The Australian Institute of Health and Welfare (AIHW) has developed core monitoring information on the incidence, prevalence, hospitalisation and deaths from cardiovascular disease (CVD) in Australia (including coronary heart disease, stroke and heart failure). This is updated on a regular basis on the AIHW website to ensure that current information and trends are readily available.

Findings from this report:

- 5.6% of Australian adults had 1 or more conditions related to heart or vascular disease, including stroke, in 2017-18
- More than 1 in 4 deaths were due to CVD in 2018
- There were more than 1.2 million hospitalisations for CVD in 2017-18 (11% of all hospitalisations)
- More than 4 in 5 (83%) CVD hospitalisations occurred in those aged 55 and over
What is cardiovascular disease?

The term cardiovascular disease (CVD) is used to describe many different conditions affecting the heart and blood vessels. The most common and serious types of CVD include coronary heart disease, stroke and heart failure. CVD remains a major health problem in Australia, despite declining mortality and hospitalisation rates. It generally has a greater impact on males, the elderly, Indigenous Australians and people living in remote and socioeconomically disadvantaged areas.
How many Australians have cardiovascular disease?

All cardiovascular disease
An estimated 1.2 million (5.6%) Australian adults aged 18 years and over had 1 or more conditions related to heart or vascular disease, including stroke, in 2017-18, based on self-reported data from the Australian Bureau of Statistics (ABS) 2017-18 National Health Survey.

Information based on self-reported data relies on survey participants being aware of and accurately reporting their health conditions. Estimates based on self-reported data are not likely to be as accurate as data based on clinical records or measurements. Note the ABS definition of heart, stroke and vascular disease for the National Health Survey refers to persons who reported having been told by a doctor or nurse that they had any of a range of circulatory conditions comprising: angina, heart attack and other ischaemic heart diseases; stroke and other cerebrovascular diseases; oedema; heart failure; and diseases of the arteries, arterioles and capillaries.

Age and sex
In 2017-18, the prevalence of heart, stroke and vascular disease among adults (based on self-reported data):

- was higher among men (6.5%) than women (4.8%).
- increased with age—more than 1 in 4 (26%) of those aged 75 and over had heart, stroke and vascular disease (Figure 1).

Figure 1: Prevalence of self-reported heart, stroke and vascular disease, among persons aged 18 and over, by age group and sex, 2017-18
The column graph shows the increase in prevalence of self-reported heart, stroke and vascular disease with age. For males the prevalence of heart, stroke and vascular disease increased from 0.7% among those aged 18–44, to 32% among males aged 75 and over. For females the prevalence of heart, stroke and vascular disease increased from 1.2% of those aged 18-44 to 20% among females aged 75 and over.

Variations between population groups
In 2017-18, the prevalence of heart, stroke and vascular disease (based on self-reported data) among adults did not vary significantly by remoteness area. However, the percentage of people who reported having heart, stroke and vascular disease was significantly higher among those living in the most socioeconomically disadvantaged areas compared with those in the least disadvantaged areas (6.4% and 4.8%, respectively) (Figure 2).

Figure 2: Prevalence of self-reported heart, stroke and vascular disease, among persons aged 18 and over, by sex, remoteness and socioeconomic area, 2017-18
The bar graph shows the prevalence of self-reported heart, stroke and vascular disease, among adults did not vary significantly by remoteness area. However, the proportion of people who reported having heart, stroke and vascular disease was slightly higher among those living in the most disadvantaged areas compared to those in the least disadvantaged areas.

Aboriginal and Torres Strait Islander people
An estimated 42,700 (5.2%) Aboriginal and Torres Strait Islander people had heart, stroke and vascular disease, based on self-reported data from the ABS 2018-19 Australian Aboriginal and Torres Strait Islander Health Survey (ABS 2019b).

