3.4 Are we getting healthier?



The concept of what it is to be 'healthy' encompasses more than just how many years a person lives—for example, it could also include consideration of how many of those years are spent in good health or with disability or chronic illness.

While a baby born today can expect to live about 30 more years than a baby born in the late 1800s, he or she will face a set of different health challenges, largely driven by lifestyle factors not encountered by previous generations.

Extra 'healthy' years

A boy born in 1881–1890 had a life expectancy of 47.2 years and a baby girl 50.8 years. Today, a baby boy can expect to live to 79.9 and a baby girl to 84.3 (see Chapter 3 'Life expectancy').

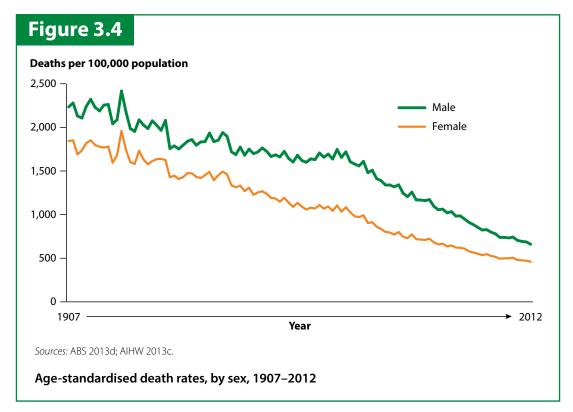
Importantly, we are not just living longer, but have more years living free of disability. A baby boy born in 2012 could expect to live 62.4 years free of disability and 17.5 years with some form of disability. This compares with a baby boy born in 1998 who could expect to live 58 years free of disability and 17.9 years with some form of disability. A baby girl born in 2012 could expect to live 64.5 years free of disability and 19.8 years with some form of disability. This compares with a baby girl born in 1998 who could expect to live 62.1 years free of disability and 19.4 years with some form of disability (AIHW forthcoming) (see Chapter 6'Ageing and the health system').

Box 3.2

Age-standardisation

'Age-standardised' refers to removing, statistically, the influence of differing age structures when comparing populations. See Glossary for more information.

There has been a long and continuing decline in death rates in Australia. Between 1907 and 2012, the age-standardised death rate fell by more than 70%, from 2,054 to 550 deaths per 100,000 population (ABS 2013d; AIHW 2013c) (see Figure 3.4).



The rate of potentially avoidable deaths (deaths among people younger than 75 that are potentially avoidable within the present health-care system) has also been in decline.

Potentially avoidable deaths are divided into potentially preventable deaths (those amenable to screening and primary prevention, such as immunisation) and deaths from potentially treatable conditions (those amenable to therapeutic interventions). Preventable death rates fell by 36% between 1997 and 2010 (from 142 to 91 deaths per 100,000) and rates of deaths from treatable conditions fell by 41% between 1997 and 2010 (from 97 to 57 deaths per 100,000) (see Chapter 9 'Indicators of Australia's health').

We're dying of different things than in the past

In 1900, people could mainly expect to die from pneumonia, influenza, tuberculosis, gastrointestinal infections, heart disease and strokes (Jones et al. 2012).

In 2011, the top 5 causes of death in Australia for males were coronary heart disease, followed by lung cancer, cerebrovascular disease (including stroke), prostate cancer and chronic lower respiratory disease. For females, the top 5 causes were coronary heart disease, cerebrovascular disease, dementia and Alzheimer disease, lung cancer and breast cancer (see Chapter 3 'Leading causes of death in Australia').



Why the change and what does it mean for our health status?

Since the 1900s, sanitation and housing have improved and vaccines have been developed to help our fight against infectious diseases. In many parts of the world, diseases that killed our ancestors no longer prove fatal; however, while we have capitalised on medical advances and technological innovations to treat and prevent these diseases, new threats have emerged.

Changing lifestyles

We are now dealing with different causes of illness than past generations. Compared with previous generations, life for many of us today is increasingly inactive.

In the early 20th century, people ate fewer processed foods, walked more, did more manual labour, lived with fewer labour-saving appliances and gadgets, and spent less time in front of televisions and other screens.

