



# National Health Survey

## First Results

**Australia**

**2014-15**

**4364.0.55.001**

AUSTRALIAN BUREAU OF STATISTICS

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## **ABOUT THIS PUBLICATION**

This publication contains key results from the 2014-15 National Health Survey, including long-term health conditions, health risk factors and mental health and well-being.

Information on the use of health services, such as consultations with health practitioners, is scheduled for release in the first quarter of 2016.

## **ACKNOWLEDGEMENTS**

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**David W. Kalisch**

Australian Statistician

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## KEY FINDINGS

### GENERAL HEALTH

- In 2014-15, over half (56.2%) of all Australians aged 15 years and over considered themselves to be in excellent or very good health, while 14.8% rated their health as fair or poor.
- Around one in nine (11.7%) adults experienced high or very high levels of psychological distress, similar to 2011-12 (10.8%).

### Long-term health conditions

Major long-term health conditions experienced in Australia in 2014-15 were:

- Arthritis – 3.5 million people (15.3%)
- Asthma - 2.5 million people (10.8%)
- Cancer - 370,100 people (1.6%)
- High cholesterol - 1.6 million people (7.1%)
- Diabetes – 1.2 million people (5.1%)
- Heart disease – 1.2 million people (5.2%)
- Hypertension – 2.6 million people (11.3%)
- Kidney disease - 203,400 people (0.9%)
- Mental and behavioural conditions - 4.0 million people (17.5%)
- Osteoporosis - 801,800 people (3.5%)

### HEALTH RISK FACTORS

#### Smoking

- Rates of daily smoking have continued to drop, to 14.5% (2.6 million) of adults smoking in 2014-15, compared with 16.1% in 2011-12 and 22.4% in 2001.
- Proportionally, more men smoke daily than women (16.9% and 12.1%, respectively).
- Smoking rates for young adults (18-44 years) have decreased to 16.3% in 2014-15 from 28.2% in 2001.
- Rates of daily smoking are higher in the Outer Regional and Remote areas of Australia (20.9%), compared with Inner Regional areas (16.7%) and Major Cities (13.0%).

#### Overweight and obesity

- In 2014-15, 63.4% of Australian adults were overweight or obese (11.2 million people). This is similar to the prevalence of overweight and obesity in 2011-12 (62.8%) and an increase since 1995 (56.3%).
- Around one in four (27.4%) children aged 5-17 years were overweight or obese, similar to 2011-12 (25.7%).

#### Alcohol consumption

- In 2014-15, 17.4% of adults consumed more than the recommended two standard drinks per day on average (exceeding the National Health and Medical Research Council lifetime risk guidelines), down from 19.5% in 2011-12.
- One in four (25.8%) men and one in ten (9.3%) women exceeded the lifetime risk guidelines.
- 44.0% of adults consumed more than four standard drinks at least once in the past year, exceeding the National Health and Medical Research Council single occasion risk guidelines.

#### High blood pressure

- In 2014-15, 23.0% of adults (4.1 million people) had measured high blood pressure (systolic or diastolic blood pressure equal to or greater than 140/90 mmHg), higher than in 2011-12 (21.5%).

### **Daily intake of fruit and vegetables**

- In 2014-15, nearly one in two (49.8%) adults met the Australian Dietary Guidelines for recommended daily serves of fruit, while 7.0% met the guidelines for serves of vegetables. Only one in twenty (5.1%) adults met both guidelines.
- Nearly seven in ten children (68.1%) aged 2-18 years met the guidelines for recommended daily serves of fruit, while 5.4% met the guidelines for serves of vegetables. Only one in twenty (5.1%) children met both guidelines.

### **Exercise**

- In 2014-15, 55.5% of 18-64 year olds participated in sufficient physical activity in the last week (more than 150 minutes of moderate physical activity or more than 75 minutes of vigorous physical activity, or an equivalent combination of both, including walking).
- Nearly one in three (29.7%) 18-64 year olds were insufficiently active (less than 150 minutes in the last week) while 14.8% were inactive (no exercise in the last week).

## **ABOUT THE NATIONAL HEALTH SURVEY**

The 2014-15 National Health Survey is the most recent in a series of Australia-wide health surveys conducted by the Australian Bureau of Statistics. The survey was designed to collect a range of information about the health of Australians, including:

- prevalence of long-term health conditions;
- health risk factors such as smoking, overweight and obesity, alcohol consumption and exercise;
- use of health services such as consultations with health practitioners and actions people have recently taken for their health; and
- demographic and socioeconomic characteristics.

The survey was conducted in all states and territories and across urban, rural and remote areas of Australia (other than very remote areas) from July 2014 to June 2015 and included around 19,000 people in nearly 15,000 private dwellings.

Previous surveys were conducted in 1989-90, 1995, 2001, 2004-05, 2007-08 and 2011-12. Health surveys conducted by the ABS in 1977-78 and 1983, while not part of the National Health Survey series, collected similar information.

This publication contains key results from the survey, including long-term health conditions, health risk factors and mental health and well-being. Information is presented for Australia and the states and territories.

Information on the use of health services, such as consultations with health practitioners, is scheduled for release in the first quarter of 2016.

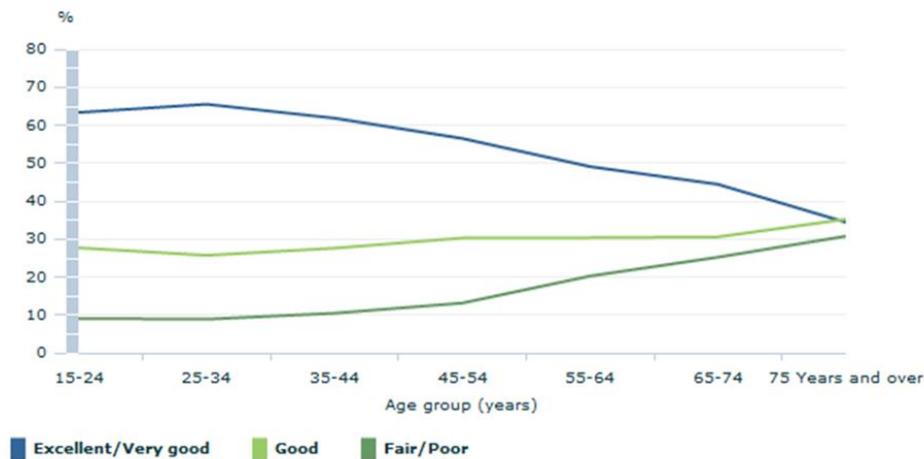
## SELF-ASSESSED HEALTH STATUS

Self-assessed health status is a commonly used measure of overall health which reflects a person's perception of his or her own health at a given point in time. It is a useful measure of a person's current health status and provides a broad picture of a population's overall health.

In 2014-15, over half (56.2%) of all Australians aged 15 years and over considered themselves to be in excellent or very good health, while 14.8% rated their health as fair or poor. This is similar to how Australians rated their health in 2011-12 (55.1% and 14.6% respectively) and 2007-08 (55.8% and 15.1% respectively).

Younger Australians generally rate themselves as having better health than older people, with 63.4% of 15-24 years olds rating their health as being excellent or very good in 2014-15, compared with 34.5% of people aged 75 years and over. Men and women generally assess their overall health similarly (with 54.8% of men and 57.6% of women rating their health as being excellent or very good in 2014-15).

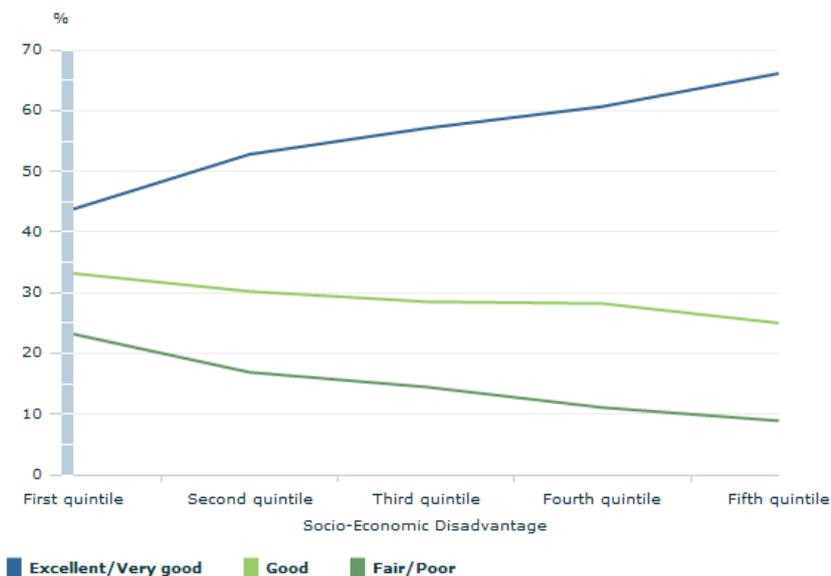
Persons aged 15 years & over - Self-assessed health status, 2014-15



Source(s): National Health Survey: First Results, 2014-15

Around two-thirds (66.1%) of people living in areas of least disadvantage (fifth quintile) rated their health as being excellent or very good in 2014-15, compared with less than half (43.8%) of people living in areas of most disadvantage (first quintile). This was similar to the pattern in 2011-12 (64.1% and 43.8% respectively).

Persons aged 15 years & over, Self-assessed health status by levels of disadvantage 2014-15(a)



Australian Bureau of Statistics

Footnote(s): (a) Based on the 2011 Index of Relative Socio-Economic Disadvantage. A lower Index of Disadvantage quintile (e.g. the first quintile) indicates an area with relatively greater disadvantage. A higher Index of Disadvantage (e.g. the fifth quintile) indicates an area with a relative lack of disadvantage. See the Glossary for more information.

Source(s): National Health Survey: First Results, 2014-15

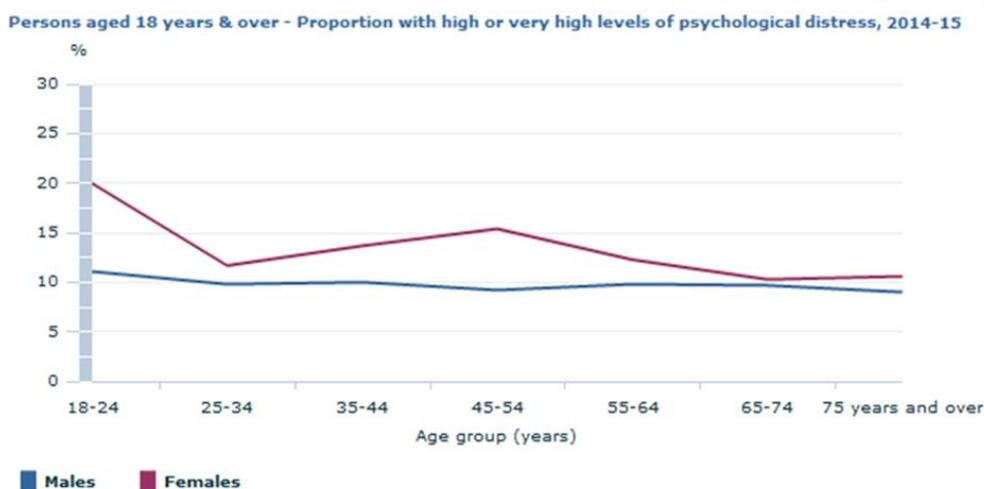
## PSYCHOLOGICAL DISTRESS

Mental health is fundamental to the wellbeing of individuals, their families and the population as a whole. One indication of the mental health and wellbeing of a population is provided by measuring levels of psychological distress using the Kessler Psychological Distress Scale (K10). The K10 questionnaire was developed to yield a global measure of psychosocial distress, based on questions about people's level of nervousness, agitation, psychological fatigue and depression in the past four weeks[1].

In 2014-15, around one in nine (11.7% or 2.1 million) Australians aged 18 years and over experienced high or very high levels of psychological distress, similar to 2011-12 (10.8%). Around two thirds (68.0%) of adults experienced a low level of psychological distress in 2014-15.

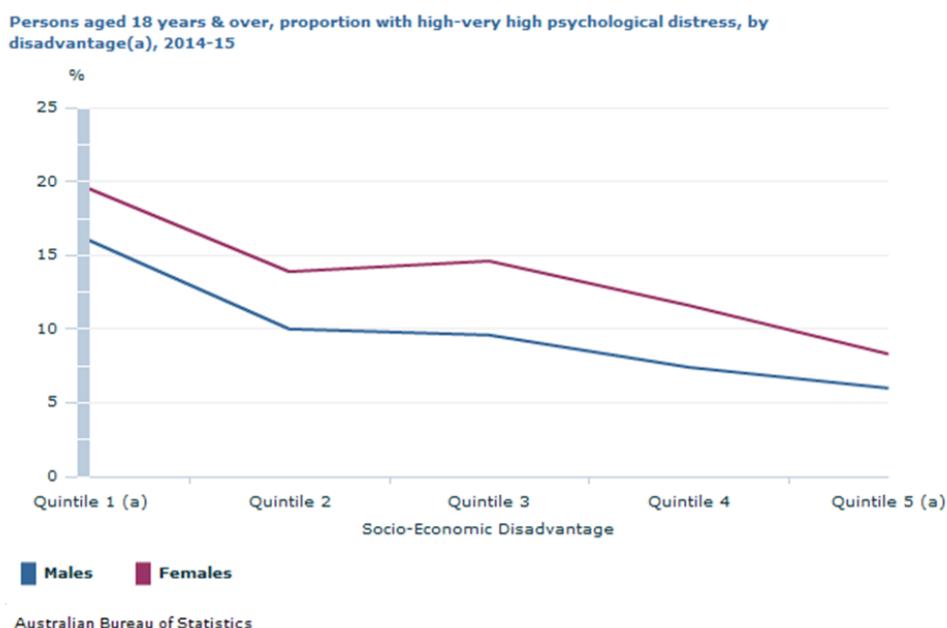
More women than men experienced high or very high levels of psychological distress in 2014-15 (13.5% and 9.9% respectively).

Between 2011-12 and 2014-15, rates of high or very high psychological distress remained stable across most age groups, with the exception of 18-24 year old women (up from 13.0% to 20.0% respectively). Women aged 18-24 years had the highest rate of any age group or sex in 2014-15.



Source(s): National Health Survey, 2014-15

In 2014-15, adults living in areas of most disadvantage across Australia were more than twice as likely to experience high or very high levels of psychological distress than adults living in areas of least disadvantage (17.7% compared with 7.3% respectively), continuing the pattern from 2011-12 (15.0% compared with 6.2% respectively).



Footnote(s): (a) Based on the 2011 Index of Relative Socio-Economic Disadvantage. A lower Index of Disadvantage quintile (e.g. the first quintile) indicates an area with relatively greater disadvantage. A higher Index of Disadvantage (e.g. the fifth quintile) indicates an area with a relative lack of disadvantage. See the Glossary for more information.

Source(s): National Health Survey, 2014-15

## **ENDNOTES**

1 Coombs, T. (2005) 'Australian Mental Health Outcomes and Classification Network; Kessler -10 Training Manual', NSW Institute of Psychiatry.

# ARTHRITIS AND OSTEOPOROSIS

## Arthritis

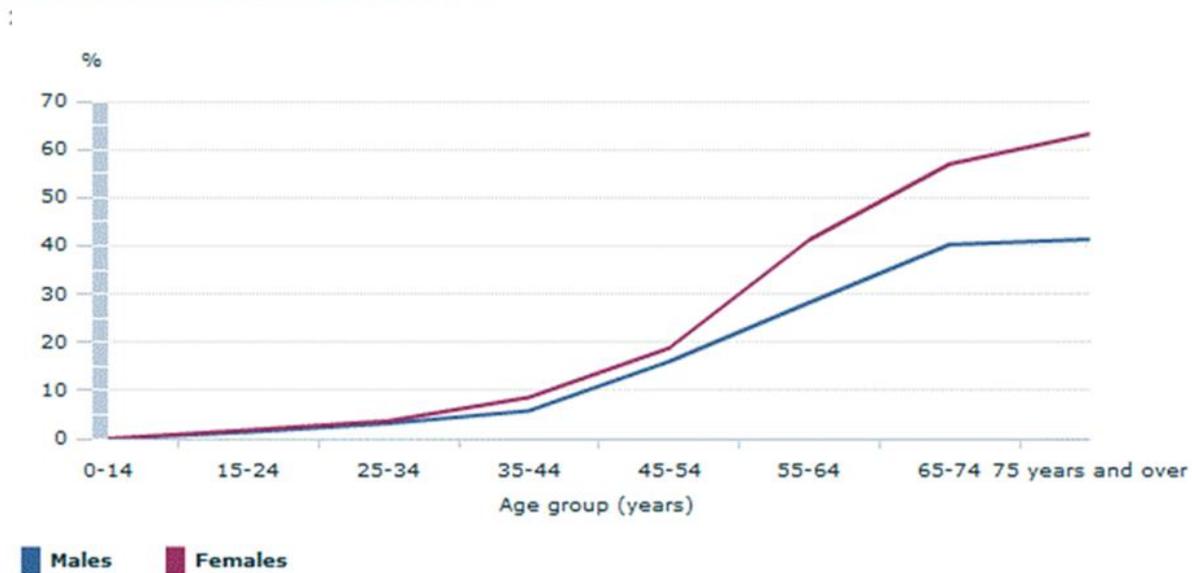
Arthritis refers to a range of musculoskeletal conditions where a person's joints become inflamed, which may result in pain, stiffness, disability and deformity. These symptoms can often have a significant impact on a person's everyday functioning life[1].

In 2014-15, 15.3% of Australians (3.5 million people) had arthritis, with prevalence higher amongst women than men (18.3% compared with 12.3%).

Of persons with arthritis, more than half (58.9%) had osteoarthritis (deterioration of cartilage inside a joint), 11.5% had rheumatoid arthritis (an autoimmune disease in which the body is attacked by bacteria or viruses) and 34.8% had an unspecified type of arthritis. Note that as it is possible to have more than one type of arthritis, proportions add to more than 100%.

The prevalence of arthritis increases with age, particularly for women. In 2014-15, women aged 55 years and over were considerably more likely to have arthritis than men (51.4% compared with 35.2%).