After adjusting for age, the prevalence of heart, stroke and vascular disease was higher among Indigenous males compared with Indigenous females (9.4% and 7.6%, respectively). Indigenous Australians were more likely to report having heart, stroke and vascular disease than their non-Indigenous counterparts (4.7% and 3.5%, respectively).

Coronary heart disease
An estimated 580,300 Australians aged 18 and over (2.8% of the adult population) had coronary heart disease (CHD) at some time in their lives, based on self-reported data from the ABS 2017-18 National Health Survey. Of those with CHD, 227,300 had experienced angina while 430,000 had a heart attack or another form of CHD (a person may report more than 1 disease).

Prevalence of CHD:

- was around twice as high among men (3.8%) as women (1.9%).
- increased rapidly with age—around 12 times as high in people aged 75 and over as in those aged 45-54 (13.9% and 1.1%, respectively).

In 2017, an estimated 59,100 people aged 25 and over had an acute coronary event in the form of a heart attack or unstable angina—around 162 events every day, based on hospitalisations and mortality data. Rates of acute coronary events:

- were more than twice as high in men than women (433 and 199 per 100,000 population, respectively)
- declined by 42% between 2007 and 2017 (from 533 to 311 events per 100,000) (Figure 3)
- were 2.6 times as high among Indigenous Australians compared with non-Indigenous Australians (811 and 303 per 100,000, respectively).

**Figure 3: Trends in acute coronary events, among persons aged 25 and over, by sex, 2007 to 2017**

The line graph shows that the age-standardised rate of acute coronary events has declined between 2007 and 2017. For males, the rate declined from 728 to 433 acute coronary events per 100,000 population between 2007 and 2017. For females, the rate declined from 357 to 199 acute coronary events per 100,000 over the same period.

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**Stroke**

In 2018, around 386,900 Australians (1.3% of the population) had experienced a **stroke** at some time in their lives, based on self-reported data from the **ABS 2018 Survey of Disability, Ageing and Carers**.

Prevalence of stroke was:

- higher in males than females (1.6% and 1.1% respectively).
- more common in older age groups—over 2 in 3 (71%) people who had a stroke were aged 65 and over. Proportions were highest for those aged 85 and over—almost 3 times as high as for those aged 65-74 (14% and 4.6%, respectively).

In 2017, there were an estimated 38,100 stroke events in Australia—more than 100 every day, based on hospital and mortality data:

- males were more likely to have had a stroke event than females (149 and 110 per 100,000 population, respectively).
- the rate of stroke events fell by 24% between 2001 and 2017, from 169 to 129 events per 100,000 over the same period.

**Figure 4: Trends in stroke events, by sex, 2001 to 2017**

The line graph shows that the age-standardised rate of stroke declined between 2001 and 2017. For males, the rate of stroke event declined from 193 to 149 events per 100,000 population between 2001 and 2017. For females, the rate of stroke event declined from 148 to 110 events per 100,000 over the same time period.

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**Heart failure**

An estimated 104,900 people aged 18 and over had **heart failure** in 2017-18, based on self-reported data from the **ABS 2017-18 National Health Survey**. This corresponds to approximately 0.5% of the adult population. Heart failure predominantly affects older Australians. Two-thirds of adults with heart failure (69,500 people) were aged 65 and over.

Using self-reported data to estimate the number of people with heart failure may under estimate the true burden of this disease, as the early stages are only mildly symptomatic. Heart failure and **cardiomyopathy** have a considerable impact on the health of Australians. For more information see **Hospital care for cardiovascular disease—heart failure and cardiomyopathy**.

**Rheumatic heart disease**

As at 31 December 2018 there were around 5,000 (52 per 100,000 population) living persons with **rheumatic heart disease** (RHD) recorded on state and territory registers in the Northern Territory, Western Australia, Queensland and South Australia combined. Indigenous Australians accounted for 87% of registered cases of RHD (4,325 diagnoses).

