-term risky levels was also lower in this age group than in those aged 25–44. In 2011–12, 40% of men aged 45–64 reported drinking at short-term risky levels in the 12 months before the survey compared with 61% of men aged 25–44. The corresponding proportions for women were 24% compared with 43%. However, there was a different pattern in long-term risky alcohol consumption. The same proportions of men aged 25–44 and 45–64 reported drinking at long-term risky levels (14%), whereas for women, the proportion was higher among those aged 45–64 (12% compared with 9%).

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Compared with rates in 2007–08, levels of overweight and obesity among people aged 45–64 have risen from 70% to 73% in 2011–12 (ABS 2009b, 2013a). However, in a similar pattern to those aged 25–44, the proportion of those aged 45–64 who were current daily smokers decreased from 19% in 2007–08 to 17% in 2011–12.

The influence of risk factors on the health of Australians aged 45–64, and their likelihood of developing chronic diseases, begins to show in the leading causes of death among this age group. Compared with the younger age group, people aged 45–64 were more likely to die due to a chronic disease. In 2011, cancer and coronary heart disease (diseases that reduce blood supply to the heart, such as a heart attack) were the predominant conditions causing death in both men and women (Table 6.2).

ank	Men	No.	%	Women	No.	
	Coronary heart disease (120–125)	1,968	15.5	Breast cancer (C50)	999	
2	Lung cancer (C33–C34)	1,174	9.3	Lung cancer (C33–C34)	818	
3	Suicide (X60–X84)	549	4.3	Coronary heart disease (120–125)	457	
4	Diseases of the liver (K70–K77)	541	4.3	Bowel cancer (C18–C20)	348	
5	Bowel cancer (C18–C20)	463	3.7	Chronic lower respiratory diseases (J40–J47)	306	

(a) Based on ICD-10 groupings.

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(b) Deaths registered in 2011 are based on the preliminary version of cause of death data and are subject to further revision by the ABS.

Source: AIHW National Mortality Database.

The leading causes of death in this age group were largely unchanged between 2006 and 2011 for women. For men, however, there was a 19% fall in the proportion of deaths caused by bowel cancer, a 10% fall in deaths caused by coronary heart disease and a 6% rise in deaths caused by diseases of the liver (AIHW analysis of National Mortality Database).

# The relationship between work and health

The importance of the health of working-age people was recognised in a review presented to the British Secretaries of State for Health and for Work and Pensions in 2008 (Black 2008). This was the first review that measured the economic costs of ill health and its impact on work in Britain, while acknowledging the human and social costs. The review identified risk factors and causes of ill health in the working-age population and recommended interventions to minimise their effects.



Sweden's *National public health report* in 2012 also explored the main causes of death and hospitalisations and the impact of workforce participation and lifestyle factors on the working-age group's wellbeing (Danielsson & Berlin 2012). A Japanese study, which looked at the impact of income on self-assessed health, found that health was better in employed people (Kachi et al. 2013), while a study of the United States working-age population showed that people with higher education levels were more likely to report their health as excellent (Zajacova et al. 2012).

In Australia, this topic has been approached mainly from an economic perspective where data from surveys that track working-age people over time have been used to explore the relationships between health and labour force participation (Cai & Cong 2009; Cai & Kalb 2006, 2005, 2004; Carter et al. 2013) and between health and income (Brown & Nepal 2010; Gunasekara et al. 2013).

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Australians who are in good health and have fewer health conditions are more likely to participate in the labour force (Cai & Cong 2009; Cai & Kalb 2006, 2005, 2004; Pit et al. 2012; Schofield et al. 2008). People who are not employed may experience poorer health. A British review of research into the health benefits of work found that, in general, work improves physical and mental health and wellbeing (Waddell & Burton 2006). The research showed that unemployed people had poorer physical and mental health, higher rates of hospitalisation and were more likely to die than those who were employed. However, people in poor health were also unlikely to be employed.