Proportion of persons with arthritis, 2014-15



Australian Bureau of Statistics

Source(s): National Health Survey, 2014-15

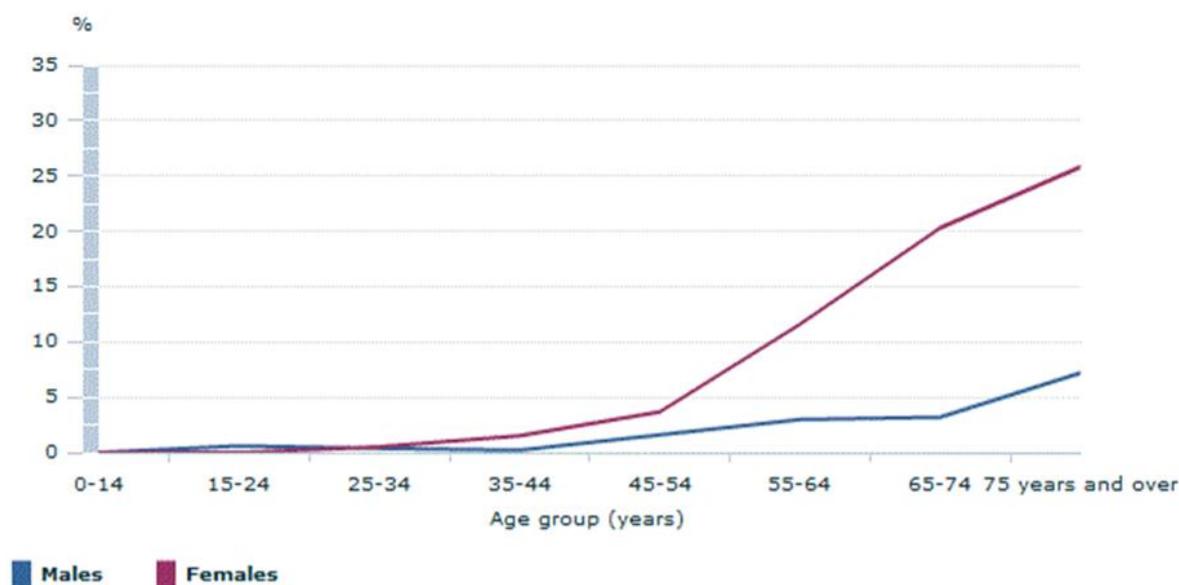
## Osteoporosis

Osteoporosis is a condition of the musculoskeletal system in which a person's bones become fragile and brittle, leading to an increased risk of fractures. Fractures can lead to chronic pain, disability and loss of independence[2].

In 2014-15, 801,800 Australians (3.5%) had osteoporosis. The proportion of people with osteoporosis more than doubled between 2001 and 2007-08 (from 1.6% to 3.4%) but has remained stable since then (3.3% in 2011-12).

Similar to arthritis, osteoporosis is considerably more common amongst women than men (5.5% of all females having osteoporosis in 2014-15 compared with 1.4% of all males), and is more common at older ages. Around one in five women (25.8%) aged 75 years and over had osteoporosis in 2014-15, compared with one in fourteen men (7.2%) of the same age.

Proportion of persons with osteoporosis, 2014-15



Australian Bureau of Statistics

Source(s): National Health Survey, 2014-15

## ENDNOTES

1 Arthritis Australia, 'What is arthritis?', <<http://www.arthritisaustralia.com.au/index.php/arthritis-information/what-is-arthritis.html>>; Last accessed 01/12/2015

2 Osteoporosis Australia, What you need to know about Osteoporosis - 2nd Edition, August 2014 <[http://www.osteoporosis.org.au/sites/default/files/files/oa\\_consumer\\_ed2\\_Aug2014.pdf](http://www.osteoporosis.org.au/sites/default/files/files/oa_consumer_ed2_Aug2014.pdf)>; Last accessed 01/12/2015

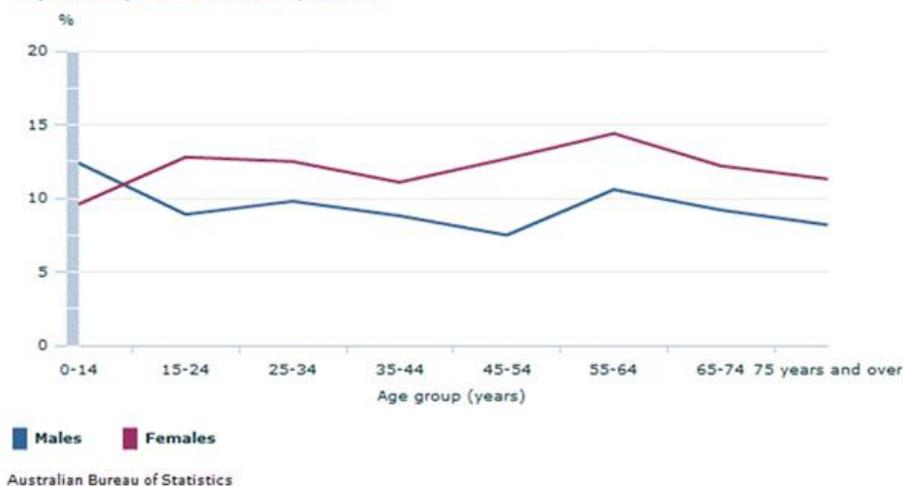
## ASTHMA

Asthma is a respiratory condition affecting the airways of the lungs, causing episodes of wheezing, breathlessness and chest tightness due to the narrowing of the airways[1]. Asthma may affect people of all ages and can usually be managed through treatment such as medication use, managing lifestyle behaviours which can assist in avoiding and managing asthma attacks, and having a written asthma plan[2].

In 2014-15, 10.8% of Australians (2.5 million people) had asthma. The prevalence of asthma has increased since 2007-08 (9.9%).

Overall, females had higher rates of asthma than males in 2014-15 (11.8% compared with 9.8%). However, asthma was more common amongst boys aged 0-14 years (12.4%) than girls (9.6%), with this pattern being consistent since 2001.

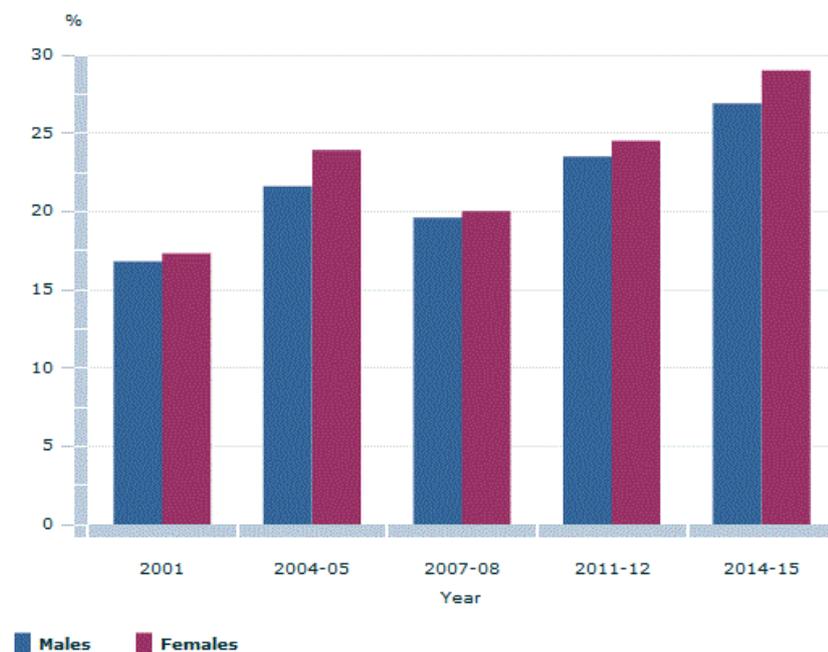
Proportion of persons with asthma, 2014-15



Source(s): National Health Survey, 2014-15

It is recommended that people with asthma have a written action plan that includes instructions for when they are well and whenever symptoms worsen[2]. In 2014-15, of the 2.5 million people with asthma, 28.1% had a written asthma action plan. The proportion of people with action plans has increased from 17.0% in 2001 and 24.0% in 2011-12.

Persons with asthma - Proportion with a written asthma action plan, 2001 to 2014-15



Source(s): National Health Survey, 2014-15

## **ENDNOTES**

**1** The Department of Health, January 2015, Chronic respiratory conditions - including asthma and chronic obstructive pulmonary disease (COPD), <<http://www.health.gov.au/internet/main/publishing.nsf/Content/chronic-respiratory>>; Last accessed 01/12/2015

**2** National Asthma Council Australia, August 2015, How is Asthma managed? <<http://www.nationalasthma.org.au/understanding-asthma/how-is-asthma-managed->>; Last accessed 01/12/2015

## CANCER

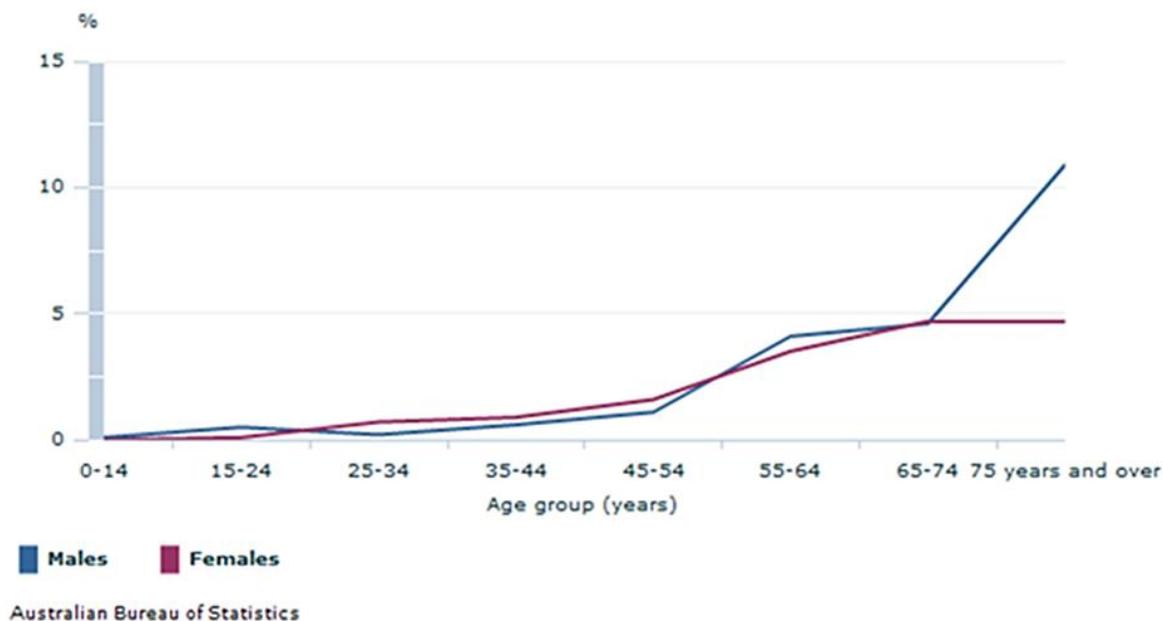
Cancer is a condition in which the body's cells grow and spread in an uncontrolled manner. A cancerous cell can arise from almost any cell, and therefore cancer can be found almost anywhere in the body.

In 2014-15 there were 370,100 people who reported having cancer, or around 1.6% of the Australian population. Over the past fifteen years, rates have remained relatively stable (1.4% in 2001).

Of people with cancer, nearly one in three people (30.3%) had skin cancer, making this the most commonly reported type of cancer.

Overall, 1.7% of men and 1.5% of women reported having cancer in 2014-15. At older ages, rates have generally been higher for men, with around one in ten men aged 75 years and over (10.9%) reporting having cancer in 2014-15, compared with 4.7% of women of the same age.

Proportion of persons with cancer, 2014-15



Source(s): National Health Survey, 2014-15

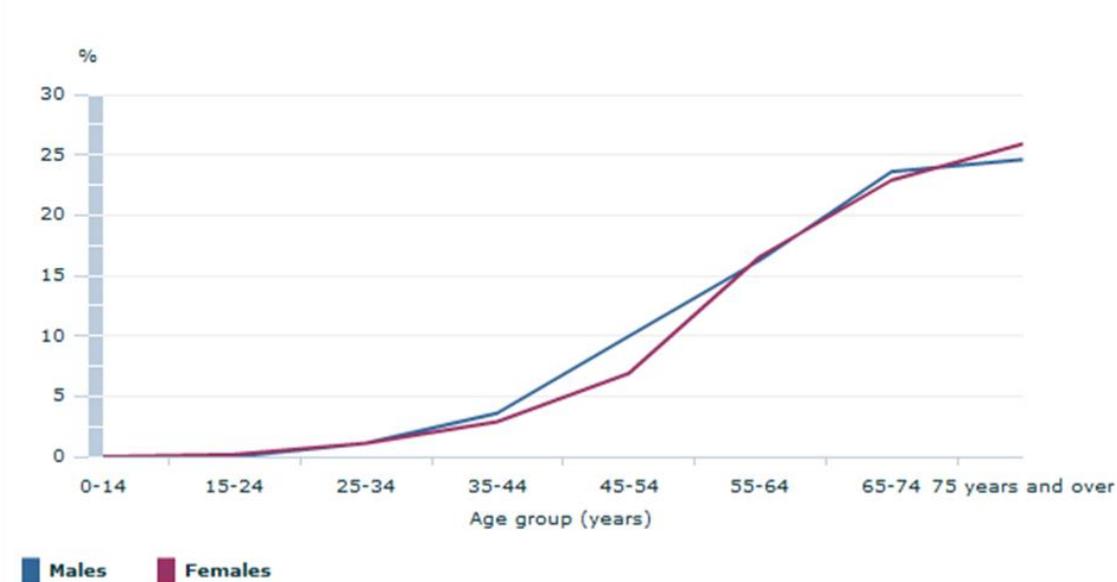
## HIGH CHOLESTEROL

Cholesterol is a type of fat that circulates in the blood. It is essential for many metabolic processes, including the production of hormones and building cells[1]. Too much cholesterol in the bloodstream can lead to fatty deposits building up in the blood vessels, making it harder for blood to flow and increasing the risk of heart attack or stroke[2].

In 2014-15, 7.1% of all Australians (1.6 million people) reported having high cholesterol. This was similar to 2011-12 when 6.8% of the population had high cholesterol.

As with many health conditions, the prevalence of high cholesterol increases with age, with around one in four (25.2%) people aged 75 years and over reporting having high cholesterol in 2014-15. Overall, the same proportion of males and females reported having high cholesterol (7.1%).

Proportion of persons with high cholesterol, 2014-15



Australian Bureau of Statistics

Source(s): National Health Survey, 2014-15

### 2011-12 biomedical information

For people with high cholesterol there are often no symptoms or signs - they can have high cholesterol yet feel well[2]. In 2011-12, biomedical information was collected for the first time by ABS, including a range of cholesterol tests. Results were used to determine indicators of high or abnormal levels of cholesterol across the population.

In 2011-12, one in three Australians aged 18 years and over (32.8% or 5.6 million people) had abnormal or high total cholesterol levels according to their blood test results (total cholesterol greater than or equal to 5.5 mmol/L). Yet only 10.1% of this group self-reported having high cholesterol as a current and long-term health condition. This suggests that the majority of people with high cholesterol results were either unaware that they had the condition or did not consider it to be a long-term or current problem.

For more information see [Australian Health Survey: Biomedical Results for Chronic Diseases, 2011-12 \(cat. no. 4364.0.55.005\)](#).

### ENDNOTES

1 Better Health Channel, 2013, Cholesterol, <[http://www.betterhealth.vic.gov.au/bhcv2/bhcarticles.nsf/pages/Cholesterol\\_explained](http://www.betterhealth.vic.gov.au/bhcv2/bhcarticles.nsf/pages/Cholesterol_explained)>, Last accessed 01/12/2015.

2 Heart Foundation, *Blood cholesterol*, <<https://www.heartfoundation.org.au/your-heart/know-your-risks/blood-cholesterol>>, Last accessed 01/12/2015.

# DIABETES MELLITUS

Diabetes mellitus is a chronic condition where insulin, a hormone that controls blood glucose levels, is no longer produced or not produced in sufficient amounts by the body. It significantly affects the health of many Australians and can result in a range of complications, including serious damage to the nerves and blood vessels. If left undiagnosed or poorly managed, diabetes can lead to coronary heart disease, stroke, kidney failure, limb amputations or blindness.

## Definitions

In this publication, data on diabetes refers to persons who reported having been told by a doctor or nurse that they had diabetes, irrespective of whether the person considered their diabetes to be current or long-term. This definition was first used for estimates of diabetes in Australian Health Survey: Updated Results, 2011-12 (cat. no. 4364.0.55.003). Estimates of diabetes for all years in this publication are presented using this definition. In earlier publications, persons who had reported having diabetes but that it was not current were not included.

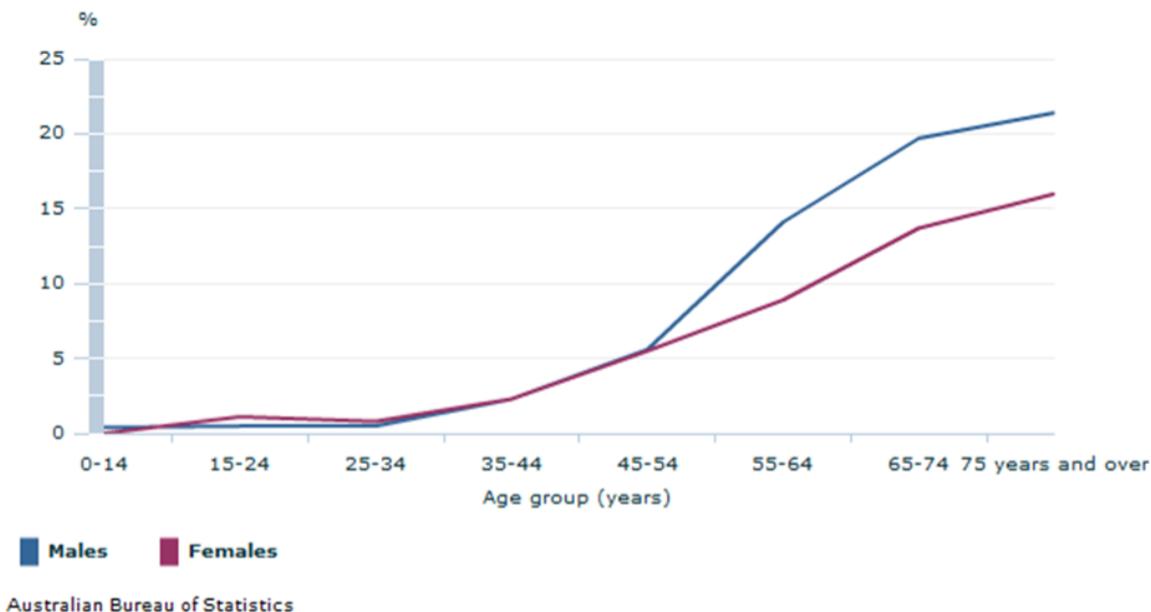
Data excludes gestational diabetes.

In 2014-15, 5.1% of the Australian population (1.2 million people) had some type of diabetes, an increase from 4.5% in 2011-12.

One million people (4.4%) had Type 2 diabetes in 2014-15, up from 840,000 people (3.8%) in 2011-12. A further 158,900 people (0.7%) had Type 1 diabetes in 2014-15, up from 113,400 people in 2011-12 (0.5%).

More males (5.7%) had diabetes than females (4.6%) in 2014-15, and, as with many health conditions, the rate of diabetes increased with age. Of people aged 75 years and over, almost one in five (18.4%) had diabetes in 2014-15.