During the 4-year period 2014-2018, there were around 1,963 diagnoses for acute rheumatic fever among Indigenous Australians (95% of all cases). In the same period, there were about 1,300 (59.8 per 100,000 population) RHD diagnoses among Indigenous Australians in the Northern Territory, Western Australia, South Australia and Queensland combined. The Northern Territory had the highest rate and greatest number of new RHD diagnoses among Indigenous Australians. Almost two-thirds (64%) of new RHD cases among Indigenous Australians were female and nearly 60% of cases were aged under 25 at diagnosis (AIHW 2020).

**Congenital heart disease**

**Congenital heart disease** is a common birth anomaly, affecting an estimated 2,400 Australian babies every year. It is a leading contributor to the burden of disease among infants, with cardiovascular defects contributing 6.4% to the total disease burden of babies aged under 1 year in 2015 (AIHW 2019).

Treatment for congenital heart disease has improved over recent decades with improvements in diagnostic testing, surgical techniques and disease management. In 2016-17, there were around 4,900 hospitalisations in Australia where congenital heart disease was the principal diagnosis—a rate of 20 hospitalisations per 100,000 population. The highest rate of hospitalisation for a specific form of congenital heart disease was for atrial septal defect (6.6 hospitalisations per 100,000 population), followed by ventricular septal defect (1.8 hospitalisations per 100,000 population) (AIHW 2019).

**References:**


Impact

Burden of disease

Burden of disease analysis assesses the health impact on a population of different diseases, conditions, injuries and risk factors. The Australian Burden of Disease Study 2015 (AIHW 2019a) used information from a range of sources to quantify the fatal and non-fatal effects of these diseases.

Cardiovascular disease (CVD) accounted for almost 14% of the total burden of disease in 2015, having decreased from 15% in 2011 and 18% in 2003.

Coronary heart disease was the leading individual disease in both males and females, accounting for 6.9% of the total burden in 2015 (8.6% for males and 5.0% for females).

Stroke was ranked ninth in the leading diseases causing burden, accounting for 2.7% of total burden in 2015. It was ranked fourth in the leading causes of fatal burden.

Expenditure

In 2015-16, an estimated 8.9% ($10.4 billion) of total disease expenditure in the Australian health system was attributed to CVD (AIHW 2019b). Further information is available from the Disease expenditure in Australia report.

References:


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Hospital care for cardiovascular disease

All cardiovascular disease

There were 1.2 million hospitalisations where cardiovascular disease (CVD) was recorded as the principal or additional diagnosis in 2017–18, according to the Australian Institute of Health and Welfare (AIHW) National Hospital Morbidity Database. This represents 11% of all hospitalisations in Australia. Note that hospitalisation data presented here are based on admitted patient episodes of care, including multiple events experienced by the same individual.

In 2017–18 there were around:

- 583,900 hospitalisations with CVD as the principal diagnosis (the diagnosis largely responsible for hospitalisation) (Figure 1).
- 861,200 hospitalisations with CVD as an additional diagnosis (a coexisting condition with the principal diagnosis or a condition arising during hospitalisation that affects patient management).

When CVD was listed as the principal diagnosis, the leading conditions were:

- coronary heart disease (28% of CVD hospitalisations)
- heart failure and cardiomyopathy (12%)
- stroke (11%) and
- peripheral vascular disease (6%).

Figure 1: Major causes of hospitalisation for CVD (principal diagnosis), by sex, 2017–18

The bar graph shows that the most common major cause of cardiovascular disease (CVD) hospitalisation was coronary heart disease (161,814 hospitalisations), followed by heart failure and cardiomyopathy (70,648 hospitalisations), stroke (66,544 hospitalisations) and peripheral vascular disease (33,129 hospitalisations). The number of hospitalisations was higher among males than females for all major causes of CVD with the exception of hypertensive disease (4,694 and 8,305 hospitalisations, respectively).