According to the latest ABS Australian Health Survey (AHS), in 2011–12 adults spent an average of just over 30 minutes a day doing physical activity. When measured against the National Physical Activity Guidelines for adults 'to do at least 30 minutes of moderate intensity physical activity on most days', only 43% met the 'sufficiently active' threshold (ABS 2013c).

Children and teenagers aged 5–17 spent 1.5 hours a day doing physical activity and more than 2 hours a day in screen-based activity (watching TV, DVDs or playing electronic games). Moreover, physical activity fell as children got older (ABS 2013c).

As we are discovering, lifestyle factors such as this can have a profound effect on our health and increase our likelihood of being ill with chronic disease.

Today, nearly two-thirds of Australian adults are overweight or obese (63%), an increase from 56.3% in 1995 and 61.2% in 2007–08 (ABS 2013c). There are an estimated 1 million people aged 2 and over with diagnosed diabetes in Australia. However, this is likely to be an underestimate—for every 4 adults with diagnosed diabetes, there is estimated to be 1 with undiagnosed diabetes (AlHW 2013d) (See Chapter 4 'Diabetes').

As well as not getting enough exercise and carrying too much weight, many of us do not eat sufficient fruit and vegetables and some of us smoke tobacco or consume alcohol at risky levels.

In 2011–12, less than half of Australian adults (48.5%) reported that they usually ate the recommended 2 serves of fruit per day and only 8% that they ate the recommended 5 or more serves of vegetables per day. Overall, only 5.5% of Australian adults ate the recommended daily intake of both fruit and vegetables (ABS 2013c).

These self-reported findings were similar to those from the 2007–08 National Health Survey where 9% of people aged 15 and over did not usually consume sufficient serves of vegetables and about half (49%) did not usually consume sufficient serves of fruit (AlHW 2012)

Older Australians (aged 65 and over) in both surveys were more likely to meet the guidelines than younger Australians.

Smoking rates in Australia are still falling, continuing a long-term downtrend trend over the past 50 years. In 1964, 43% of Australian adults smoked (OECD 2013), but by 2010 this rate had dropped to 16%. Moreover, fewer younger people are now taking up smoking. In 2001, about one-quarter of 18- to 24-year-olds smoked daily—by 2010, this had fallen to 16% (see Chapter 5 'Tobacco smoking').



Results from the 2010 National Drug Strategy Household Survey showed that while daily drinking declined between 2007 (8.1%) and 2010 (7.2%), 1 in 5 people drank at a level that put them at risk of harm over their lifetime. The rate of people drinking at a level that put them at risk of harm over their lifetime has remained stable since 2001 (see Chapter 5 'Alcohol risk and harm').

These behaviours put us at an increased risk for a range of chronic diseases, including heart disease, stroke and cancer (see Table 3.3 and Chapter 4 'Chronic disease—Australia's biggest health challenge').

Table 3.3: Relationship between selected chronic conditions and risk factors

Behavioural					Biomedical		
Conditions	Tobacco smoking	Physical inactivity	Risky alcohol consumption	Poor diet	Obesity	Hypertension ^(a)	High blood fats
Ischaemic heart disease	✓	✓		✓	✓	✓	✓
Stroke	✓	✓	✓	✓	✓	✓	✓
Type 2 diabetes	✓	✓		✓	✓	✓	
Kidney disease	✓	✓		✓	✓	✓	
Arthritis	√ (b)	√ (c)			√ (c)		
Osteoporosis	✓	✓	✓	✓			
Lung cancer	✓						
Colorectal cancer		✓	✓	✓	✓		
Chronic obstructive pulmonary disease	✓						
Asthma	✓						
Depression		✓	✓		✓		
Oral health	✓		✓	✓			

⁽a) High blood pressure.

Note: The relationships shown above relate to the causation (development) of the chronic diseases. They do not to reflect the determinant's role (effect) on management of the chronic disease.

Source: AIHW 2012 adapted from AIHW 2008.

⁽b) Relates to rheumatoid arthritis.

⁽c) Relates to osteoarthritis.



Stress of everyday life

Today's generation faces emotional, mental and physical stressors that are fuelled by living in a fast-moving, ever-changing world.

Stress has been associated with a range of illnesses, from headaches and sleep disorders to autoimmune diseases and heart problems (mindhealthconnect 2012). Stress can be triggered by a multitude of causes, from running late for an appointment to a life-changing event such as the death of a family member or partner. Common everyday stressors include job insecurity, financial worries and relationship difficulties.