Proportion of persons with diabetes mellitus, 2014-15



Source(s): National Health Survey, 2014-15

One of the main risk factors for developing Type 2 diabetes is being overweight or obese<sup>[1]</sup> as excess body weight can interfere with the body's production of, and resistance to, insulin<sup>[2]</sup>. In 2014-15 adults aged 18 years and over who were obese had higher rates of Type 2 diabetes (11.6%) than adults who were overweight (4.9%), who in turn had higher rates of Type 2 diabetes than adults who were of normal weight (1.9%).

In 2014-15, people living in areas of most disadvantage in Australia had a higher rate of diabetes than people living in areas of least disadvantage (8.2% compared with 3.1%). Similarly, people living in Outer Regional/Remote areas of Australia had a higher rate than people living in Major Cities (6.7% compared with 4.7%).

## 2011-12 biomedical information

In 2011-12, biomedical information was collected for the first time by ABS, including two tests used to measure diabetes: fasting plasma glucose and glycated haemoglobin (commonly referred to as HbA1c). Diabetes prevalence was derived using a combination of blood test results and self-reported information on diabetes diagnosis and medication use.

Around one in twenty (5.1%) Australians aged 18 years and over had diabetes according to the fasting plasma glucose test and self-reported information. This comprised 4.2% with known diabetes and 0.9% with diabetes newly diagnosed from their test results. This indicates that there was approximately one newly diagnosed case of diabetes for every four diagnosed cases. A further 3.1% of adults had impaired fasting plasma glucose results, which indicates that they were at high risk of diabetes. This means that there were an extra three people at high risk of diabetes for every four people who had been diagnosed with diabetes.

For more information see [Australian Health Survey: Biomedical Results for Chronic Diseases, 2011-12 \(cat. no. 4364.0.55.005\)](#).

## ENDNOTES

1 International Diabetes Federation, 2015, Risk Factors, <<http://www.idf.org/about-diabetes/risk-factors>>; last accessed 07/12/2015.

2 Kahn, B.B & Flier, J.S., 2000, 'Obesity and insulin resistance'. *The Journal of Clinical Investigation*, <<http://www.jci.org/articles/view/10842>>; last accessed 01/12/2015.

## HEART, STROKE AND VASCULAR DISEASE

Heart, stroke and vascular disease encompasses a range of circulatory conditions including angina, heart attack and stroke. Commonly this group of conditions is referred to under the broader term of 'heart disease' (or 'cardiovascular disease'). Heart disease remains one of the leading causes of death worldwide, and is associated with modifiable risk factors such as a healthy diet, exercise and avoidance of smoking.<sup>[1]</sup>

### Definitions

In this publication, data on heart, stroke and vascular disease refers to persons who reported having been told by a doctor or nurse that they had any of a range of circulatory conditions comprising:

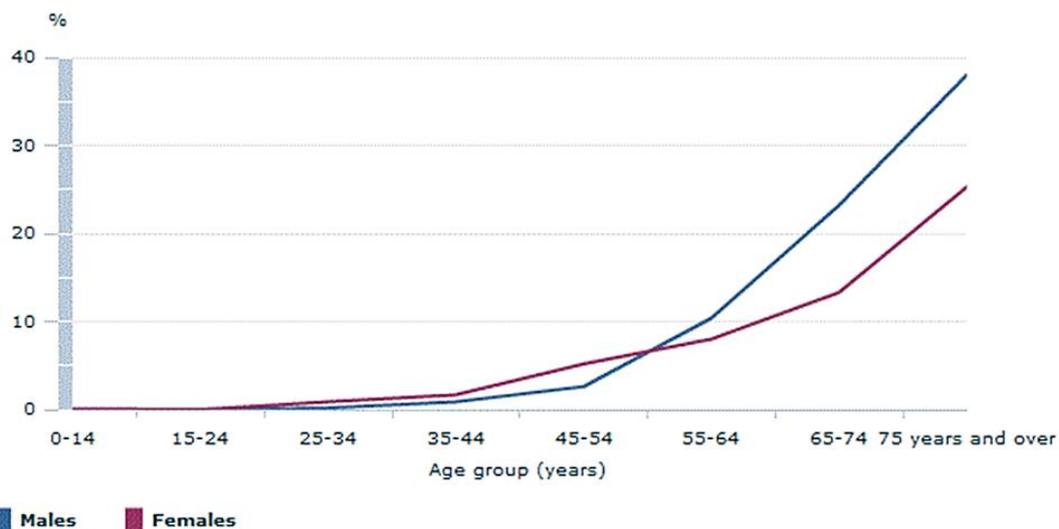
- ischaemic heart diseases (angina, heart attack and other ischaemic heart diseases)
- cerebrovascular diseases (stroke and other cerebrovascular diseases)
- oedema
- heart failure
- diseases of the arteries, arterioles and capillaries
- and that their condition was current and long-term; that is, their condition was current at the time of interview and had lasted, or was expected to last, 6 months or more.

Persons who reported having ischaemic heart diseases and cerebrovascular diseases that were not current and long-term at the time of interview are also included, for the first time. Estimates of heart, stroke and vascular disease for 2007-08, 2011-12 and 2014-15 in this publication are presented using this definition. There is limited comparability between 2007-08 and previous years due to a change in derivation methodology in 2007-08.

In 2014-15, 5.2% of Australians (1.2 million people) had heart disease, an increase from 4.7% in 2011-12 when 1.0 million people had heart disease.

The proportion of people with heart disease increases steadily with age, with almost one-third (30.7%) of all Australians aged 75 years and over having heart disease in 2014-15. It is more common amongst men (5.7%) than women (4.7%).

Proportion of persons with heart, stroke & vascular disease, 2014-15



Australian Bureau of Statistics

Source(s): National Health Survey, 2014-15

### ENDNOTES

1 Heart Foundation, 2015, Keep your heart healthy <<http://heartfoundation.org.au/your-heart/keep-your-heart-healthy>>; Last accessed 04/12/2015.

## HYPERTENSION AND MEASURED HIGH BLOOD PRESSURE

Hypertension (commonly known as high blood pressure) can lead to serious health problems such as heart attack, stroke, heart failure or kidney disease[1].

### Definitions

Information on hypertension was collected in the National Health Survey using two methods. These were:

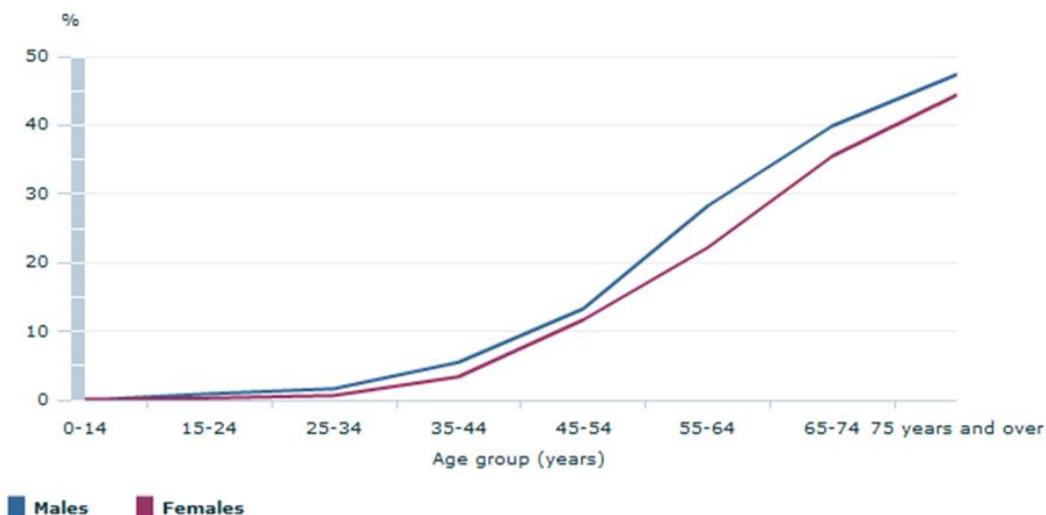
- a question on whether respondents had ever been told by a doctor or nurse they had any circulatory conditions (including hypertension or high blood pressure), and
- for adults aged 18 years and over, the taking of blood pressure measurements. A person was defined as having high blood pressure if their systolic/diastolic blood pressure was equal to or greater than 140/90 mmHg[2]. In 2014-15, 24.3% of respondents aged 18 years and over did not have their blood pressure measured. For these people, blood pressure was imputed. For more information see Appendix 2: Physical measurements in the 2014-15 National Health Survey.

### Hypertension

In 2014-15, 11.3% of Australians (2.6 million people) reported having hypertension, with prevalence higher amongst males than females (12.0% compared with 10.7% respectively). The prevalence of people reporting having hypertension has remained relatively stable over the past decade (10.7% in 2004-05).

The prevalence of hypertension increases with age, with just under half (45.5%) of all people aged 75 years and over reporting having hypertension in 2014-15.

Proportion of persons with hypertension, 2014-15



Australian Bureau of Statistics

Source(s): National Health Survey, 2014-15

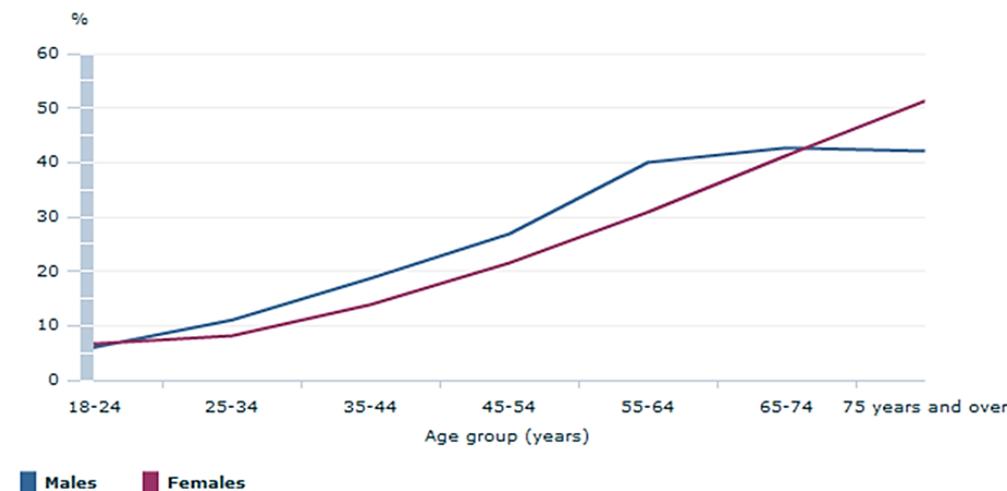
### Measured high blood pressure

In addition to asking respondents whether they had ever been told by a doctor or nurse that they had hypertension or high blood pressure, respondents 18 years and over also had their blood pressure measured. Numbers of people with high blood pressure presented in this section are based on these measurements, and do not include people who have high blood pressure but are managing their condition through the use of blood pressure medications.

In 2014-15, 23.0% of all Australians aged 18 years and over (4.1 million people) had measured high blood pressure. This was higher than in 2011-12, when 21.5% of adults had measured high blood pressure.

Overall, men were more likely to have high blood pressure than women (24.4% and 21.7% respectively), while the proportion of Australians with high blood pressure increased with age. Just under half (46.9%) of all people aged 75 years and over had measured high blood pressure in 2014-15.

Persons aged 18 years & over - Proportion with high blood pressure, 2014-15



Australian Bureau of Statistics

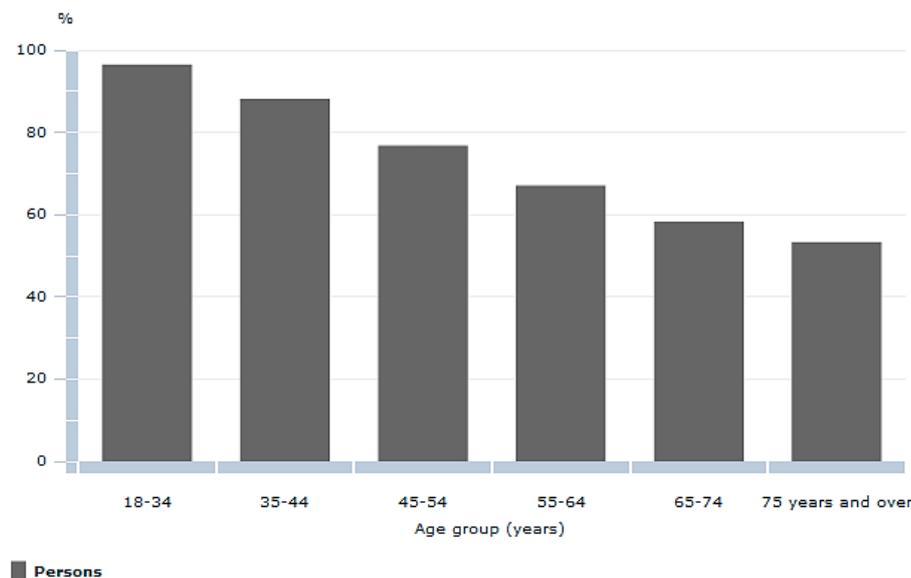
Source(s): National Health Survey, 2014-15

### Comparison of reported hypertension and measured high blood pressure

For people with high blood pressure there are often no symptoms or signs - they can have high blood pressure yet feel well[1]. The inclusion of two methods for assessing prevalence of high blood pressure in the National Health Survey allows an assessment of whether people with the condition are aware that they have it.

In 2014-15, of all adults with measured high blood pressure, nearly three-quarters (71.1%) did not report having hypertension (similar to 2011-12). This suggests that many people with high blood pressure were either unaware that they had the condition or did not consider it to be a long-term or current problem. Almost all 18-34 year olds (96.5%) with measured high blood pressure in 2014-15 did not report having hypertension, compared with around half (53.3%) of people aged 75 years and over.

Persons aged 18 years & over- Proportion with high blood pressure who did not self-report hypertension(a), 2014-15



Australian Bureau of Statistics

Footnote(s): (a) Measured systolic blood pressure greater than or equal to 140 mmHg and/or diastolic blood pressure greater than or equal to 90mmHg

Source(s): National Health Survey: First Results, 2014-15

## **ENDNOTES**

1 Heart Foundation, 2015, Blood pressure <<http://heartfoundation.org.au/your-heart/know-your-risks/blood-pressure>>; last accessed 04/12/2015.

## KIDNEY DISEASE

Kidney disease is a chronic disease in which a person's kidney function is reduced or damaged. This affects the kidney's ability to filter blood and therefore control the body's water and other hormone levels, leading to increased fluid and waste within the body. The increase in these fluids can cause high blood pressure, anemia and uremia. Kidney disease is also often associated with other chronic diseases such as diabetes and cardiovascular disease.

### Definitions

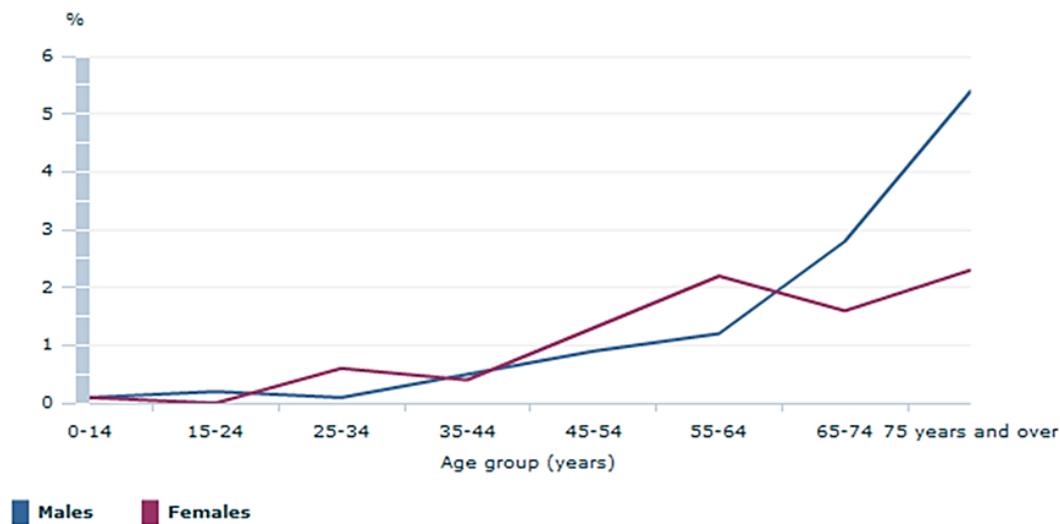
Chronic kidney disease has a number of stages, ranging in severity from Stage 1 to Stage 5, with the early stages often showing no symptoms. An individual's kidney function can improve or regress during the early stages of the disease but once Stages 4 and 5 are reached, kidney function is severely reduced and unlikely to improve. A person with end stage kidney disease is generally reliant on kidney replacement therapy in the form of dialysis or kidney transplant.<sup>[1][2]</sup>

Data on kidney disease presented here refers to persons who reported having been told by a doctor or nurse that they had kidney disease and that it was current and long-term; that is, their kidney disease was current at the time of interview and had lasted, or was expected to last, 6 months or more.

In 2014-15, 0.9% of Australians (203,400 people) had kidney disease. The prevalence of kidney disease has remained stable over the past three years (0.8% of the population or 181,900 people in 2011-12).

Men and women had similar rates of kidney disease (both 0.9%), while rates increase with age. In 2014-15, 3.6% of people aged 75 years and over reported having kidney disease.

Proportion of persons with kidney disease, 2014-15



Australian Bureau of Statistics

Source(s): National Health Survey, 2014-15

### 2011-12 biomedical information

In 2011-12, biomedical information was collected for the first time by ABS, including tests measuring aspects of kidney function. Results were used to determine indicators of chronic kidney disease and its stages. Around 1.7 million people (10.0%) aged 18 years and over had indicators of chronic kidney disease based on these tests.

Of these people, only 6.1% had reported having kidney disease. This suggests that a large proportion of people with indicators of chronic kidney disease were unaware that they had the condition. However, it is possible that not all those people whose tests provided an indication of chronic kidney disease had the condition, as tests at a single point in time cannot provide a diagnosis for kidney disease and could indicate the presence of an acute kidney condition or infection instead. Kidney disease can only be confirmed if indicators are persistent for at least three months.<sup>[3]</sup>

For more information see [Australian Health Survey: Biomedical Results for Chronic Diseases, 2011-12 \(cat. no. 4364.0.55.005\)](#).

## **ENDNOTES**

- 1** Kidney Health Australia, July 2014, Risk factors and symptoms of Kidney Disease?, <<http://www.kidney.org.au/KidneyDisease/RiskFactorsandSymptoms/tabid/819/Default.aspx>>, Last accessed 10/11/2015.
- 2** The Renal Association, July 2014, Stage 4-5 CKD, <<http://www.renal.org/information-resources/the-uk-eckd-guide/stages-4-5-ckd#sthash.sHNUuljf.puzWwFtZ.dpbs>>, Last accessed 10/11/2015.
- 3** Kidney Health Australia, Jun 2013, Chronic Kidney Disease (CKD) Management in General Practice. 2nd Edition 2012 <<http://www.kidney.org.au/LinkClick.aspx?fileticket=vfDcA4sEUMs%3d&tabid=635&mid=1584>>, Last accessed 10/11/2015.