Trends over time

The number of acute hospitalisations for CVD as the principal diagnosis increased by 34% between 2000–01 and 2017–18, from 391,400 to 523,800 hospitalisations. Despite increases in the number of hospitalisations, the age-standardised rate for acute care declined by 12% over this period, from 2,100 to 1,800 per 100,000 population. The rate of CVD hospitalisations among males was higher than that among females across the period (Figure 2).

Figure 2: Acute CVD (principal diagnosis) hospitalisations rates, by sex, 2000–01 to 2017–18

The line graph shows that the age-standardised rate of acute care hospitalisations for CVD has declined between 2000–01 and 2017–18 for both males and females. Among males, the rate decreased from 2,570 to 2,225 hospitalisations per 100,000 over this period. Among females, the rate declined from 1,614 to 1,419 hospitalisations per 100,000. The hospitalisation rate was consistently higher among males than females.

Age and sex

In 2017–18, CVD hospitalisation rates (as the principal diagnosis):

- were overall 1.6 times as high for males as females (2,500 and 1,600 per 100,000 population, respectively) after adjusting for age. Age-specific rates were higher among males than females across all age groups.
- increased with age, with over 4 in 5 (83%) CVD hospitalisations occurring in those aged 55 and over. CVD hospitalisation rates for males and females were highest in the 85 and over age group (21,000 and 16,000 per 100,000 population, respectively)—1.4 times as high as those in the 75–84 age group for males and 1.5 times as high among females (15,200 and 10,500 per 100,000, respectively) (Figure 3).

Figure 3: CVD hospitalisations (principal diagnosis), by age group and sex, 2017–18

The column graph show that CVD hospitalisation rate increased with increasing age. Males had a higher CVD hospitalisation rate than females across all age groups. For males, the CVD hospitalisation rate increased from 167 hospitalisations per 100,000 population in those aged under 25 to 20,953 hospitalisations per 100,000 population in those aged 85 and over. For females the CVD hospitalisation rate increased from 154 hospitalisations per 100,000 population in those under 25 to 16,016 hospitalisations per 100,000 population those aged 85 and over.

Variations between population groups

In 2017–18, CVD hospitalisation rates (as the principal diagnosis) increased with remoteness and socioeconomic disadvantage. Rates were:
around 30% higher among those living in Remote and very remote areas compared with those in Major cities. This pattern was largely driven by the rate for females—2,300 and 1,500 per 100,000 population, respectively—while for males, rates in these areas were more similar (2,800 and 2,400 per 100,000, respectively).

20% higher for those in the lowest socioeconomic areas compared with the highest socioeconomic areas—2,200 and 1,800 per 100,000, respectively. This difference was similar for males and females (Figure 4).

Figure 4: CVD hospitalisations (principal diagnosis), by remoteness and socioeconomic area, 2017–18
The bar graph show that the age-standardised rate of CVD hospitalisations (principal diagnosis) increased with remoteness and socioeconomic disadvantage for both males and females. Males had a higher age-standardised rate of CVD hospitalisations than females across remoteness areas and socioeconomic groups.

Aboriginal and Torres Strait Islander people
In 2017–18, there were around 14,900 hospitalisations for CVD (as the principal diagnosis) among Aboriginal and Torres Strait Islander people—a crude rate of 1,800 per 100,000 population.

After adjusting for differences in the age structure of the populations:
• the rate among Indigenous Australians was overall 1.6 times as high as the non-Indigenous rate.
• the disparity between Indigenous and non-Indigenous Australians was greater for females than males—1.9 times as high for females (3,000 and 1,500 per 100,000, respectively) and 1.4 times as high for males (3,400 and 2,400 per 100,000, respectively).

Coronary heart disease
There were over 229,600 hospitalisations where coronary heart disease (CHD) was recorded as the principal or an additional diagnosis in 2017–18. This represents 2.0% of all hospitalisations in Australia.

Seventy percent (161,800) of CHD hospitalisations were recorded as the principal diagnosis.