Despite its overall beneficial effects, at times work can also be harmful to health. Workers may be injured or killed while doing their jobs, and some may develop health conditions from their work practices—for example, people who are exposed to asbestos at work may develop mesothelioma. Serious work-related injuries and illnesses, which involved death, permanent incapacity or temporary incapacity requiring absence from work of 1 week or more, were 25% more common in men than in women in 2010–11 (Safe Work Australia 2014). Preliminary compensation claims data indicate that there were 128,050 serious claims in 2011–12 in Australia, or 12.2 serious claims per 1,000 workers. In the same year, 228 workers died from a work injury, which equated to a rate of 2.0 deaths per 100,000 workers. The incidence rates of serious claims and fatalities have fallen since 2003–04, when there were 16.5 serious claims per 1,000 workers and 3.3 deaths per 100,000 workers (SafeWork Australia 2013a).

While Australians work fewer hours a year than the OECD average (1,693 hours a year compared with 1,776 hours), their labour productivity, measured by gross domestic product per hours worked, is above the OECD average, suggesting that Australians are more productive when they are at work (Conway & Meehan 2013). However, the proportion of Australian employees who work very long hours is higher than the OECD average. More than 14% of Australian employees work more than 50 hours a week, compared with the OECD average of 9% (OECD 2013).



Long hours, heavy workload and job insecurity can lead to work-related stress, which may result in long-term absences from work, and has been estimated to cost the Australian economy \$14.81 billion a year (Safe Work Australia 2013b). Work stress through high job demands and low job control has also been shown to increase the risk of developing mood and anxiety disorders, coronary heart disease and metabolic syndrome, which can be a precursor to type 2 diabetes, stroke and heart disease (Chandola et al. 2006; Marmot et al. 1997; Rosengren et al. 2004; Szeto & Dobson 2013). Body-stressing, caused by lifting, repetitive movements or awkward postures at work, was responsible for 40% of serious compensation claims and was the most common mechanism of workplace injury or disease in 2010–11. The relationship between work and health can also have an influence later in life through income security, savings and superannuation contributions, which can affect physical and mental health as well as self-esteem. In 2007, 15% of males and 23% of females aged 45-64 had no superannuation coverage (ABS 2009a). Average retirement savings are generally lower for women, who historically have lower rates of employment participation and are more likely than men to have breaks in employment due to having and caring for children. In addition, divorces can have a negative impact on both men and women's financial status in later life (Caruana 2011). On the other hand, poor health and disability in either males or females may result in decreased workforce participation, loss of earnings and decreased capacity to save for older age. People of lower SES tend to have poorer general and mental health, and fare more poorly in these measures over time compared with people of higher SES.

Research indicates that overall, work is beneficial to physical and mental wellbeing (AFOEM 2011). Working improves people's economic situation, increases their self-esteem and promotes community connectedness. These outcomes benefit not only individuals, but also their families and society as a whole.

#### What is missing from the picture?

Information on the effects of life events and transitions on Australians' health is limited because not all health-related data sets collect information on aspects such as marital status and employment status. Even if these data were collected for a particular point in time, they may not be useful when looking at how these factors affect the development of long-term health conditions compared with data from long-term studies that collect data at many points in time. Health is also multidimensional and it may not always be clear whether it is a cause or an effect of other aspects of life. For example, people who work may be healthier because work has beneficial effects or because people who have poor health may be less likely to be working.

Further information on the health of working-age Australians will be available when the ABS releases more results from the 2011–12 AHS. In addition, the AIHW is using 2011 data to measure the burden of disease experienced by Australians, which will provide updated information on the effect of disability, long-term conditions and premature death on the working-age population.



More information on the health and wellbeing of working-age Australians is available at <u>www.aihw.gov.au</u>. Recent AIHW reports and other publications available for free download include: <u>The health of Australia's males: 25 years and over and Young Australians: their health and wellbeing 2011</u>.

See Chapter 7 for information on the health of Indigenous Australians. Information on the impact of life events and transitions on families can be found on the Australian Institute of Family Studies website: <a href="https://www.aifs.gov.au">www.aifs.gov.au</a>.

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