## MENTAL AND BEHAVIOURAL CONDITIONS

Mental and behavioural conditions result from the complex interplay of biological, social, psychological, environmental and economic factors, and can change a person's thinking, feelings, and behaviour causing the person distress and difficulty in functioning.<sup>[1]</sup>

### Changes to mental and behavioural conditions in 2014-15

In 2014-15 a module specifically dedicated to mental and behavioural conditions was included in the National Health Survey (NHS) to collect information on cognitive, organic and behavioural conditions. In previous NHS cycles, mental and behavioural conditions were collected in a module that included a wide range of long-term health conditions. The number of persons who reported having a mental and behavioural condition in 2014-15 has increased since the 2011-12 NHS, potentially due to the greater prominence of mental and behavioural conditions in the new module. Data on mental and behavioural conditions for 2014-15 are therefore not comparable with data in previous National Health Surveys. For further information see the Explanatory Notes.

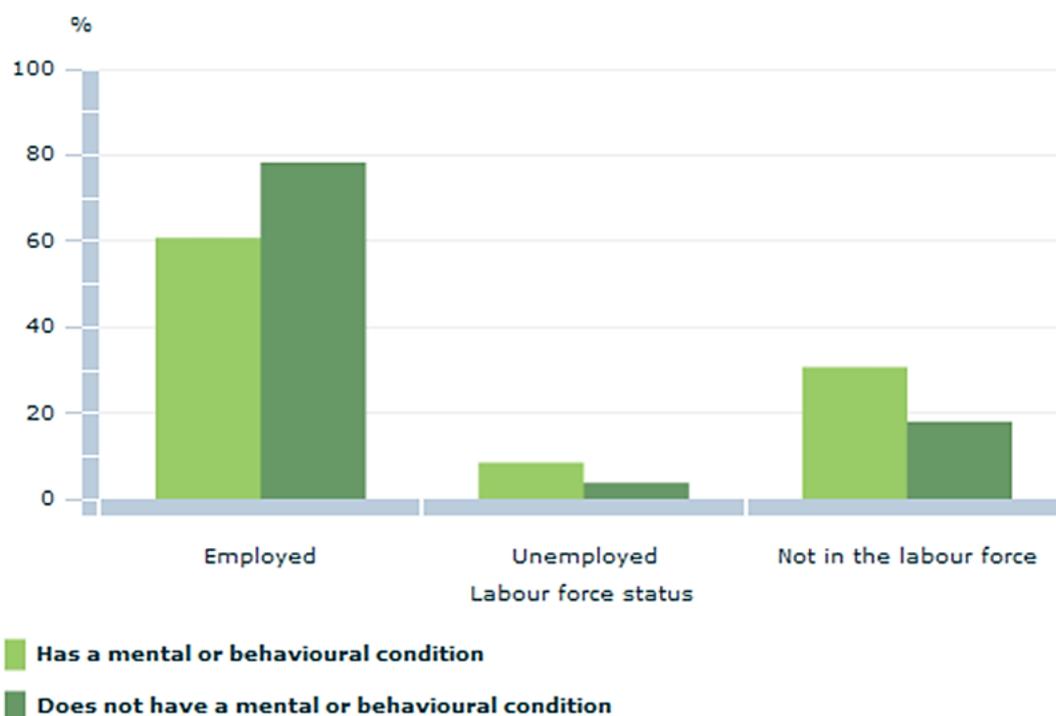
Estimates of people with mental or behavioural conditions from the NHS will differ from those obtained from a diagnostic tool such as that used in the 2007 National Survey of Mental Health and Wellbeing.

In 2014-15 there were 4.0 million Australians (17.5%) who reported having a mental or behavioural condition. Anxiety-related conditions were most frequently reported (2.6 million people or 11.2% of the population) followed by mood (affective) disorders, which includes depression (2.1 million people or 9.3%). Around one in twenty Australians (5.1%) reported having both an anxiety-related condition and a mood (affective) disorder.

Mental and behavioural conditions were more common amongst women than men (19.2% compared with 15.8% respectively).

In 2014-15, three in five people aged 15-64 years with a mental or behavioural condition were employed, compared with around four in five people of the same age without a mental or behavioural condition (60.7% compared with 78.3% respectively). Conversely, people aged 15-64 years with a mental or behavioural condition were more than twice as likely to be unemployed than people without a mental or behavioural condition (8.4% compared with 3.7% respectively). Almost one in three people aged 15-64 years with a mental or behavioural condition were not in the labour force, compared with around one in five people without a mental or behavioural condition (30.7% compared with 18.0% respectively).

Persons aged 15 to 64 years - Mental health condition status by labour force status, 2014-15

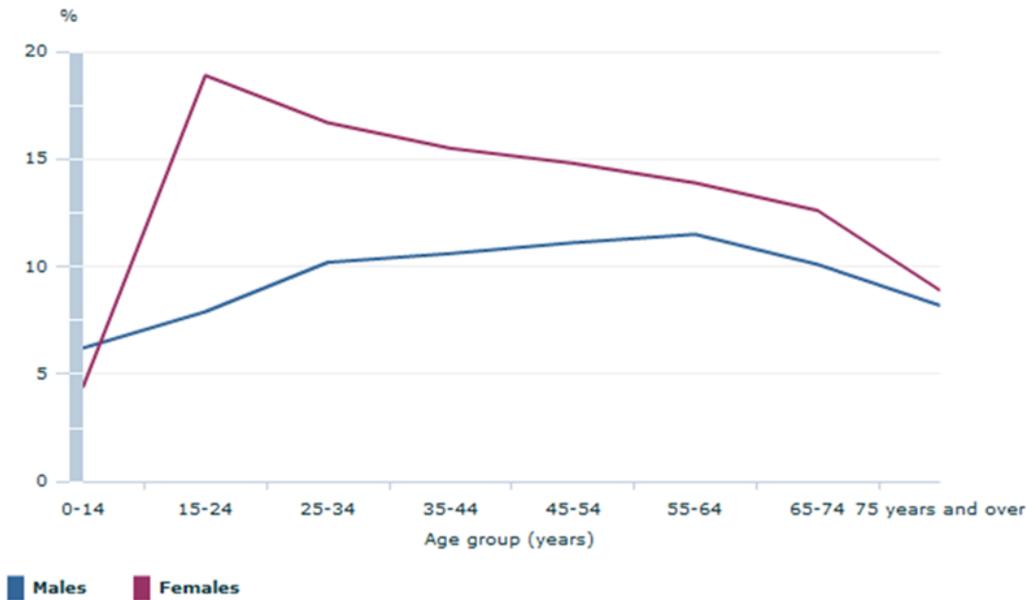


Source(s): National Health Survey, 2014-15

### Anxiety-related conditions

In 2014-15, around one in eight females (13.0%) reported having an anxiety-related condition compared with around one in ten males (9.4%). Women aged 15-24 years reported having an anxiety-related condition at twice the rate of men of the same age (18.9% compared with 7.9%).

Proportion of persons with anxiety related conditions, 2014-15



Australian Bureau of Statistics

Source(s): National Health Survey, 2014-15

### Depression or feelings of depression

Around one in eleven people (8.9%) reported having depression or feelings of depression in 2014-15. Similar to anxiety-related conditions, females reported having depression or feelings of depression at a higher rate than males (10.4% compared with 7.4% respectively).

The rate of people reporting depression or feelings of depression increased until around 55-64 years of age (13.7%). For most age groups, females reported higher rates of depression or feelings of depression compared with their male counterparts.

Proportion of persons with depression or feeling depressed, 2014-15



Australian Bureau of Statistics

Source(s): National Health Survey, 2014-15

## **Psychological distress**

Information on psychological distress was also collected from adult respondents in the National Health Survey using the Kessler Psychological Distress Scale (K10). See Psychological distress.

## **ENDNOTES**

1 Australian Health Ministers, 2009. 'Fourth National Mental Health Plan – an agenda for collaborative government action in mental health 2009-2014', <<http://www.health.gov.au/internet/publications/publishing.nsf/Content/mental-pubs-f-plan09-toc>>; last accessed 03/12/2015

## OVERWEIGHT AND OBESITY

Being overweight or obese increases a person's risk of developing long-term health conditions such as cardiovascular disease, high blood pressure and Type 2 diabetes, while being underweight can also be a health risk factor for some people.

### Definitions

Body Mass Index (BMI) is a commonly used measure for defining whether a person is underweight, normal weight, overweight or obese. In the National Health Survey, respondents' height and weight were measured to determine their BMI score.

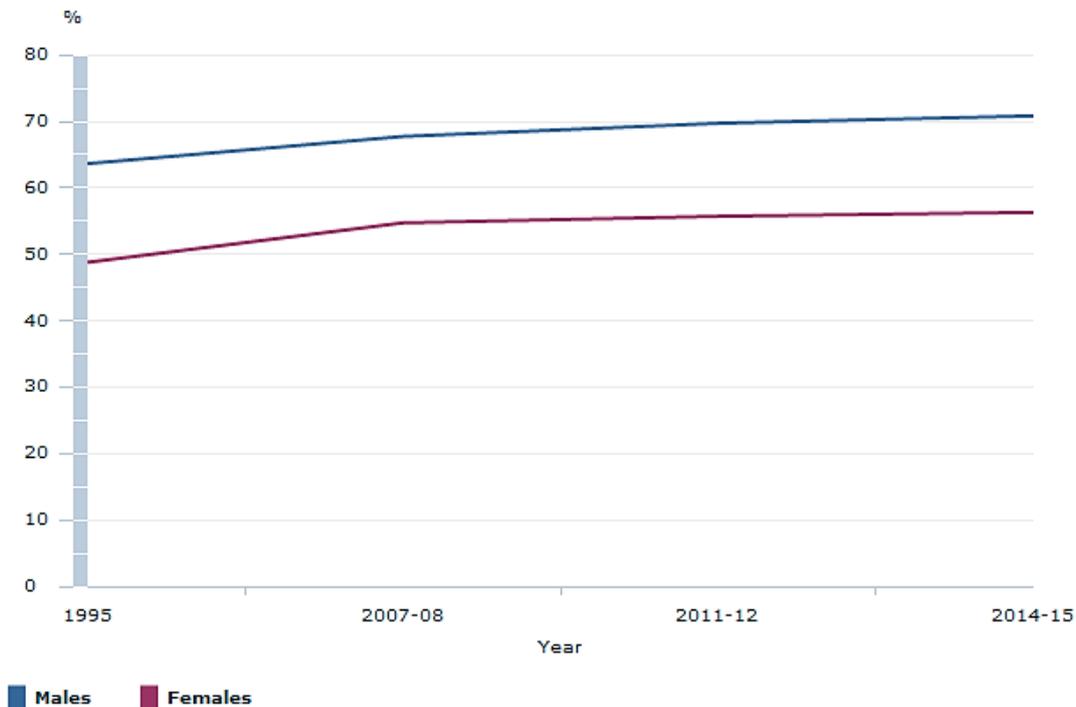
In 2014-15, 26.8% of respondents aged 18 years and over did not have their height, weight or both measured. For these people, height and weight were imputed. For more information see Appendix 2: Physical measurements in the 2014-15 National Health Survey.

Another method used to measure whether a person is a healthy weight or not is waist circumference. See Waist circumference for more information.

In 2014-15, 63.4% of Australians aged 18 years and over were overweight or obese (11.2 million people), comprised of 35.5% overweight (6.3 million people) and 27.9% obese (4.9 million people). A further 35.0% were of normal weight and 1.6% were underweight.

While the prevalence of overweight and obesity increased in Australia between 1995 (56.3%) and 2011-12 (62.8%), there was no significant increase between 2011-12 and 2014-15. Overall, 70.8% of men were overweight or obese in 2014-15, compared with 56.3% of women.

Persons aged 18 years & over - Proportion overweight or obese(a), 1995 to 2014-15



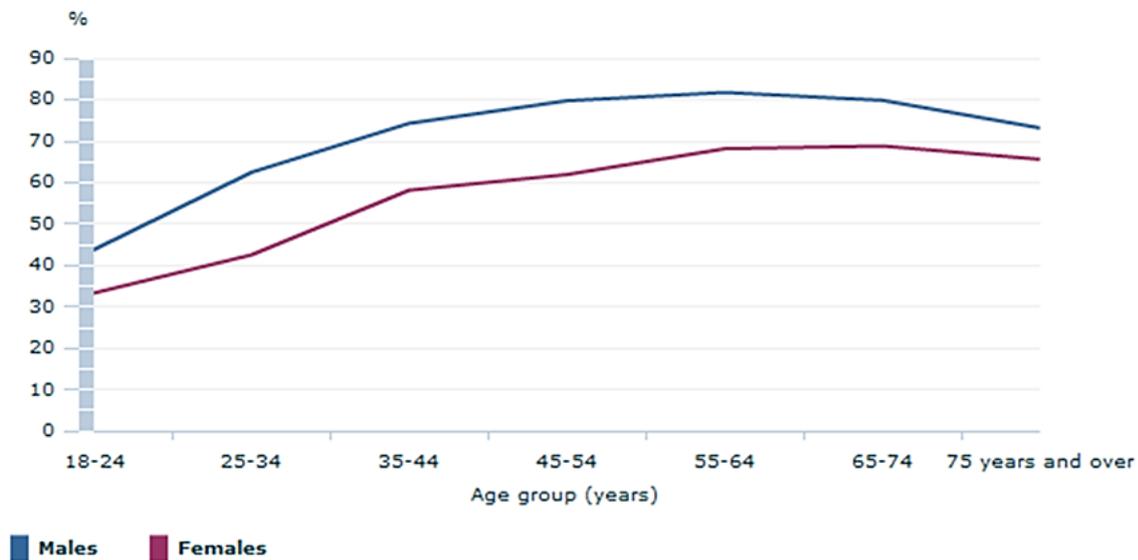
Australian Bureau of Statistics

Footnote(s): (a) BMI scores of 25 and above

Source(s): National Health Survey, 2014-15

Rates of overweight and obesity increase with age. Of men aged 45 years and over, almost four in five (79.4%) were overweight or obese in 2014-15, while two in three women (65.7%) of the same age were overweight or obese.

Persons aged 18 years & over - Proportion of males & females overweight or obese(a), 2014-15



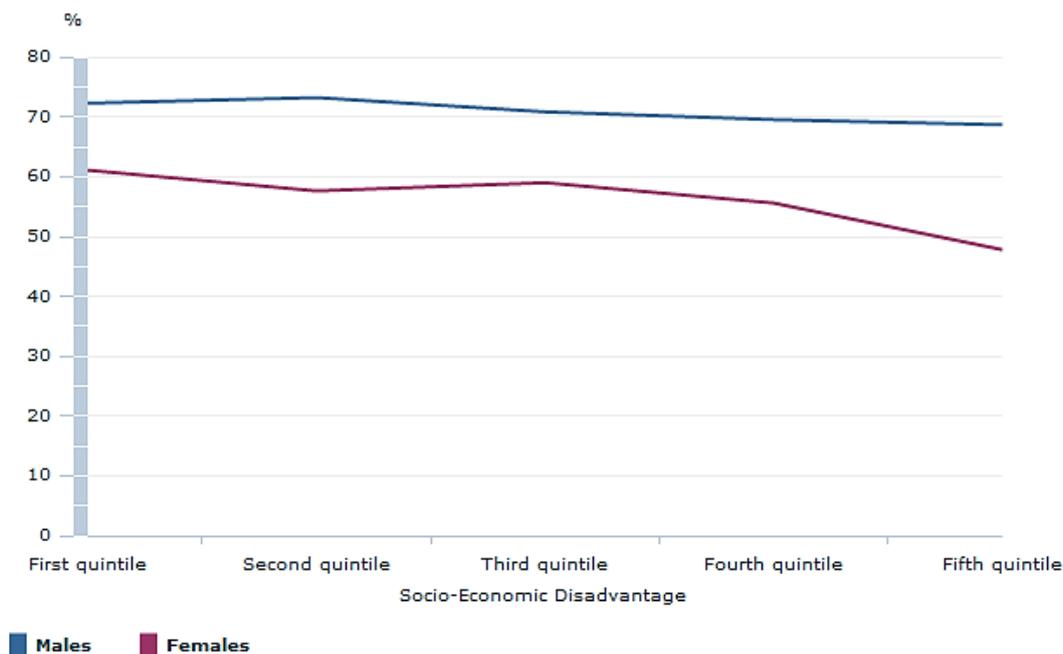
Australian Bureau of Statistics

Footnote(s): (a) Based on the 2011 Index of Relative Socio-Economic Disadvantage. A lower Index of Disadvantage quintile (e.g. the first quintile) indicates an area with relatively greater disadvantage. A higher Index of Disadvantage (e.g. the fifth quintile) indicates an area with a relative lack of disadvantage. See the Glossary for more information.

Source(s): National Health Survey, 2014-15

In 2014-15, more women living in areas of most disadvantage in Australia were overweight or obese (first quintile; 61.1%) than women living in areas of least disadvantage (fifth quintile; 47.8%). For men there were no differences between areas of disadvantage. These patterns were similar to those of 2011-12.

Persons aged 18 years & over - Proportion overweight or obese by levels of disadvantage, 2014-15(a)

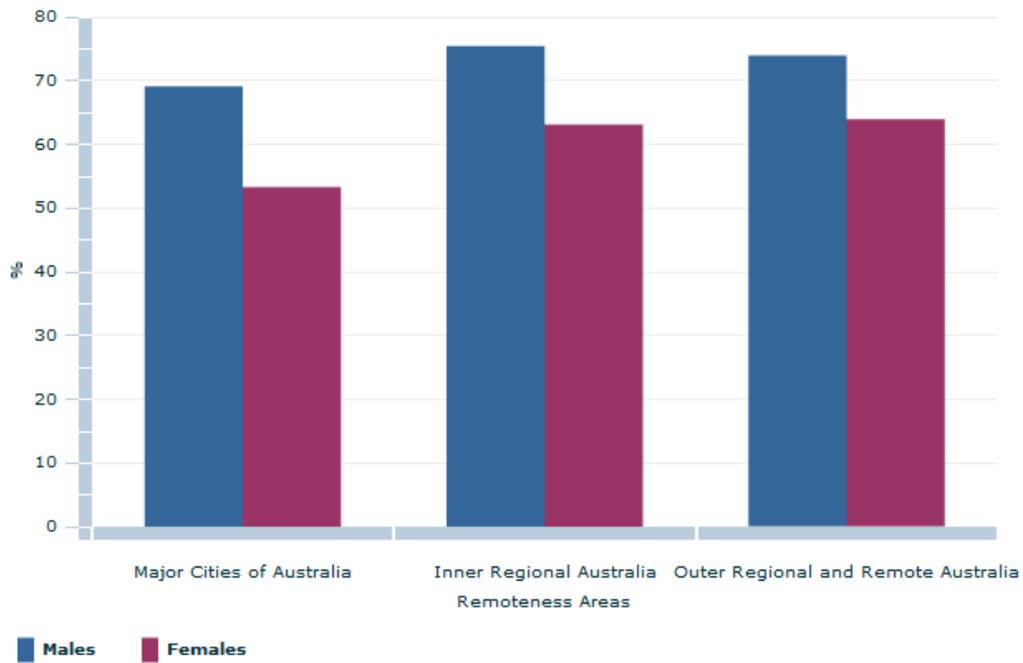


Australian Bureau of Statistics

Source(s): National Health Survey, 2014-15

Rates of overweight and obesity also vary by remoteness areas. In 2014-15, 61.1% of adults living in Major Cities were overweight or obese compared with 69.2% in Inner Regional Australia and 69.2% also in Outer Regional and Remote Australia. This pattern was consistent with that of 2011-12.