Where CHD was the principal diagnosis, hospitalisation rates:
• were overall 2.5 times as high for males as for females. Age-specific rates were higher among males than females across all age groups.
• increased with age and were highest among males aged 75–84 (4,500 per 100,000 population) and females aged 85 and over (2,400 per 100,000) (Figure 5).

Figure 5: CHD hospitalisations (principal diagnosis), by age group and sex, 2017–18
The column graph shows that males had a higher rate of CHD hospitalisations than females across all age groups. The rate of CHD hospitalisations peaked among males aged 75–84 (4,539 hospitalisations per 100,000 population). Among females, the rate was highest among those aged 85 years and over (2,411 hospitalisations per 100,000 population).

Heart failure and cardiomyopathy
There were around 177,800 hospitalisations where heart failure and cardiomyopathy was recorded as the principal or an additional diagnosis in 2017–18. This represents 1.6% of all hospitalisations in Australia.

Almost 40% of hospitalisations (70,600) for heart failure and cardiomyopathy were recorded as the principal diagnosis.

Where heart failure and cardiomyopathy was recorded as the principal diagnosis, hospitalisation rates:
• were overall 1.5 times as high for males as females. Age-specific rates were higher among males than females in all age groups.
• increased with age, with rates highest for males and females aged 85 and over (5,700 and 4,400 per 100,000 population)—at least 2.6 times as high as those aged 75–84 (2,200 and 1,600 per 100,000, respectively) (Figure 6).

Figure 6: Heart failure and cardiomyopathy hospitalisations (principal diagnosis), by age group and sex, 2017–18
The column graph shows that the heart failure and cardiomyopathy hospitalisation rate increased with age. Males had a higher heart failure and cardiomyopathy hospitalisation rate than females across all age groups. For males, the hospitalisation rate increased from 5 hospitalisations per 100,000 population in those aged under 25, to 5,744 hospitalisations per 100,000 population in those aged 85 and over. For females, the hospitalisation rate increased from 3 hospitalisations per 100,000 population among those aged under 25 to 4,388 hospitalisations per 100,000 population in those aged 85 and over.

Stroke
There were around 82,000 hospitalisations where stroke was recorded as the principal or an additional diagnosis in 2017–18. This represents 0.7% of all hospitalisations in Australia. Over 81% (66,500) of hospitalisations for stroke were recorded as the principal diagnosis in 2017–18.

In 2017–18, where stroke was recorded as the principal diagnosis, hospitalisation rates:
were overall 1.4 times higher for males than females. Age-specific rates were higher among males than females from age 25 and over.

increased with age, with rates for males and females highest in those aged 85 and over (2,900 and 2,600 per 100,000 population, respectively)—around 1.5 times as high as those aged 75-84 among males (1,900 per 100,000) and around twice as high among females (1,300 per 100,000) (Figure 7).

**Figure 7: Stroke hospitalisations (principal diagnosis), by age group and sex, 2017-18**
The column graph shows that stroke hospitalisation rates increased with age. The rates for males were higher than for females from the age of 25 and over. For males, the rate of stroke hospitalisations increased from 1,902 to 2,882 per 100,000 population between the age groups 75-84 and 85 and over. For females, the rate of stroke hospitalisations increased from 1,343 to 2,553 per 100,000 population between the age groups 75-84 and 85 and over.

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**Hospital procedures for CVD**

Procedures are provided in hospitals to admitted patients to diagnose or treat CVD.

In 2017–18, common procedures performed in hospital for CVD were coronary angiography (137,900), percutaneous coronary intervention (44,900), echocardiography (44,000) and pacemaker insertion (18,100). The number of procedures to diagnose and treat CVD was higher among males than females.
Deaths from cardiovascular disease

All cardiovascular disease

Cardiovascular disease (CVD) was the underlying cause of death in 41,800 deaths in 2018 (26% of all deaths) according to the Australian Institute of Health and Welfare (AIHW) National Mortality Database. It was an associated cause of death in 70,600 deaths.