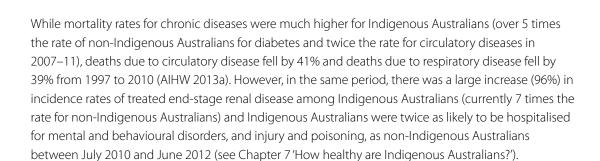
While a British review of research into the health benefits of work found that, in general, work improved physical and mental health and wellbeing (Waddell & Burton 2006), work stress has been shown to increase the risk of developing mood and anxiety disorders, coronary heart disease and metabolic syndrome, 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) (see Chapter 6 'The health of our working age population').

Indigenous health

Indigenous Australians experience poorer health and have worse health outcomes than other Australians. They have a burden of disease 2–3 times greater than the general Australian population, and are more likely to die at younger ages, experience disability and report their health as fair or poor (see Chapter 7 'How healthy are Indigenous Australians?').

The gap in the health of Indigenous and non-Indigenous Australians is best illustrated by differences in life expectancy. Life expectancy at birth for Indigenous Australians in 2010–2012 was 73.7 years for females and 69.1 years for males, compared with 83.1 and 79.7 years for non-Indigenous females and males respectively (ABS 2013e) (see Chapter 7 'Indigenous life expectancy and death rates'). These differences in health start at birth and continue throughout life. Babies born to Indigenous mothers are more likely to be of low birthweight than babies born to non-Indigenous mothers and Indigenous children die at more than twice the rate of non-Indigenous children. Between 2008 and 2012, 203 out of 100,000 Indigenous children aged 0–4 died compared with 91 out of 100,000 non-Indigenous children. Indigenous adults of all ages also died at a higher rate than non-Indigenous Australians (AIHW 2013a; SCRGSP forthcoming) (See Chapter 7 'Indigenous life expectancy and death rates').

Despite this continuing health gap, there have been improvements in recent years. Overall mortality for Indigenous Australians fell by 19% from 1991 to 2011, and Indigenous infant mortality rates fell by 62% from 2001 to 2012 (AIHW 2013a).



Living with ill health

In the 19th and early 20th centuries, many people who became acutely ill died quickly. And, as outlined earlier, today many of these acute illnesses have been replaced by chronic, non-communicable illnesses that now cause most of the disease burden—in 2011, 90% of all Australian deaths were caused by a chronic disease (see Chapter 4'Chronic disease—Australia's biggest health challenge').

Typically, chronic conditions are long-lasting, have persistent effects, and can range from conditions such as short- or long-sightedness to debilitating arthritis and low back pain, to life-threatening heart disease and cancers. Once present, chronic conditions often persist throughout life—which means that although Australians are now living longer, many people live with some type of ill health for many years, with a need for long-term management.

ABS Australian Health Survey data for 2011–12 indicate that about 3.3 million Australians (14.8% of the population) have arthritis, 2.3 million (10.2%) have asthma, 1 million have heart disease (5%) and 1 million have diabetes (5%) (ABS 2013b; 2013c).

Living with chronic illness

Living with a chronic illness can affect many aspects of a person's life. For example, people with asthma rate their health as worse than people without the condition, with most of the impact on their physical functioning and social and work life (ACAM 2011).

And while people who control their asthma with medication and a management plan can lead a normal life (National Asthma Council Australia 2013), most people with asthma do not have a written action plan, and poor asthma control (frequent symptoms and asthma exacerbations) is a common problem in both adults and children (ACAM 2011).

The burden of chronic conditions extends far beyond personal costs and results in a significant national economic burden. Estimates based on allocated health care expenditure indicate that the 4 most expensive disease groups are chronic—cardiovascular diseases, oral health, mental disorders, and musculoskeletal—incurring direct health-care costs of \$32 billion, or 43% of all allocated health expenditure in 2008–09 (see Chapter 4 'Chronic disease—Australia's biggest health challenge').