Persons aged 18 years & over - Proportion overweight or obese by Remoteness Areas



Australian Bureau of Statistics

Source(s): National Health Survey, 2014-15

## WAIST CIRCUMFERENCE

Waist circumference is a commonly used measure of whether a person is of a healthy weight or not. In particular it provides a good estimate of body fat and in conjunction with Body Mass Index can indicate a person's potential risk of developing chronic diseases such as heart disease and Type 2 diabetes.

### Definitions

A waist measurement of 94cm or more for men or 80cm or more for women indicates that a person is at increased risk of developing chronic disease<sup>[1]</sup>.

In 2014-15, 28.8% of respondents aged 18 years and over did not have their waist circumference measured. For these people, waist circumference was imputed. For more information see Appendix 2: Physical measurements in the 2014-15 National Health Survey.

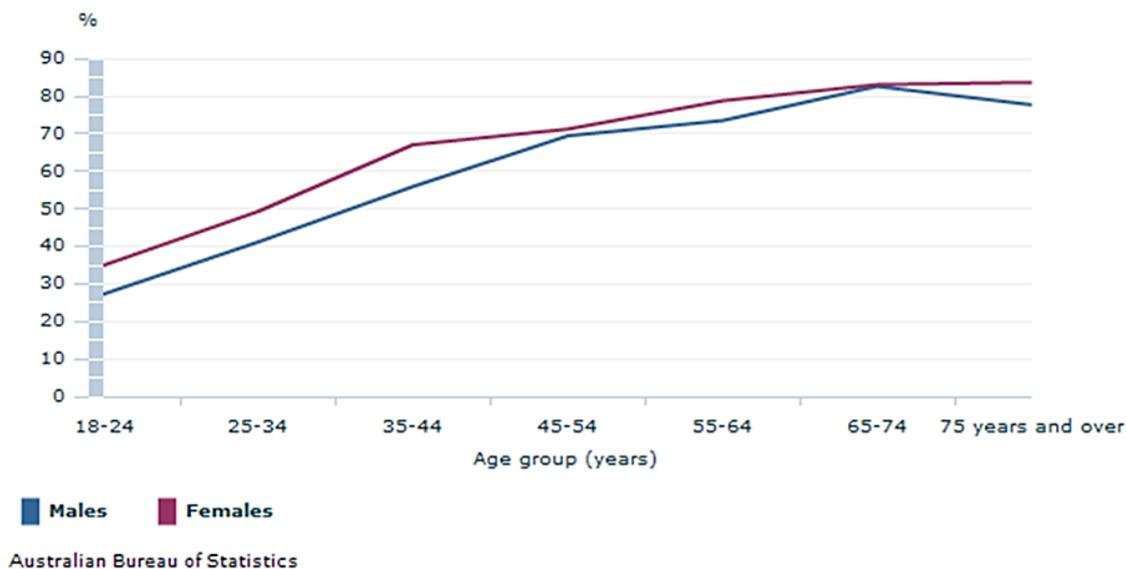
In 2014-15 the average waist measurement for men aged 18 years and over was 97.5cm, while for women of the same age it was 87.5cm. Both averages are considerably above the measurements indicating increased risk (94cm and 80cm respectively), particularly for women.

More than half (58.8%) of all men aged 18 years and over had a waist circumference that put them at an increased risk of developing chronic diseases, while two in three (65.4%) women had an increased level of risk.

Between 2007-08 and 2011-12 the proportions of men and women at increased risk rose, from 55.4% to 59.6% respectively for men, and 63.8% to 66.3% respectively for women. However, between 2011-12 and 2014-15 the proportions have remained stable. This corresponds with the slowing in recent years of the trend in increases in the proportion of Australians who are overweight or obese based on BMI. See [Overweight and Obesity](#) for more information.

The proportion of men and women with a waist circumference that puts them at risk of developing chronic diseases increases with age, with more than three-quarters of men and women aged 55 years and over at increased risk in 2014-15 (77.1% of men compared with 81.3% of women).

Persons aged 18 years & over - Proportion with an increased risk waist circumference, 2014-15(a)



Footnote(s): (a) A waist measurement of 94cm or more for men and 80cm or more for women.

Source(s): National Health Survey, 2014-15

People living in Inner Regional and Outer Regional/Remote areas of Australia were more likely to have 'increased risk' waist measurements than people living in Major Cities. In Inner Regional Australia, 66.4% of men and 71.0% of women had a waist circumference that put them at increased risk of developing chronic diseases, similar to men and women in Outer Regional/Remote areas (67.7% and 71.7% respectively). In Major Cities, 55.7% of men and 63.1% of women had a waist circumference that put them at increased risk.

People living in the most disadvantaged areas of Australia were more likely to have 'increased risk' than people living in the least disadvantaged areas. For men, 60.7% in the most disadvantaged areas of Australia were at increased risk of developing chronic diseases, compared with 55.4% in the least disadvantaged areas. A similar pattern was evident for women, with 69.1% in the most disadvantaged areas being at increased risk, compared with 59.6% in the least disadvantaged areas.

#### **ENDNOTES**

1 World Health Organisation, Obesity: preventing and managing the global epidemic. Report of a WHO Consultation, 2000 <[http://libdoc.who.int/trs/WHO\\_TRS\\_894.pdf](http://libdoc.who.int/trs/WHO_TRS_894.pdf)>; Last accessed 04/12/2015.

# SMOKING

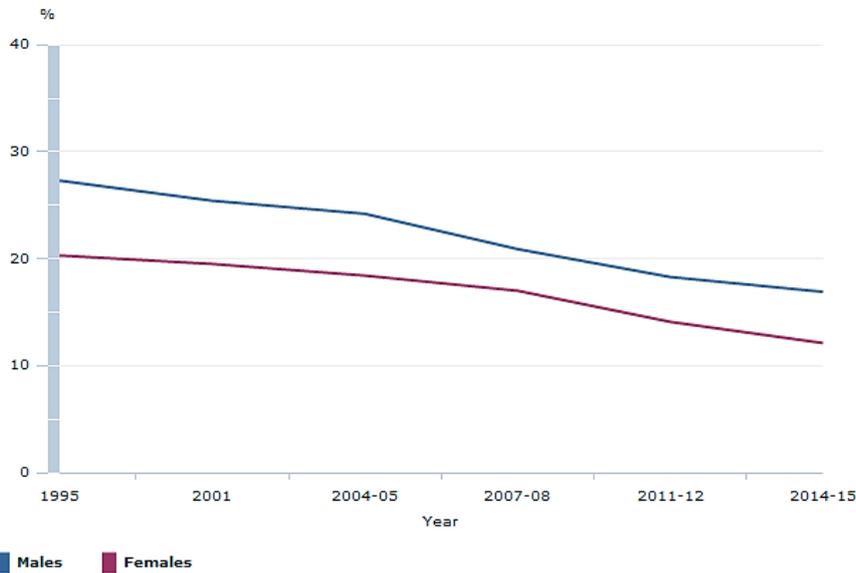
Tobacco smoking is one of the largest preventable causes of death and disease in Australia [1]. It is associated with an increased risk of a wide range of health conditions, including heart disease, diabetes, stroke, cancer, renal disease, eye disease and respiratory conditions such as asthma, emphysema and bronchitis. Tobacco was responsible for 7.8% of the total burden of disease and injury in Australia in 2003, equivalent to around 15,000 deaths per year [2], and was estimated to cost Australia \$31.5 billion in social (including health) and economic costs in 2004-05 [3].

## Adults 18 years and over

In 2014-15, 14.5% of adults aged 18 years and over were daily smokers (2.6 million adults), down from 16.1% in 2011-12. This decrease is a continuation of the trend over the past two decades. In 2001, 22.4% of adults smoked daily while 23.8% of adults smoked daily in 1995.

Men have been consistently more likely to smoke daily than women. In 2014-15, 16.9% of males and 12.1% of women smoked daily, with a similar but higher pattern in 1995 (27.3% of men compared with 20.3% of women).

Persons aged 18 years & over - Proportion who were current daily smokers, 1995 to 2014-15

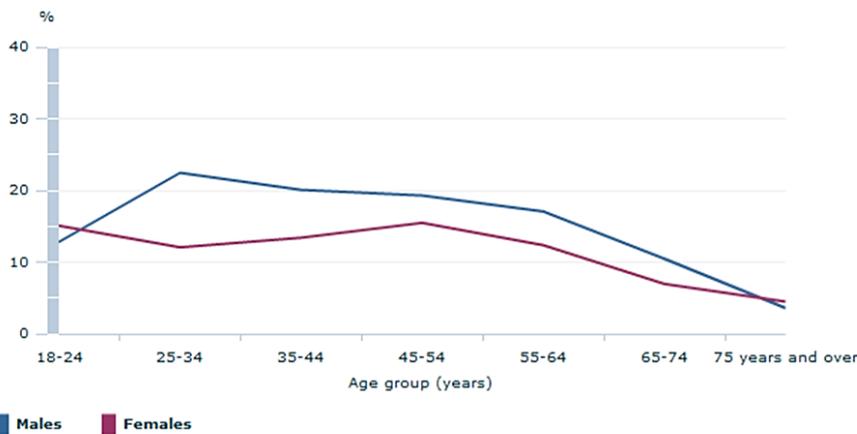


Australian Bureau of Statistics

Source(s): National Health Survey, 2014-15

The following graph shows daily smoking rates across age and sex in 2014-15.

Persons aged 18 years & over - Proportion who are current daily smokers by age, 2014-15

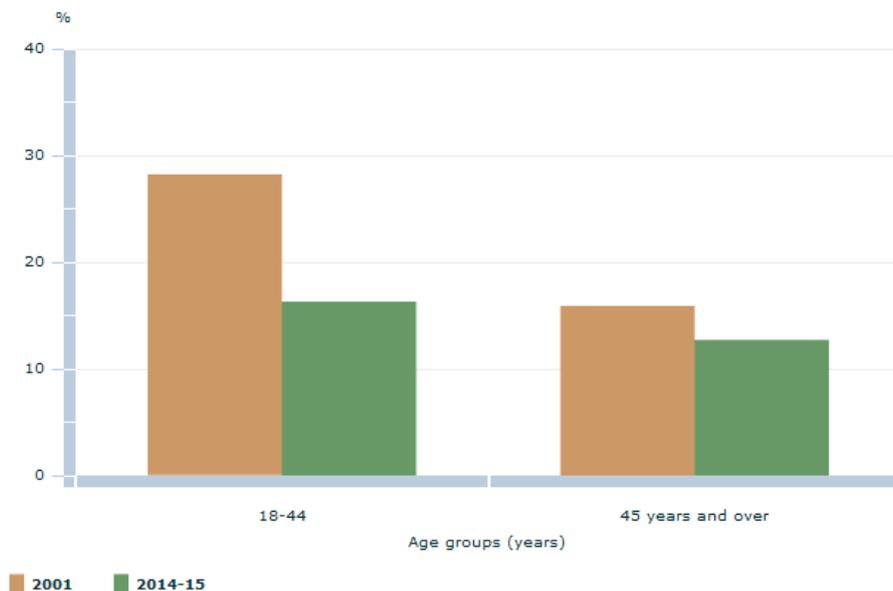


Australian Bureau of Statistics

Source(s): National Health Survey, 2014-15

Rates of daily smoking have decreased considerably amongst younger adults since 2001, while rates for older adults have also decreased but to a lesser extent. In 2001, 28.2% of 18-44 year olds smoked daily, decreasing to 16.3% in 2014-15. Of adults aged 45 years and over, 15.9% smoked daily in 2001, decreasing to 12.7% in 2014-15.

Persons aged 18 years & over - Proportion who were current daily smokers, 2001 & 2014-15



Australian Bureau of Statistics

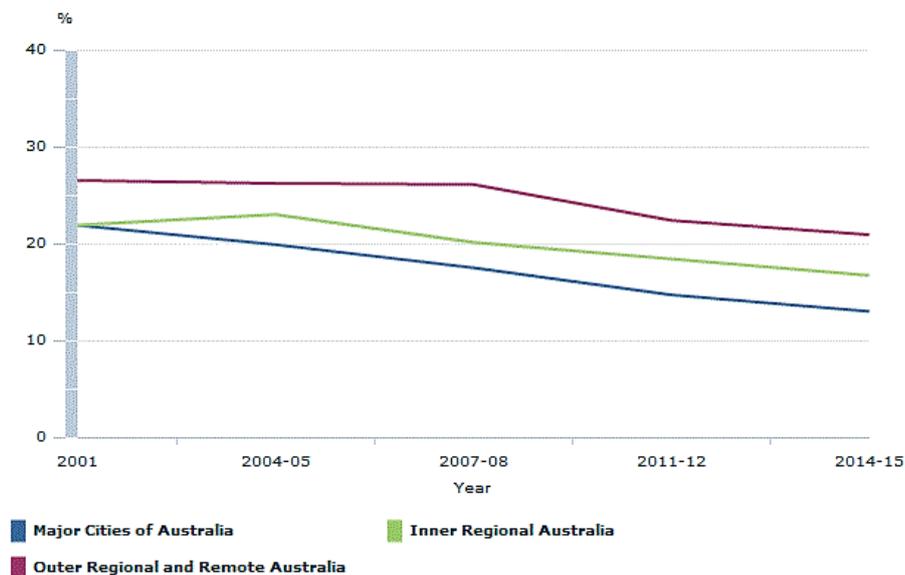
Source(s): National Health Survey, 2014-15

A further 1.5% of adults smoked less often than daily in 2014-15, while nearly one third (31.4%) were ex-smokers and just over half (52.6%) had never smoked.

Similar to 2011-12, the Northern Territory had the highest rate of daily smokers (20.9%) in 2014-15, followed by Tasmania (17.9%). The Australian Capital Territory had the lowest rate of daily smokers in 2014-15 (12.4%).

In 2014-15, people living in Outer Regional and Remote areas of Australia had higher rates of daily smoking (20.9%) than people in Inner Regional areas (16.7%) or Major Cities (13.0%). While rates of daily smoking have decreased across all remoteness areas over the past 10-15 years, the rate for Outer Regional and Remote areas is only now similar to that of Major Cities a decade ago (19.9% in 2004-05).

Persons aged 18 years & over - Proportion who were current daily smokers by Remoteness Areas, 2001 to 2014-15

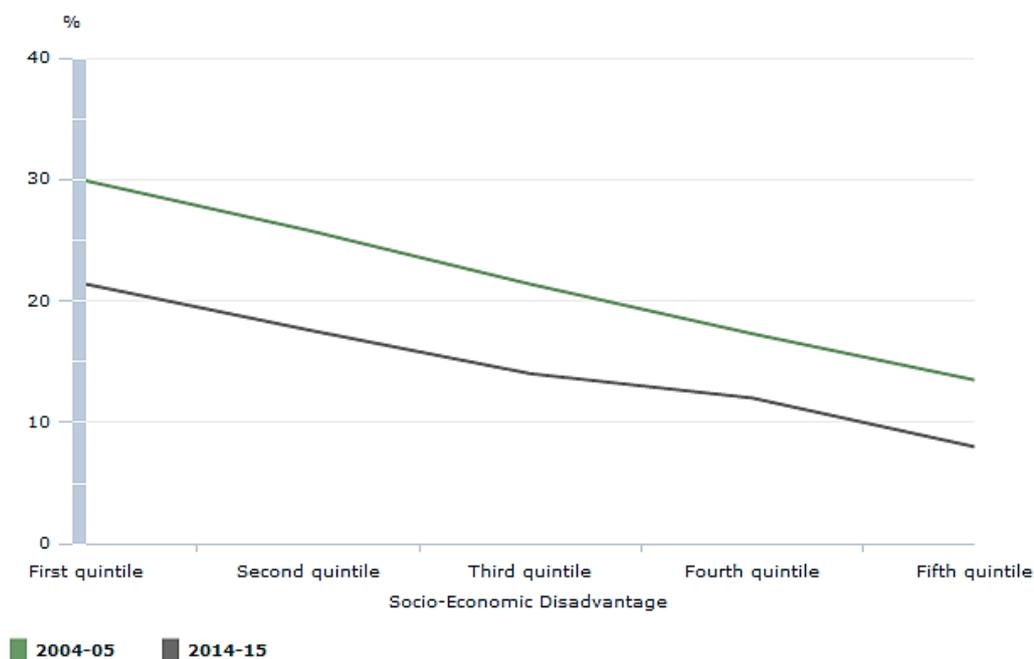


Australian Bureau of Statistics

Source(s): National Health Survey, 2014-15

Rates of smoking are also considerably higher amongst people living in areas of Australia with the most disadvantage. In 2014-15, 21.4% of people living in areas of most disadvantage (first quintile) smoked daily, compared with 8.0% of people living in areas of the least disadvantage (fifth quintile). Rates of smoking have decreased over the past decade in all quintiles of disadvantage. However, the daily smoking rate for people living in areas of most disadvantage (first quintile; 21.4%) remains considerably higher than the rate for people living in areas of least disadvantage (fifth quintile) a decade ago (13.5% in 2004-05).

Persons aged 18 years & over - Proportion who were current daily smokers by level of disadvantage, 2004-05 & 2014-15



Australian Bureau of Statistics

**Footnote(s):** (a) Based on the 2011 Index of Relative Socio-Economic Disadvantage. A lower Index of Disadvantage quintile (e.g. the first quintile) indicates an area with relatively greater disadvantage. A higher Index of Disadvantage (e.g. the fifth quintile) indicates an area with a relative lack of disadvantage. See the Glossary for more information.

**Source(s):** National Health Survey, 2014-15

### Persons 15-17 years

In 2014-15, 2.7% of 15-17 year olds were daily smokers, similar to 2011-12 (4.2%). A further 0.5% smoked less often than daily, 1.8% were ex-smokers, and 94.2% reported that they had never smoked.

Some under-reporting of persons identifying as current smokers may have occurred due to social pressures, particularly in cases where other household members were present at the interview.