The deaths data in this web page only refer to CVD as the underlying cause of death (that is, the primary or main cause of death).

Where CVD was listed as the underlying cause of death:
- 42% were due to coronary heart disease (CHD)
- 20% were due to stroke
- 10% were due to heart failure and cardiomyopathy (Figure 1).

Figure 1: Major causes of CVD death, 2018

The bar graph shows that coronary heart disease was the most common underlying cause of CVD death for both males and females in 2018. Coronary heart disease was the underlying cause of 10,269 deaths of males and 7,264 deaths of females. Stroke was the second most common underlying cause of CVD death followed by heart failure and cardiomyopathy, and peripheral vascular disease. More females than males had stroke, hypertensive disease and rheumatic heart disease listed as the underlying cause of death.

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Trends over time

Both the number and rate of CVD deaths have declined substantially between 1981 and 2018.

- The number of CVD deaths declined by 25% (from around 56,000 to 41,800).
- Age standardised CVD death rates declined by around 75%—falling from 689 to 152 per 100,000 population for males and 440 to 109 per 100,000 for females (Figure 2).

Figure 2: Trends in CVD deaths, by sex, 1981–2018

The line graph shows that the rate of CVD deaths has declined between 1981 and 2018 for both males and females. For males, the rate of CVD deaths declined from 689 to 152 deaths per 100,000 population between 1981 and 2018. For females, the rate of CVD deaths declined from 440 to 109 deaths per 100,000 over the same period.

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Age and sex

In 2018, CVD death rates:
- were overall 1.4 times as high for males as for females (152 and 109 per 100,000 population, respectively). Age-specific rates for males were higher than females across all age groups.
- increased with age, with over half (53%) of CVD deaths occurring in persons aged 85 and over. CVD death rates for males and females were highest in the 85 and over age group (4,500 and 4,300 per 100,000, respectively)—4.4 times as high for males and 5.9 times as high for females aged 75-84 (1,000 and 725 per 100,000, respectively) (Figure 3).

Figure 3: CVD deaths, by age group and sex, 2018

The column graph shows that the rate of CVD deaths increased with age, with the highest rate for both males and females in those aged 85 and over (4,509 and 4,303 per 100,000 population, respectively).

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Variations between population groups

After adjusting for age, CVD death rates increased with remoteness and socioeconomic disadvantage. Rates were:
- 1.4 times as high in Remote and very remote areas compared with Major cities (180 and 128 per 100,000 population, respectively). This difference was similar for males and females.
- 1.5 times as high in the lowest socioeconomic areas compared with the highest socioeconomic areas (164 and 112 per 100,000, respectively). This difference was higher for males (1.6 times as high) than females (1.4 times as high) (Figure 4).

Figure 4: CVD deaths, by remoteness and socioeconomic areas, 2016–2018

The bar graph shows that the age-standardised rate of CVD deaths increased with remoteness and socioeconomic disadvantage for both males and females. The rate was 1.4 times as high among males living in Remote and Very remote areas compared to those living in Major cities (201 and 150 deaths per 100,000 population, respectively) and 1.3 times as high among females living in Remote and Very remote areas.
areas compared to those living in Major cities (146 and 109 deaths per 100,000 population, respectively). The rate of CVD deaths was 1.6 times as high among males living in the most disadvantaged areas compared with the least disadvantaged areas (197 and 126 deaths per 100,000 population, respectively) and 1.4 times as high among females (134 and 98 deaths per 100,000 population, respectively).

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**Aboriginal and Torres Strait Islander people**

In 2016–2018, there were around 2,000 deaths from CVD among Aboriginal and Torres Strait Islander people, a crude rate of 93 deaths per 100,000 population.

After adjusting for differences in the age structure of the populations, the rate of death from CVD was 1.7 times as high among Indigenous Australians compared with non-Indigenous Australians. The difference between Indigenous and non-Indigenous Australians was higher among females (1.8 times higher among Indigenous Australians) than males (1.6 times higher among Indigenous Australians).