New health responses

Although Australians now face the challenges of rises in non-communicable diseases which have a long latency period and are more frequent with ageing (Hetzel 2001), we also have new answers to those challenges. Today we have access to an increasingly innovative and sophisticated health system providing care and treatment regimens that were not available in the past. Cancer is one such example. Cancer is the second leading cause of death in Australia (after cardiovascular disease) but despite a rise in new cases diagnosed, the mortality rate has fallen and people are living longer after diagnosis. Why? Detection and treatment have improved markedly in recent years, and national screening programs have been established for breast, bowel and cervical cancer (see Chapter 4'Cancer in Australia'). So, while more people are being diagnosed with cancer, more people are surviving due to early detection (which is associated with more successful treatment, generally) and better treatment technology and delivery.

Inequalities

Presenting a broad picture of health status to some extent masks that there are clear inequalities in health for many Australians, particularly Indigenous Australians (as described earlier), people living in rural and remote areas, and the socioeconomically disadvantaged.

People living outside Australia's major cities have worse outcomes on leading indicators of health and access to care. They have higher rates of obesity, smoking and risky alcohol consumption, their rates of potentially preventable hospitalisations are also higher and they are less likely to gain timely access to aged care (COAG Reform Council 2013). The COAG Reform Council report, *Healthcare 2011–12:* comparing outcomes by remoteness, also found that people living outside major cities were more likely to defer access to dental services and general practitioners due to cost and were more likely to wait longer than 1 year for access to public dental services.

It has been suggested that socioeconomic factors have the largest impact on health, accounting for up to 40% of all influences compared with health behaviours (30%), clinical care (20%) and the physical environment (10%) (The British Academy 2014).

The World Health Organization's Commission on Social Determinants of Health concluded that social inequalities in health arise because of inequalities in the conditions of daily life and the fundamental drivers that give rise to them: inequities in power, money and resources (Commission on Social Determinants of Health 2008).

The WHO describes a 'social gradient in health' which shows that, in general, the lower an individual's socioeconomic position the worse their health. Where people are in the social hierarchy affects the conditions in which they grow, learn, live, work and age, their vulnerability to ill health and the consequences of ill health (WHO 2014).

So, are we healthier?

The change in the patterns and causes of illness and deaths in Australia and many other countries has been described as the 'health transition' from a pattern of high mortality from infectious diseases to one of lower overall mortality from non-communicable disease and injury (Hetzel 2001).

It could be argued that we are both healthier and unhealthier in different ways compared with the past, and that we have, perhaps, more control of our health. Today there are medications and treatments that were not available to our predecessors—medical technologies such as minimally invasive surgery and devices such as pacemakers and hip replacements offer not just more treatment options, but in some cases treatments that were previously not available at all.

Emerging technologies such as telehealth enable people to monitor chronic conditions such as diabetes and hypertension in their own homes, with the support of health professionals (see Chapter 2'Australia's health system'). Avenues such as online health forums and websites provide better access to health information, making it easier to take more personal responsibility for our own health management.

How do we rate our own health?

According to the Australian Health Survey, in 2011–12 more than half (55.1%) of all Australians aged 15 and over considered themselves to be in 'excellent' or 'very good' health, and another 30.3% in 'good' health. Just over 1 in 10 (10.7%) rated their health as 'fair', and 4.0% as 'poor'. These ratings are slightly better than those recorded in 1995 when 54.3% rated their health as 'excellent' or 'very good', 28.3% as 'good', 13% as 'fair' and 4.2% as 'poor' (ABS 2006; 2013c).

Older Australians generally rated themselves as having poorer health than younger people. People aged 75–84, and 85 and over, recorded the highest proportions of 'fair' health (21.6% and 23.3% respectively) and 'poor' health (9.7% and 14.2%). About 35% of people aged 75–84 rated their health as 'excellent' or 'very good', and a further 33% as 'good'. About 30% of those aged 85 and over rated their health as 'excellent' or 'very good' and 32% as 'good' (ABS 2013c).

In comparison with figures given earlier for all Australians, only 39% of Indigenous Australians rated their health as 'excellent' or 'very good', 36% as 'good', 18% as 'fair' and 7% as 'poor' in 2012–13 (ABS 2013a).

Where do I go for more information?

Detailed information on Australians' health and wellbeing, including on leading causes of ill health and risk factors, is available at the <u>AIHW website</u>. Detailed information on the ABS Australian Health Survey is available at <u>www.abs.gov.au</u>.



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