### ENDNOTES

- 1 Department of Health, 'Tobacco control' <<http://www.health.gov.au/internet/main/publishing.nsf/content/tobacco>>; last accessed 03/12/2015.
- 2 Begg S, Vos T, Barker B, Stevenson C, Stanley L and Lopez AD 2007. The Burden of Disease and Injury in Australia 2003, AIHW cat. no. PHE 82, Canberra: Australian Institute of Health and Welfare, <<http://www.aihw.gov.au/publication-detail/?id=6442467990>>; last accessed 03/12/2015.
- 3 Collins D & Lapsley H 2008. The Costs of Tobacco, Alcohol and Illicit Drug Abuse to Australian Society in 2004/05 - Summary version, National Drug Strategy Monograph series no. 66, Canberra: DoHA, <[http://www.nationaldrugstrategy.gov.au/internet/drugstrategy/publishing.nsf/Content/mono66/\\$File/mono66.pdf](http://www.nationaldrugstrategy.gov.au/internet/drugstrategy/publishing.nsf/Content/mono66/$File/mono66.pdf)>; last accessed 03/12/2015.

## ALCOHOL CONSUMPTION

Alcohol occupies a significant place in Australian culture and is consumed in a wide range of social circumstances. In general, alcohol is consumed in Australia at levels of low immediate risk. However, some people drink at levels that increase their risk of developing health problems over the course of their life, as well as increasing their risk of alcohol-related injury.

In 2014-15, 80.6% of Australians aged 18 years and over had consumed alcohol in the past year. A further 8.2% had consumed alcohol 12 or more months ago, and 10.7% had never consumed alcohol. More males had consumed alcohol in the past year (85.6%) than females (75.7%).

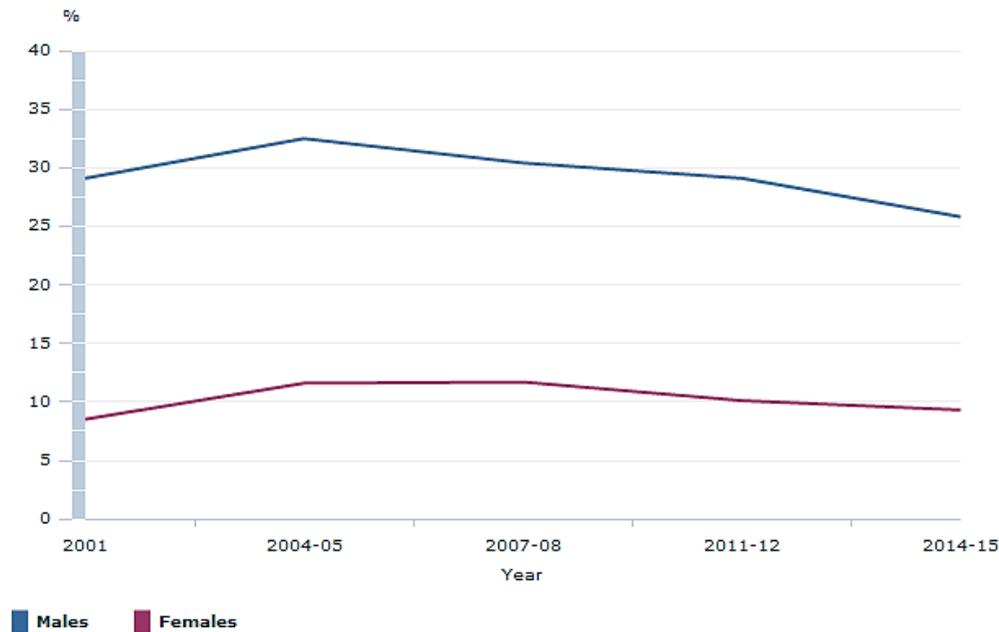
Two-thirds (66.2%) of all 15-17 year olds had never consumed alcohol, an increase from 2011-12 when around half (49.1%) of all 15-17 year olds had never consumed alcohol.

### Lifetime risk for adults

The 2009 National Health and Medical Research Council (NHMRC) guidelines for reducing health risks associated with the consumption of alcohol state that, for healthy men and women, 'drinking no more than two standard drinks on any day reduces the lifetime risk of harm from alcohol-related disease or injury'<sup>[1]</sup>.

In 2014-15, 17.4% of adults aged 18 years and over consumed more than two standard drinks per day on average, exceeding the lifetime risk guideline. This was a decrease from 2011-12 when 19.5% of adults exceeded the guideline.

Persons aged 18 years & over - Proportion who exceeded the lifetime risk alcohol guideline(a), 2001 to 2014-15



Australian Bureau of Statistics

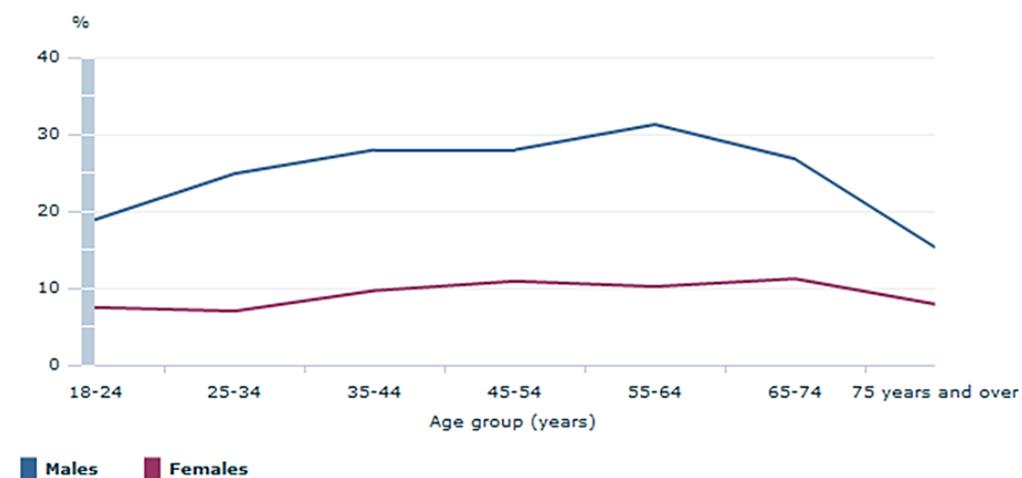
**Footnote(s):** (a) More than two standard drinks per day on average.

**Source(s):** National Health Survey, 2014-15

Around one in four (25.8%) Australian men exceeded the lifetime risk guideline in 2014-15, a decrease from 29.1% in 2011-12. Of women, one in ten (9.3%) exceeded the guideline, similar to 2011-12 (10.1%). Overall, Australian men were more than twice as likely to exceed the guideline than women.

Western Australia had the highest proportion of adults who consumed more than two standard drinks per day on average (20.8%) while Victoria had the lowest (15.6%).

Persons aged 18 years & over - Proportion who exceeded the lifetime risk alcohol guideline(a), by age, 2014-15



Australian Bureau of Statistics

Footnote(s): (a)More than two standard drinks per day on average.

Source(s): National Health Survey, 2014-15

### Single occasion risk for adults

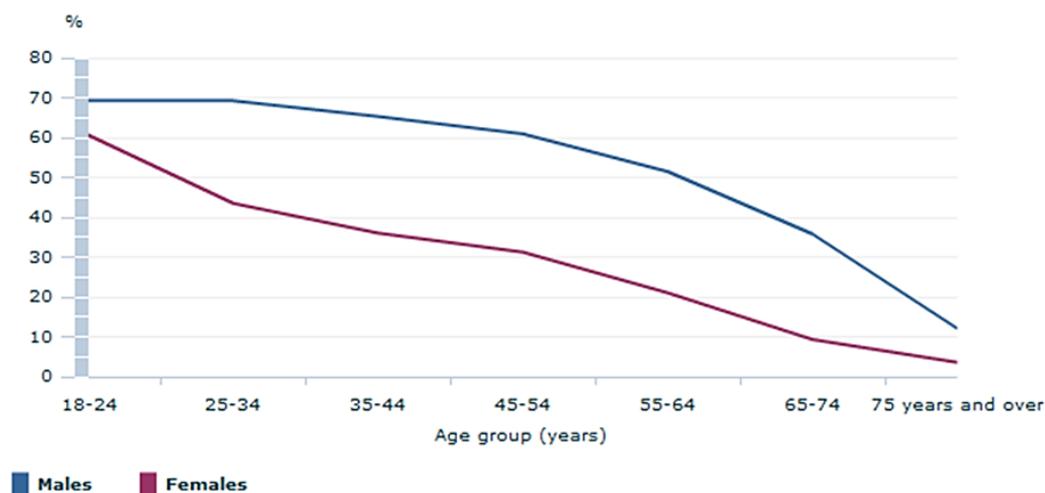
The 2009 NHMRC guidelines also advise that on a single occasion of drinking, the risk of alcohol-related injury increases with the amount consumed. For healthy men and women, 'drinking no more than four standard drinks on a single occasion reduces the risk of alcohol-related injury arising from that occasion'[1]. A single occasion of drinking refers to a person consuming a sequence of drinks without their blood alcohol concentration reaching zero in between.

In 2014-15, 44.0% of Australians aged 18 years and over exceeded the single occasion risk threshold of consuming more than 4 standard drinks at least once in the past year, similar to 2011-12 (44.7%). More males exceeded the guideline than women in 2014-15 (56.8% and 31.7% respectively).

Young adults were more likely to exceed the single occasion risk guideline than other ages. In 2014-15, over two-thirds (69.4%) of males aged 18-24 years consumed more than 4 standard drinks at least once in the past year, while 60.6% of females of the same age exceeded the guideline.

The Northern Territory had the highest proportion (47.8%) of adults exceeding the guideline followed by Western Australia (47.0%), while New South Wales and Victoria had the lowest rates (both 42.5%).

Persons aged 18 years & over - Proportion who exceeded the single occasion risk alcohol guideline(a), 2014-15



Footnote(s): (a)More than four standard drinks at least once in the past year.

Source(s): National Health Survey, 2014-15

For more information on NHMRC guidelines for the consumption of alcohol, and an explanation of the method used to measure alcohol consumption in ABS health surveys, see [Alcohol Consumption in Australia: A Snapshot, 2007-08 \(cat. no. 4832.0.55.001\)](#).

## ENDNOTES

1 National Health and Medical Research Council (NHMRC), 2009. Australian guidelines to reduce health risks from drinking alcohol, Canberra: NHMRC.  
<[http://www.nhmrc.gov.au/\\_files\\_nhmrc/publications/attachments/ds10-alcohol.pdf](http://www.nhmrc.gov.au/_files_nhmrc/publications/attachments/ds10-alcohol.pdf)>; last accessed 03/12/2015.

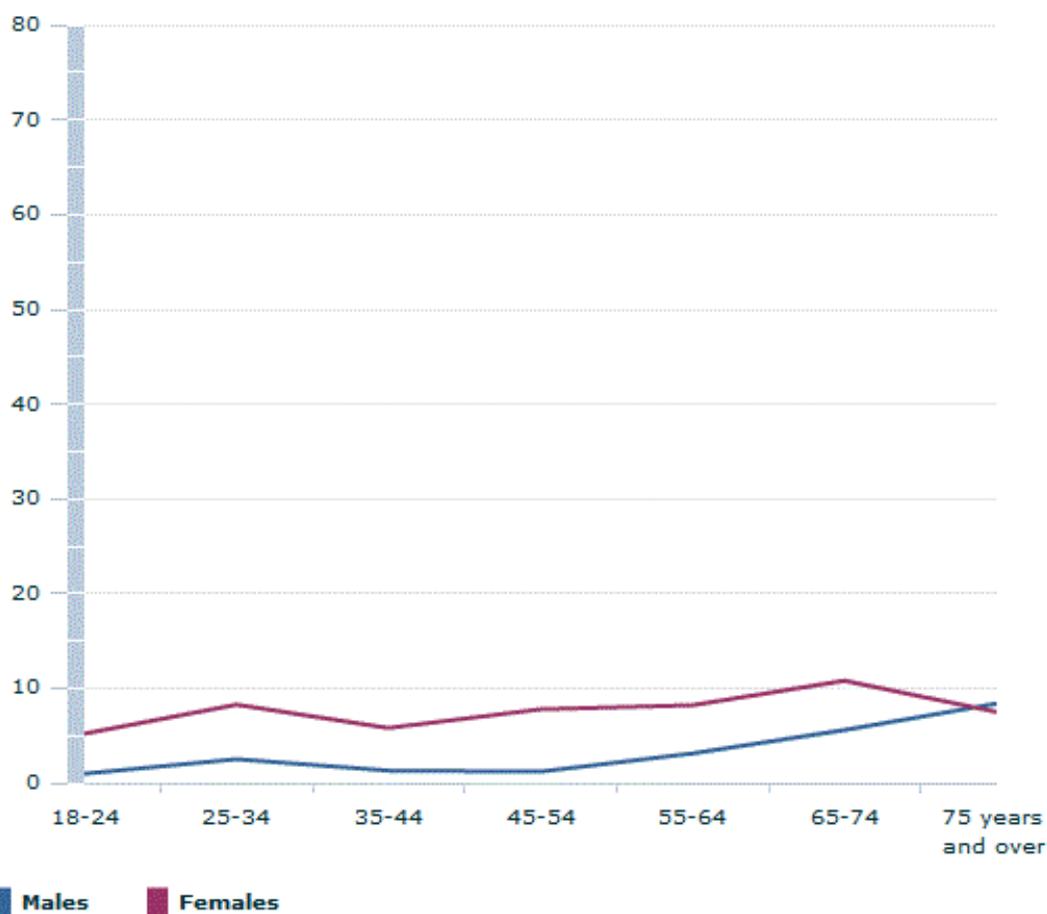
## DAILY INTAKE OF FRUIT AND VEGETABLES

A balanced diet, including sufficient fruit and vegetables, reduces a person's risk of developing conditions such as heart disease and diabetes. The 2013 Australian Dietary Guidelines recommend a minimum number of serves of fruit and vegetables each day, depending on a person's age and sex, to ensure good nutrition and health<sup>[1]</sup>. More information about the guidelines is available in the Glossary.

In 2014-15, 49.8% of Australians aged 18 years and over met the guidelines for recommended daily serves of fruit (2 or more serves), while 7.0% met the guidelines for serves of vegetables (5-6 or more serves for men depending on age, and 5 or more for women). Only one in twenty (5.1%) adults met both guidelines. These rates were similar to 2011-12 (48.5%, 6.1% and 4.2% respectively).

Women were more likely to meet the guidelines than men. In 2014-15, 55.4% of women met the fruit guidelines and 10.2% met the vegetable guidelines, compared with 44.0% and 3.8% of men. In general, older people were more likely to meet the guidelines than younger people. Of people aged 65-74 years, 8.1% met both the fruit and vegetable intake guidelines, compared with only 3.2% of 18-24 year olds.

Persons 18 years & over - Proportion with adequate intake of fruit, vegetables or both(a), 2014-15



Adequate fruit and vegetable intake | ▼

Australian Bureau of Statistics

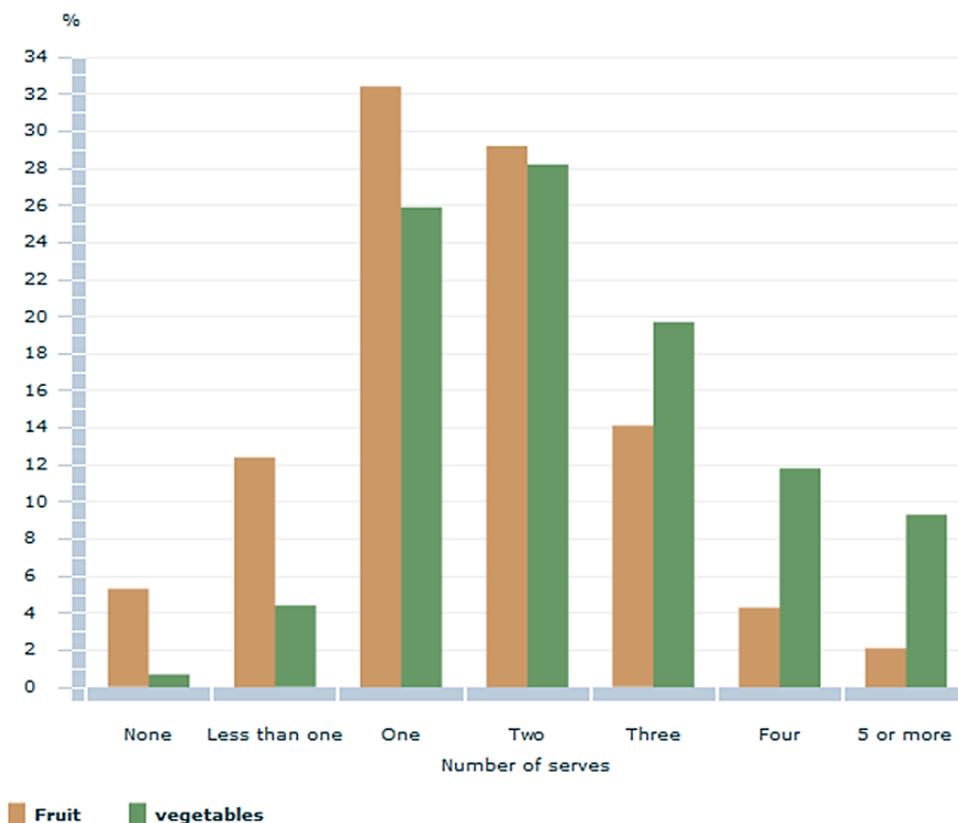
Footnote(s): (a)NHMRC 2013 Australian Dietary Guidelines

Source(s): National Health Survey, 2014-15

## Serves of fruit and vegetables

On average, men aged 18 years and over consumed 1.6 serves of fruit and 2.3 serves of vegetables each day in 2014-15. Women of the same age consumed an average of 1.8 serves of fruit and 2.5 serves of vegetables.

Persons 18 years & over - Usual daily intake of fruit & vegetables



Australian Bureau of Statistics

Source(s): National Health Survey, 2014-15

## 2011-12 dietary recall information

In 2011-12, detailed dietary information was collected through a 24-hour recall of foods, beverages and supplements. For more information on dietary intakes see Australian Health Survey: Nutrition First Results - Foods and Nutrients (cat. no. 4364.0.55.007) and Australian Health Survey: Usual Nutrient Intakes (cat. no. 4364.0.55.008).

Further analysis using the 24-hour recall information from 2011-12 will assess Australians' usual intake of fruit and vegetables against the 2013 Australian Dietary Guidelines. This is scheduled for release in mid-2016.

## ENDNOTES

1 National Health and Medical Research Council (2013) Australian Dietary Guidelines. Canberra: National Health and Medical Research Council.

<[https://www.eatforhealth.gov.au/sites/default/files/files/the\\_guidelines/n55\\_australian\\_dietary\\_guidelines.pdf](https://www.eatforhealth.gov.au/sites/default/files/files/the_guidelines/n55_australian_dietary_guidelines.pdf)>; last accessed 03/12/2015

## EXERCISE

The benefits of regular physical activity include reductions in the risk of health conditions such as heart disease, Type 2 diabetes, certain forms of cancer, depression and some injuries. In addition, physical activity is an important element for achieving and maintaining a healthy body mass which is of particular focus given the high rates of overweight and obesity in Australia and the role of this risk factor in chronic disease.