**Coronary heart disease**

In 2018, coronary heart disease (CHD) was the underlying cause in around 17,500 deaths (11% of all deaths and 42% of CVD deaths). Forty percent of CHD deaths (7,300) resulted from a heart attack, also known as acute myocardial infarction.

**Trends over time**

The number and rate of CHD deaths have declined substantially between 1981 and 2018.

- The number of CHD deaths declined by 44% (from around 31,400 to 17,500).
- CHD death rates declined by around 80%—falling from 412 to 75 per 100,000 population for males and 208 to 38 per 100,000 population for females (Figure 5).

**Figure 5: Trends in CHD deaths, 1981–2018**

The line graph shows the rate of CHD deaths has declined between 1981 and 2018 for both males and females. For males, the rate of CHD deaths declined from 412 in 1981 to 75 in 2018. For females, the rate of CHD deaths declined from 208 in 1981 to 38 in 2018.

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**Age and sex**

In 2018, CHD death rates:

- were twice as high for males as for females (75 and 38 per 100,000 population, respectively).
- increased with age, with around half of all CHD deaths occurring in persons aged 85 and over. CHD death rates for males and females were highest in the 85 and over age group (2,000 and 1,500 per 100,000, respectively)—4 times as high for males and 6 times as high for females aged 75-84 (486 and 243 per 100,000, respectively) (Figure 6).

**Figure 6: CHD deaths, by age group and sex, 2018**

The column graph shows that the rate of CHD deaths increased with increasing age, with the highest rate for both males and females in those aged 85 and over (2,049 and 1,506 deaths per 100,000 population, respectively). Among those aged 75-84 years, the rates were substantially lower for both males and females (486 and 243 deaths per 100,000 population, respectively).

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**Stroke**

In 2018, stroke was the underlying cause in over 8,400 deaths (5% of all deaths and 20% of CVD deaths).

**Trends over time**

The number and rate of stroke deaths have declined substantially between 1981 and 2018.

- The number of stroke deaths declined by 30% (from around 12,000 to 8,400).
- Age-standardised stroke death rates declined by 75%, falling from 102 to 26 deaths per 100,000 population. Stroke death rates declined similarly for males and females (Figure 7).

**Figure 7: Trends in stroke deaths, 1981–2018**

The line graph shows the rate of stroke deaths per 100,000 people has declined between 1981 and 2018 for both males and females. For males, the rate of CHD deaths declined from 106 to 25 per 100,000 over this time period. For females, the rate of CHD deaths declined from 97 to 26 per 100,000 from 1981 to 2018.

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**Age and sex**

In 2018, stroke death rates:

- were similar for males and females, except in the 85 and over age group where rates were higher among females than males.
increased with age, with over half (54%) of all stroke deaths occurring in those aged 85 and over. Stroke death rates for males and females were highest in the 85 and over age group (762 and 980 per 100,000 population, respectively)—4 times as high for males and 5 times as high for females aged 75-84 (196 and 187 per 100,000, respectively) (Figure 8).

Figure 8: Stroke deaths, by age group and sex, 2018
The column graph shows that the rate of stroke deaths increased with increasing age, with the highest rate for both males and females in those aged 85 and over (762 and 980 per 100,000 population, respectively). The rate among those aged 75-84 years was substantially lower among both males and females (196 and 187 deaths per 100,000 population, respectively).

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For more information on how deaths are registered, coded and updated, see About deaths data.
Data

Data tables: Cardiovascular disease 2020
Download Data tables: Cardiovascular disease 2020. Format: XLSX 284Kb

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Related reports
- Cardiovascular disease in women - 18 June 2019
- Indicators of socioeconomic inequalities in cardiovascular disease, diabetes and chronic kidney disease - 31 January 2019
- Congenital heart disease in Australia - 7 November 2019

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