### Definitions

Types of exercise covered in the 2014-15 National Health Survey were walking undertaken for transport, fitness, recreation or sport, and moderate and vigorous exercise. Moderate exercise consists of activity that causes a moderate increase in heart rate or breathing, while vigorous exercise causes a large increase in a person's heart rate or breathing.

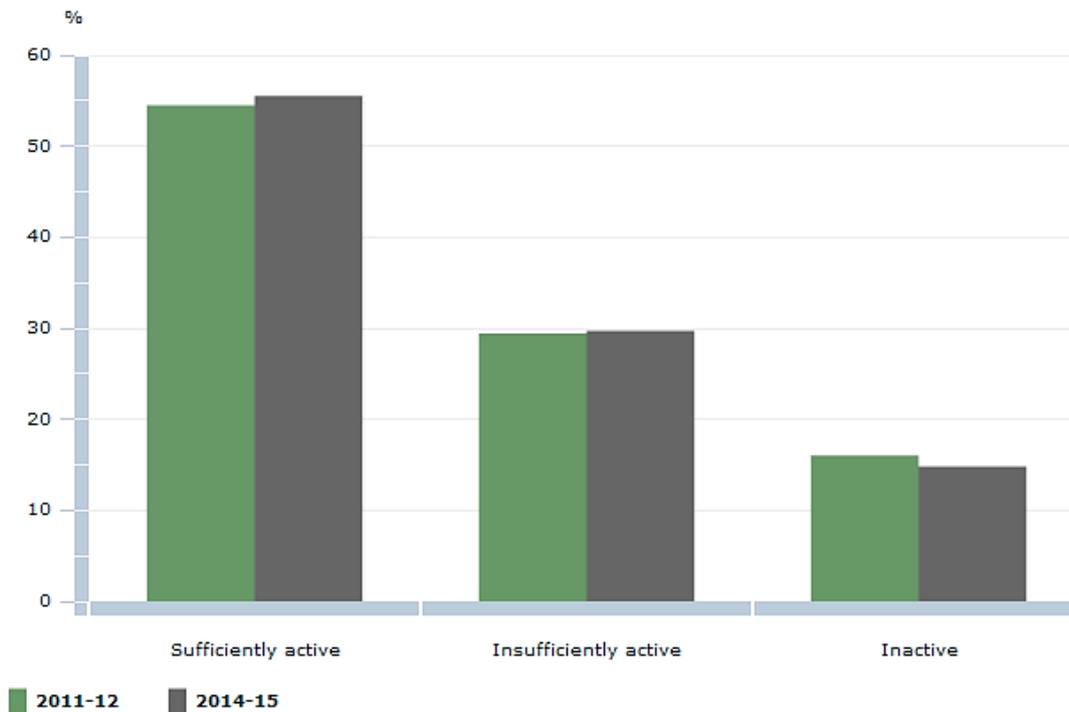
For adults aged 18-64 years, physical activity guidelines recommend 150-300 minutes of moderate or 75-150 minutes of vigorous physical activity, or an equivalent combination of both, per week. The guidelines also recommend that adults aged 18-64 years do muscle strengthening activities on at least 2 days of each week<sup>[1]</sup>.

For adults aged 65 years and over, guidelines recommend at least 30 minutes of moderate intensity physical activity on most, preferably all, days<sup>[1]</sup>.

### Adults aged 18-64 years

In 2014-15, 55.5% of 18-64 year olds participated in sufficient physical activity in the last week (more than 150 minutes of moderate physical activity or more than 75 minutes of vigorous physical activity, or an equivalent combination of both, including walking). Nearly 1 in 3 (29.7%) were insufficiently active (less than 150 minutes in the last week) while 14.8% were inactive (no exercise in the last week). These were similar to proportions in 2011-12 (54.5%, 29.4% and 16.0% respectively).

Persons aged 18-64 years - Whether sufficiently active(a), 2011-12 & 2014-15



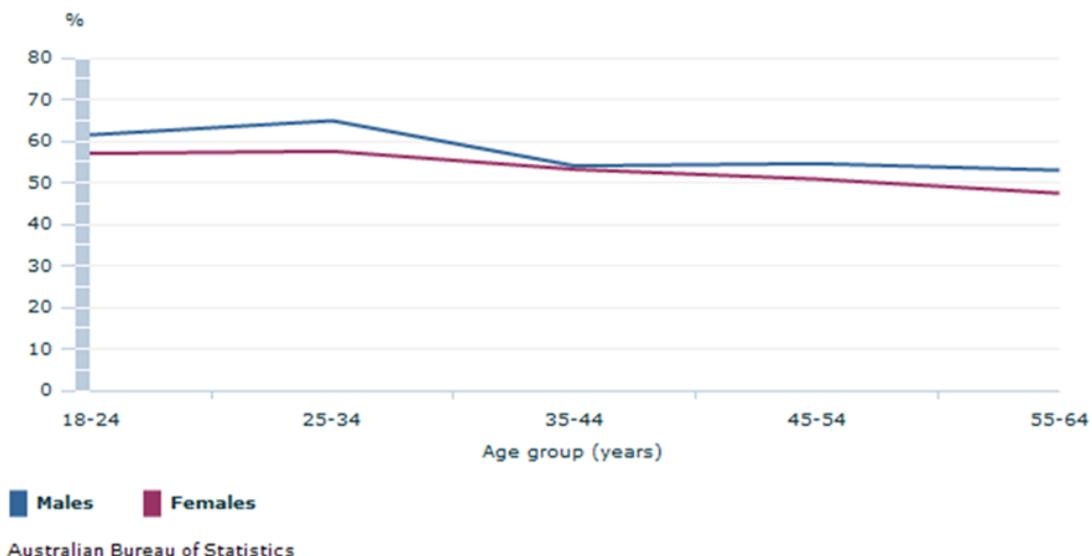
Australian Bureau of Statistics

**Footnote(s):** (a) Based on a total of 150 minutes or more of exercise in last week - exercise includes that undertaken for fitness, recreation, sport and walking for transport.

**Source(s):** National Health Survey, 2014-15

Of men aged 18-64 years, 57.7% participated in sufficient physical activity in the last week, compared with 53.3% of women of the same age. Similar proportions of men and women were inactive in 2014-15 (15.2% and 14.4% respectively).

Persons aged 18 years & over - Proportion who met or exceeded 150 minutes of exercise(a) by age, 2014-15



Footnote(s): (a) Total duration in minutes exercise in last week including walking for fitness, recreation or sport and walking for transport

Source(s): National Health Survey, 2014-15

In 2014-15, 24.1% of 18-64 year olds did strength or toning activities on two or more days in the last week. A higher proportion of men than women did two or more days of strength and toning activities (25.9% compared with 22.3%).

### Adults aged 65 years and over

In 2014-15, one in four (24.9%) adults aged 65 years and over did at least 30 minutes of exercise on five or more days in the last week, while almost half (44.7%) had no days in which they exercised for more than 30 minutes. These were similar to proportions in 2011-12 (23.8% and 45.8% respectively).

Similar proportions of men and women aged 65 years and over did at least 30 minutes of exercise on five or more days in the last week (26.5% of men and 23.2% of women).

### ENDNOTES

1 Department of Health, 10 July 2014, The Department of Health: Australia's Physical Activity and Sedentary Behaviour Guidelines <<http://www.health.gov.au/internet/main/publishing.nsf/Content/health-publth-strateg-phys-act-guidelines>>; last accessed 03/12/2015.

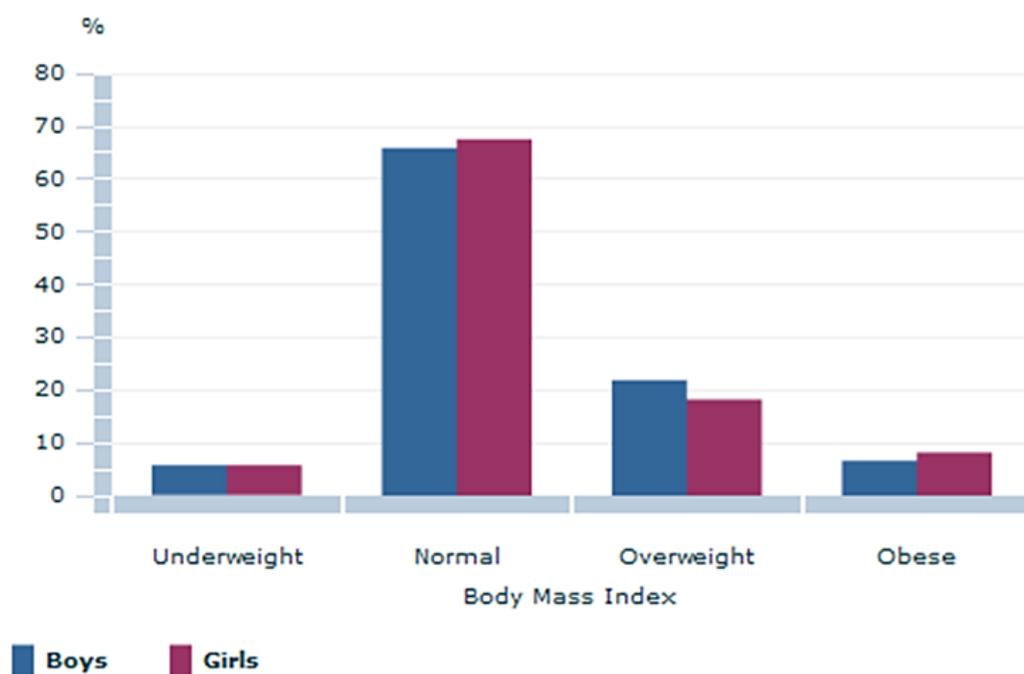
## CHILDREN'S RISK FACTORS

Healthy practices established early in life, such as a balanced diet with sufficient fruit and vegetables, may continue into adolescence and adulthood, thereby reducing a person's risk of developing conditions such as heart disease and diabetes. Conversely, risk factors such as being overweight or obese in childhood may increase a person's risk of developing such health conditions later in life.

### Body Mass Index

In 2014-15, around one in four (27.4%) children aged 5-17 years were overweight or obese, comprised of 20.2% overweight and 7.4% obese. There has been no change in the proportion of children who were overweight or obese since 2011-12 (25.7%).

Children aged 5-17 years - Body Mass Index, 2014-15



Australian Bureau of Statistics

Source(s): National Health Survey, 2014-15

### Daily intake of fruit and vegetables

The 2013 Australian Dietary Guidelines recommend a minimum number of serves of fruit and vegetables each day for children, depending on their age and sex, to ensure good nutrition and health<sup>[1]</sup>. More information about the guidelines is available in the Glossary.

In 2014-15, 68.1% of children aged 2-18 years met the guidelines for recommended daily serves of fruit, while 5.4% met the guidelines for serves of vegetables. Accordingly, only one in twenty (5.1%) children met both guidelines.

Girls were more likely than boys to meet recommended intakes for fruit (71.8% compared with 65.0%), but the proportions of girls and boys meeting recommended intakes for vegetables were similar (6.3% and 4.3% respectively).

On average, children aged 2-18 years consumed 2 serves of fruit and 1.9 serves of vegetables each day in 2014-15.

### Milk consumption

Milk is an excellent source of vitamins and minerals, particularly calcium, which is important for forming strong and healthy bones. In 2014-15, almost all children (97.3%) aged 2-18 years consumed milk. The majority of children usually consumed cow's milk (93.1%), while 2.2% of children usually consumed soy milk.

### **2011-12 dietary recall information**

In 2011-12, detailed dietary information was collected through a 24-hour recall of foods, beverages and supplements. For more information on dietary intakes see Australian Health Survey: Nutrition First Results - Foods and Nutrients (cat. no. 4364.0.55.007) and Australian Health Survey: Usual Nutrient Intakes (cat. no. 4364.0.55.008).

Further analysis using the 24-hour recall information from 2011-12 will assess Australians' usual intake of fruit and vegetables against the 2013 Australian Dietary Guidelines. This is scheduled for release in mid-2016.

### **ENDNOTES**

1 National Health and Medical Research Council (2013) Australian Dietary Guidelines. Canberra: National Health and Medical Research Council.

<[https://www.eatforhealth.gov.au/sites/default/files/files/the\\_guidelines/n55\\_australian\\_dietary\\_guidelines.pdf](https://www.eatforhealth.gov.au/sites/default/files/files/the_guidelines/n55_australian_dietary_guidelines.pdf)>; last accessed 03/12/2015.

## APPENDIX 1: SAMPLE COUNTS AND ESTIMATES

The following tables present sample counts and weighted estimates for the 2014-15 National Health Survey.

### SAMPLE COUNTS AND WEIGHTED ESTIMATES, Australia

Age group (years)	PERSONS IN SAMPLE			WEIGHTED ESTIMATE		
	Males no.	Females no.	Persons no.	Males '000	Females '000	Persons '000
0-4	776	724	1 505	774.2	733.2	1 512.4
5-9	663	574	1 232	765.1	725.1	1 484.1
10-14	588	544	1 128	714.9	678.9	1 388.9
15-19	576	559	1 138	722.1	766.3	1 492.4
20-24	411	404	824	810.7	702.4	1 529.8
25-29	535	605	1 139	853.5	851.2	1 702.7
30-34	577	771	1 345	843.2	848.4	1 686.9
35-39	589	755	1 346	760.5	774.3	1 536.9
40-44	667	755	1 418	804.8	830.1	1 630.2
45-49	562	690	1 247	745.4	775.4	1 514.6
50-54	604	669	1 270	758.8	783.0	1 538.3
55-59	553	664	1 219	690.4	723.9	1 417.1
60-64	560	626	1 186	616.6	637.4	1 253.9
65-69	496	598	1 099	549.4	563.1	1 117.6
70-74	397	417	813	399.2	417.9	816.1
75-79	262	361	621	287.0	341.9	626.9
80-84	174	237	406	189.2	228.6	412.7
85 years and over	129	199	325	135.5	178.6	311.3
Total all ages	9 110	10 151	19 259	11 410.1	11 561.3	22 969.0

### SAMPLE COUNTS AND WEIGHTED ESTIMATES, States and territories

Age group (years)	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.
<b>PERSONS IN SAMPLE (no.)</b>									
0-17	813	815	732	525	625	438	307	445	4 698
18-64	1 845	1 962	1 847	1 421	1 410	1 115	658	1 041	11 299
65 years and over	614	559	503	486	411	370	92	219	3 265
Total all ages	3 272	3 335	3 081	2 434	2 450	1 918	1 057	1 708	19 259
<b>WEIGHTED ESTIMATES ('000)</b>									
0-17	1 682.0	1 292.3	1 099.2	352.3	572.9	114.3	43.4	85.1	5 235.7
18-64	4 632.6	3 685.1	2 873.0	1 021.6	1 568.2	302.7	119.0	247.7	14 451.3
65 years and over	1 100.5	821.7	628.8	269.7	310.4	87.5	12.9	43.8	3 285.6
Total all ages	7 414.1	5 797.2	4 599.5	1 644.7	2 455.3	503.2	175.2	377.0	22 969.0

## SAMPLE COUNTS AND WEIGHTED ESTIMATES, Remoteness Areas

Age group (years)	PERSONS IN SAMPLE			WEIGHTED ESTIMATE		
	Males no.	Females no.	Persons no.	Males '000	Females '000	Persons '000
<b>MAJOR CITIES OF AUSTRALIA</b>						
0-17	1 651	1 502	3 151	1 877.9	1 772.1	3 647.7
18-64	3 537	4 079	7 614	5 269.6	5 322.4	10 589.6
65 years and over	896	1 116	2 012	1 012.6	1 148.9	2 161.6
Total all ages	6 089	6 692	12 781	8 166.7	8 237.4	16 404.0
<b>INNER REGIONAL AUSTRALIA</b>						
0-17	424	374	794	508.3	480.5	984.1
18-64	861	1 075	1 934	1 217.3	1 224.2	2 439.7
65 years and over	314	430	740	339.7	391.4	726.7
Total all ages	1 594	1 878	3 474	2 060.0	2 094.9	4 157.2
<b>OUTER REGIONAL AND REMOTE AUSTRALIA</b>						
0-17	382	365	750	299.5	297.7	599.6
18-64	793	948	1 744	671.8	739.2	1 413.4
65 years and over	249	262	509	208.8	186.1	393.4
Total all ages	1 427	1 578	3 000	1 182.6	1 225.4	2 403.9

## APPENDIX 2: PHYSICAL MEASUREMENTS IN THE 2014-15 NATIONAL HEALTH SURVEY

In the 2014-15 National Health Survey (NHS), measurements of height, weight and waist circumference were taken of respondents aged 2 years and over, while blood pressure was also measured for adult respondents (aged 18 years and over). These provide information on overweight and obesity (using Body Mass Index), risk of developing chronic disease, and high blood pressure amongst the Australian population.

Non-response rates for these items are shown in the table below.

### NON-RESPONSE RATES FOR PHYSICAL MEASUREMENTS, 2014-15 National Health Survey

Non-response rates					
Age group (years)	Total persons in sample	Body Mass Index(a)		Waist circumference	Blood pressure
	no.	%		%	%
<b>Children</b>					
2-4	841	40.0		43.4	..
5-7	769	38.0		40.6	..
8-11	920	36.2		38.6	..
12-15	927	37.2		39.6	..
16-17	582	36.6		37.8	..
Total 2-17 years	4 033	37.7		40.0	..
<b>Adults</b>					
18-24	1 126	25.0		27.1	23.7
25-34	2 485	26.0		28.2	23.2
35-44	2 764	26.1		27.9	23.8
45-54	2 520	26.3		28.4	24.9
55-64	2 404	28.3		30.0	24.8
65-74	1 916	25.7		27.9	22.5
75 years and over	1 350	31.4		33.7	27.9
Total 18 years and over	14 561	26.8		28.8	24.3

.. not applicable

(a) Respondent's height and/or weight missing.

Non-response rates for physical measurements were higher in 2014-15 than in the 2011-12 NHS; for example, the non-response for BMI for adults in 2014-15 was 26.8% compared with 16.5% in 2011-12.

An investigation was undertaken to determine whether the characteristics of the people who were measured differed from those who were not measured. This investigation looked at variables such as smoking status, self-assessed health, employment status, marital status, country of birth, self perceived body mass, level of exercise and whether or not has high cholesterol (as a long-term health condition) and found no differences. While there were some differences in age, sex and part of state as illustrated above, these were taken account of in the weighting process.

As the sample weights have been calculated to apply to the whole fully responding sample, use of these weights would produce a correct estimate of the proportion of people with these characteristics (for example, overweight or obesity) but would not produce a correct estimate of the number of people who are overweight or obese. The use of a second weight, to be applied to the measured population only, was considered too confusing for use in microdata products such as TableBuilder and therefore imputation was used to obtain values for respondents for whom physical measurements were not taken and therefore allow the calculation of correct estimates for the number of people who are overweight or obese.

After investigations using 2011-12 NHS data and simulating lower response rates, the 'hot decking' imputation method was chosen for the 2014-15 NHS. In this method, a record with a missing response (the 'recipient') receives the response of another similar record (the 'donor'). A number of characteristics with which to match recipients to donors were used; for adults they were:

- age group
- sex
- part of state (capital city and balance of state)
- self-perceived body mass (underweight, acceptable, or overweight)
- level of exercise (sedentary, low, moderate or high)
- whether or not has high cholesterol (as a long-term health condition).

For example, a female recipient aged 35-39 years who lives in a capital city, has a self-perceived body mass of overweight, has high cholesterol and lives a sedentary lifestyle will match to a donor record who has the same profile (female, 35-39, self-reports as overweight, etc).

For adult BMI, around 92% of imputed records used all 6 variables in identifying donor records. For the remaining 8%, donor records could not be found using all 6 variables therefore fewer variables were used. For example, around 2% of recipients were matched to donors according to self-perceived body mass, level of exercise and cholesterol but not part of state.

For children 2-14 years, age group, sex and part of state were used as imputation variables while for 15-17 year olds, level of exercise was also used as an imputation variable, due to the other variables not being collected for children aged 2-17 years.

As a result of this investigation, results for all physical measurement data (BMI, waist circumference and blood pressure) from 2014-15 are of suitable quality and are directly comparable to 2011-12 and earlier years.

## EXPLANATORY NOTES

### INTRODUCTION

1 This publication presents key indicators from the 2014-15 National Health Survey (NHS), including information on:

- the health status of the population, including long-term health conditions;
- health risk factors such as smoking, Body Mass Index, diet, exercise and alcohol consumption; and
- demographic and socioeconomic characteristics.

2 Information on the use of health services, such as consultations with health practitioners, is scheduled for release in the first quarter of 2016.

3 The 2014-15 NHS was conducted throughout Australia from July 2014 to June 2015. Previous surveys were conducted in 1989-90, 1995, 2001, 2004-05, 2007-08 and 2011-12. Health surveys conducted by the ABS in 1977-78 and 1983, while not part of the NHS series, also collected similar information.

### SCOPE OF THE SURVEY

4 The NHS was conducted from a sample of approximately 14,700 private dwellings across Australia.

5 Urban and rural areas in all states and territories were included, while Very Remote areas of Australia and discrete Aboriginal and Torres Strait Islander communities were excluded. These exclusions are unlikely to affect national estimates, and will only have a minor effect on aggregate estimates produced for individual states and territories, excepting the Northern Territory where the population living in Very Remote areas accounts for around 23% of persons.

6 Non-private dwellings such as hotels, motels, hospitals, nursing homes and short-stay caravan parks were excluded from the survey. This may affect estimates of the number of people with some long-term health conditions (for example, conditions which may require periods of hospitalisation).

7 Within each selected dwelling, one adult (18 years and over) and one child (0-17 years) were randomly selected for inclusion in the survey. This sub-sampling within households enabled more information to be collected from each respondent than would have been possible had all usual residents of selected dwellings been included in the survey. For the purposes of the NHS, a household was defined as one or more persons, at least one of whom is aged 18 years and over, usually resident in the same private dwelling.

8 The following groups were excluded from the survey:

- certain diplomatic personnel of overseas governments, customarily excluded from the Census and estimated resident population;
- persons whose usual place of residence was outside Australia;
- members of non-Australian Defence forces (and their dependents) stationed in Australia; and
- visitors to private dwellings.

### SAMPLE DESIGN

9 Dwellings were selected at random using a multistage area sample of private dwellings. The initial sample selected for the survey consisted of approximately 21,850 dwellings. This was reduced to a sample of 17,958 after sample loss (for example, households selected in the survey which had no residents in scope of the survey, vacant or derelict buildings, buildings under construction). Of those remaining dwellings, 14,723 (or 82.0%) were fully or adequately responding, yielding a total sample for the survey of 19,259 persons.

## APPROACHED SAMPLE, FINAL SAMPLE AND RESPONSE RATES

	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.
Households approached (after sample loss)	3 246	3 196	2 796	2 224	2 250	1 640	1 131	1 475	17 958
Households in sample	2 499	2 547	2 367	1 916	1 865	1 497	775	1 265	14 723
Response rate (%)	77.0	79.7	84.7	86.2	82.9	91.3	68.5	85.8	82.0
Persons in sample	3 272	3 335	3 081	2 434	2 450	1 918	1 057	1 708	19 259

**10** To take account of possible seasonal effects on health characteristics, the sample was spread randomly across the 12-month enumeration period. Analysis of previous health surveys has shown no particular seasonal bias across key estimates.

### DATA COLLECTION

**11** Trained ABS interviewers conducted personal interviews with selected residents in sampled dwellings. One adult (aged 18 years and over) in each dwelling was selected and interviewed about their own health characteristics as well as information about the household (for example, income of other household members). An adult, nominated by the household, was interviewed about one child in the household. Some children aged 15-17 years may have been personally interviewed with parental consent.

### WEIGHTING, BENCHMARKING AND ESTIMATION

**12** Weighting is a process of adjusting results from a sample survey to infer results for the in-scope total population. To do this, a weight is allocated to each sample unit; for example, a household or a person. The weight is a value which indicates how many population units are represented by the sample unit.

**13** The first step in calculating weights for each person was to assign an initial weight, which was equal to the inverse of the probability of being selected in the survey. For example, if the probability of a person being selected in the survey was 1 in 600, then the person would have an initial weight of 600 (that is, they represent 600 others). An adjustment was then made to these initial weights to account for the time period in which a person was assigned to be enumerated.

**14** The weights are calibrated to align with independent estimates of the population of interest, referred to as 'benchmarks', in designated categories of sex by age by area of usual residence. Weights calibrated against population benchmarks in this way compensate for over or under-enumeration of particular categories of persons and ensure that the survey estimates conform to the independently estimated distribution of the population by age, sex and area of usual residence, rather than to the distribution within the sample itself.

**15** The NHS was benchmarked to the estimated resident population living in private dwellings in non-Very Remote areas of Australia at 31 December 2014. Excluded from these benchmarks were persons living in discrete Aboriginal and Torres Strait Islander communities. The benchmarks, and hence the estimates from the survey, do not (and are not intended to) match estimates of the total Australian resident population (which include persons living in Very Remote areas or in non-private dwellings, such as hotels) obtained from other sources.

**16** Survey estimates of counts of persons are obtained by summing the weights of persons with the characteristic of interest. Estimates of non-person counts (for example, number of health conditions) are obtained by multiplying the characteristic of interest with the weight of the reporting person and aggregating.

### RELIABILITY OF ESTIMATES

**17** All sample surveys are subject to sampling and non-sampling error.

**18** Sampling error is the difference between estimates, derived from a sample of persons, and the value that would have been produced if all persons in scope of the survey had been included. Indications of the level of sampling error are given by the Relative Standard Error (RSE) and 95% Margin of Error (MOE). For more information refer to the Technical Note - Reliability of Estimates.

**19** In this publication, estimates with an RSE of 25% to 50% are preceded by an asterisk (e.g. \*3.4) to indicate that the estimate has a high level of sampling error relative to the size of the estimate, and should be used with caution. Estimates with an RSE over 50% are indicated by a double asterisk (e.g. \*\*0.6) and are generally considered too unreliable for most purposes.

**20** Margins of Error are provided for proportions to assist users in assessing the reliability of these data. The proportion combined with the MOE defines a range which is expected to include the true population value with a given level of confidence. This is known as the confidence interval. This range should be considered by users to inform decisions based on the proportion. Proportions with an MOE of greater than 10 percentage points are preceded by a hash (e.g. #40.1) to indicate the range in which the true population value is expected is relatively wide.

**21** Non-sampling error may occur in any data collection, whether it is based on a sample or a full count such as a census. Non-sampling errors occur when survey processes work less effectively than intended. Sources of non-sampling error include non-response, errors in reporting by respondents or in recording of answers by interviewers, and errors in coding and processing data.

**22** Non-response occurs when people are unable to or do not cooperate, or cannot be contacted. Non-response can affect the reliability of results and can introduce a bias. The magnitude of any bias depends on the rate of non-response and the extent of the difference between the characteristics of those people who responded to the survey and those who did not.

**23** In the 2014-15 NHS, measurements of height, weight and waist circumference were taken of respondents aged 2 years and over, while blood pressure was also measured for adult respondents (aged 18 years and over). While these items had relatively high non-response rates, analysis indicated no bias existed in the non-responding population. Imputation was used to obtain values for respondents for whom physical measurements were not taken. For more information see Appendix 2: Physical measurements in the 2014-15 National Health Survey.

**24** The following methods were adopted to reduce the level and impact of non-response:

- face-to-face interviews with respondents;
- the use of proxy interviews in cases where language difficulties were encountered, noting the interpreter was typically a family member;
- follow-up of respondents if there was initially no response; and
- weighting to population benchmarks to reduce non-response bias.

## **INTERPRETATION OF RESULTS**

**25** Care has been taken to ensure that results are as accurate as possible. This includes thorough design and testing of the questionnaire, interviews being conducted by trained ABS Interviewers, and quality control procedures throughout data collection, processing and output. There remain, however, other factors which may have affected the reliability of results, and for which no specific adjustments can be made. The following factors should be considered when interpreting these estimates:

- information recorded in the survey is essentially 'as reported' by respondents, and hence may differ from information available from other sources or collected using different methodology; for example, information about health conditions is self-reported and, while not directly based on a diagnosis by a medical practitioner in the survey, respondents were asked whether they had ever been told by a doctor or nurse that they had a particular health condition. Conditions which have a greater effect on people's wellbeing or lifestyle, or those specifically mentioned in survey questions, are expected in general to have been better reported than others;
- some respondents may have provided responses that they felt were expected, rather than those that accurately reflected their own situation. Every effort has been made to minimise such bias through the development and use of appropriate survey methodology; and
- results from previous surveys indicate a tendency for respondents to under-report consumption of alcohol.

## Comparability with previous National Health Surveys

**26** Data for 2014-15 are comparable with earlier surveys, with some exceptions:

- estimates of people reporting having a mental and/or behavioural condition are not comparable with earlier years. See Explanatory Notes 27 to 29 for more information;
- 'Back problems (dorsopathies)' have been redefined to include sciatica, disc disorders, back pain/problems not elsewhere classified and curvature of the spine. Data for all years presented in this publication use this definition, while previous publications defined 'Back problems' as including only disc disorders and back pain/problems not elsewhere classified;
- during processing of 2014-15 NHS data, an issue with coding of 'Back pain or back problems' in the 2011-12 NHS was identified in which some responses were incorrectly coded to 'Diseases of the digestive system' and 'Symptoms, signs and conditions not elsewhere classified'; analysis indicates that estimates of 'Back pain/problem, disc disorder' published for 2011-12 were under-reported by approximately 540,000 people, 'Diseases of the digestive system' were over-reported by approximately 250,000 people and 'Symptoms, signs and conditions not elsewhere classified' were over-reported by approximately 280,000 people. Data for 2011-12 for 'Back problems (dorsopathies)' are not comparable to other years. ABS are investigating options to address this issue. Data for 2014-15 have been coded appropriately;
- during processing of 2014-15 NHS data, an issue with coding of 'Gout' and 'Rheumatism' in the 2007-08 and 2011-12 NHS was identified in which a large number of people who reported having these conditions were erroneously allocated a status of 'current and long-term', resulting in over-estimation of prevalence in 2007-08 and 2011-12. In 2007-08 'Gout' was over-reported by approximately 800,000 people and 'Rheumatism' by approximately 290,000 persons, while in 2011-12 'Gout' was over-reported by approximately 280,000 people and 'Rheumatism' by approximately 145,000 people. Data for 2007-08 and 2011-12 for these two conditions are not comparable to other years. ABS are investigating options to address this issue. Data for 2014-15 have been coded appropriately;
- 'Heart, stroke and vascular disease' has been redefined to include persons who reported having ischaemic heart diseases and cerebrovascular diseases that were not current and long-term at the time of interview. Data for 2007-08, 2011-12 and 2014-15 in this publication are presented using this definition, while previously published data excluded these persons; and
- in 2014-15, in addition to the existing category 'Stroke (including after effects of stroke)' on the prompt card for circulatory conditions, a new category 'Transient ischaemic attack (TIA, 'mini stroke')' was introduced and coded to 'Other cerebrovascular diseases'. As a result estimates of 'Other cerebrovascular diseases' have increased (from 4,900 people in 2011-12 to 171,200 people in 2014-15) while estimates of 'Stroke' have decreased (from 240,000 people to 172,300 people respectively).

**27** In 2014-15 a module specifically dedicated to mental and behavioural conditions was included in the NHS to collect information on cognitive, organic and behavioural conditions. In previous NHS cycles, mental and behavioural conditions were collected in a module that included a wide range of long-term health conditions. The number of persons who reported having a mental and behavioural condition in 2014-15 has increased since the 2011-12 NHS, potentially due to the greater prominence of mental and behavioural conditions in the new module. Data on mental and behavioural conditions for 2014-15 are therefore not comparable with data in previous National Health Surveys.

**28** The table below presents numbers and proportions of people with mental and behavioural conditions in 2014-15 and 2011-12 to illustrate the effect of the change in collection methodology. Differences between 2014-15 and 2011-12 should not be interpreted as changes in the prevalence of mental or behavioural conditions.

## MENTAL AND BEHAVIOURAL CONDITIONS(a), 2014-15 and 2011-12

National Health Survey, 2014-15			National Health Survey, 2011-12		
	Estimate	Proportion		Estimate	Proportion
	'000	%		'000	%
Alcohol and drug problems	230.9	1.0	Alcohol and drug problems	152.1	0.7
Mood (affective) disorders					
Depression/feeling depressed	2 052.2	8.9			
Other mood (affective) disorders	179.5	0.8			
Total mood (affective) disorders	2 137.6	9.3	Mood (affective) disorders	2 143.1	9.7
Anxiety related problems					
Anxiety disorders/feeling anxious, nervous or tense	2 207.0	9.6			
Panic disorders/panic attacks	585.7	2.5			
Phobic anxiety disorders	303.6	1.3			
Obsessive-compulsive disorder	267.9	1.2			
Post-traumatic stress disorder	232.3	1.0			
Total anxiety related disorders	2 564.1	11.2	Anxiety related problems	850.1	3.8
Problems of psychological development	293.8	1.3	Problems of psychological development	154.1	0.7
Behavioural, cognitive & emotional problems with usual onset in childhood/adolescence	257.1	1.1	Behavioural and emotional problems with usual onset in childhood/adolescence	135.7	0.6
Other mental and behavioural problems(b)	260.4	1.1	Other mental and behavioural problems(b)	196	0.9
Symptoms and signs involving cognition, perceptions, emotional state and behaviour	40.3	0.2	Symptoms and signs involving cognition, perceptions, emotional state and behaviour	108.3	0.5
Total mental and behavioural problems	4 017.4	17.5	Total mental and behavioural problems	2 996.2	13.6
<b>Total population</b>	<b>22 969.0</b>	<b>100</b>	<b>Total population</b>	<b>22 105.3</b>	<b>100</b>

(a) Data for 2014-15 are not comparable to earlier years due to a change in collection methodology. In 2014-15, information on mental health conditions was obtained through a new Mental, Behavioural and Cognitive Conditions module, while in previous years it was collected as part of the Long Term Conditions module.

(b) Includes organic mental problems.

**29** Estimates of people with mental or behavioural conditions from the NHS will differ from those obtained from a diagnostic tool such as that used in the 2007 National Survey of Mental Health and Wellbeing.

**30** When interpreting changes over time or differences between population groups (for example, between males and females), reliability of estimates should be taken into account. All comparisons in this publication were tested for statistical significance at the 95% level of confidence; for more information see Technical Note - Reliability of Estimates.

### CLASSIFICATIONS

**31** Long-term health conditions reported by respondents in the NHS are presented using a classification originally developed for the 2001 NHS by the Family Medicine Research Centre, University of Sydney, in conjunction with the ABS. The classification is based on the 10th revision of the International Classification of Diseases (ICD) and is used for all years from 2001 to 2014-15.

**32** Country of birth is classified to the Standard Australian Classification of Countries (cat. no. 1269.0).

**33** Main language spoken at home is classified according to the Australian Standard Classification of Languages (cat. no. 1267.0).

**34** Descriptions of data items such as Body Mass Index and the Kessler Psychological Distress Scale (K10) are included in the Glossary to this publication.

## **CONFIDENTIALITY**

**35** The **Census and Statistics Act, 1905** provides the authority for the ABS to collect statistical information, and requires that statistical output shall not be published or disseminated in a manner that is likely to enable the identification of a particular person or organisation. This requirement means that the ABS must take care and make assurances that any statistical information about individual respondents cannot be derived from published data.

**36** To minimise the risk of identifying individuals in aggregate statistics, a technique known as perturbation is used to randomly adjust cell values. Perturbation involves a small random adjustment of the statistics and is considered the most satisfactory technique for avoiding the release of identifiable statistics while maximising the range of information that can be released. These adjustments have a negligible impact on the underlying pattern of the statistics. After perturbation, a given published cell value will be consistent across all tables. However, adding up cell values to derive a total will not necessarily give the same result as published totals.

**37** Perturbation has been applied to 2014–15 data. Data from previous NHS presented in this publication have not been perturbed, but have been confidentialised if required using suppression of cells.

## **ROUNDING**

**38** Estimates presented in this publication have been rounded.

**39** Proportions presented in this publication are based on unrounded estimates. Calculations using rounded estimates may differ from those published.

## **ACKNOWLEDGEMENTS**

**40** ABS publications draw extensively on information provided freely by individuals, businesses, governments and other organisations. Their continued cooperation is very much appreciated; without it, the wide range of statistics published by the ABS would not be available. Information received by the ABS is treated in strict confidence as required by the **Census and Statistics Act, 1905**.

## **PRODUCTS AND SERVICES**

**41** Summary results from the NHS are available in spreadsheet form from the 'Downloads' tab in this release. The statistics presented are only a selection of the information collected.

**42** For users who wish to undertake more detailed analysis, a Survey TableBuilder product for the 2014-15 NHS is expected to be available in the first quarter of 2016. Survey TableBuilder is an online tool for creating tables from ABS survey data, where variables can be selected for cross-tabulation. It has been developed to complement the existing suite of ABS microdata products and services including Census TableBuilder and CURFs. Further information about ABS microdata, including conditions of use, is available via the Microdata section on the ABS website.

**43** Customised tabulations are available on request. Subject to confidentiality and sampling variability constraints, tabulations can be produced from the survey incorporating data items, populations and geographic areas selected to meet individual requirements.

## **RELATED PUBLICATIONS**

**44** Other ABS publications which may be of interest are shown under the 'Related Information' tab of this release.

**45** Current publications and other products released by the ABS are listed on the ABS website <http://www.abs.gov.au/>. The ABS also issues a daily Release Advice on the website which details products to be released in the week ahead.





## INQUIRIES

For further information about these and related statistics, contact the National Information and Referral Service on 1300 135 070.

