

# The health of Australia's females

Web report | Last updated: 27 Jun 2023 | Topic: Men & women

# About

Australian females experience different health outcomes to males. They experience more of their total disease burden from living with disease rather than from dying prematurely. Leading causes of disease burden include anxiety disorders, back pain and problems, chronic obstrucitve pulmonary disease (COPD) and heart disease. Females are more likely to have multiple chronic conditions. They are also more likely to experience sexual violence and intimate partner violence.

To learn more about the health outcomes of males, see <u>The health of Australia's males</u>.

Cat. no: PHE 240

- Fact sheet
- <u>Data</u>
- Findings from this report:
- 34% of disease burden among females could have been prevented by avoiding or reducing exposure to certain risk factors
- 56% of Australian females have 1 or more of 10 selected chronic conditions, in 2020-21
- 21% of females reported having an anxiety disorder in the previous 12 months, in 2020-21
- 88% of Australian females aged 15+ visited a GP in the last 12 months in 2021-22

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# Summary

This report uses the latest available data to summarise the health of females in Australia including health behaviours and risk factors, the impact of COVID-19 on health, chronic conditions, sexual and reproductive health, leading causes of disease burden and how females access health care.

Females experience more of their total disease burden due to living with disease rather than from dying early from disease and injury.

Australian females experience different health outcomes to males. Leading causes of ill health and death for females include anxiety disorders, back pain and problems, chronic obstructive pulmonary disease (COPD) and coronary heart disease. They are also more likely to have multiple chronic conditions.

Females are more likely to experience sexual violence and intimate partner violence.

Females are more likely to seek health care such as general practitioners (GP) and health professionals for their mental health.

Female health varies for some population groups in socioeconomic areas, and for those living in rural and remote areas.

This report focuses on females aged 18 and over, and the term females refers to females aged 18 and over unless otherwise specified. To learn more about the health outcomes of males, see <u>The health of Australia's males</u>, for the health of children, see <u>Australia's children</u>, and for the health of youths, see <u>Australia's youth</u>.

For more information on reporting of sex and gender at the AIHW, see <u>AIHW data by sex and gender</u>.

#### Data by sex and gender

This web report focuses on female health. A separate web report focuses on male health.

The use of the word 'female' in this report may relate to either sex or gender due to the nature of the data sources that we use. Most current data sources do not record sex and gender as separate concepts so it can be unclear which is the focus. For example, a survey may ask participants for their 'sex' or 'gender', but in each case, a participant can respond to the question according to how they identify, or how they interpret the question. In other instances, an interviewer conducting a survey may assume a person's sex or gender rather than ask. Similarly, for administrative data, a health service provider may not ask a person to specify their sex or gender.

The AIHW is working towards including other categories when reporting by sex or gender. However, it is not always possible to do so as data on other categories may not be available. The AIHW is only able to report on the sex or gender categories that are available in the health service or program administrative records, or survey, that provide us with the underlying data.

For more information on reporting of sex and gender at the AIHW, see AIHW data by sex and gender.

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Who are Australia's females?

# Page highlights

#### The female population is ageing

- $\circ~$  The median age of females has increased from 36.9 years in 2003 to 39.4 years in 2022.
- The proportion of the female population aged 65 and over has increased from 15% of the total female population in 2012 to 18% in 2022.

#### Some females are more disadvantaged

- One in 7 (14%) females in all age groups are living under the poverty line.
- Around 54,000 females are considered homeless.

#### Females experience a gender pay gap

The average full-time weekly wage is 16% less for females compared with males.

#### Aboriginal and Torres Strait Islander females

• There are nearly 491,000 Aboriginal and Torres Strait Islander females, representing 3.8% of the female population.

• Indigenous females tend to be younger than non-Indigenous females - 32% are aged under 15, compared with 18% of non-Indigenous females.

#### Australian females have diverse backgrounds

Three in 10 (30%) of all Australian females were born overseas.

#### Females outnumber males in Major cities and Inner regional areas

There are 103 females for every 100 males in Major cities and Inner regional areas.

There are 12.9 million females of all ages in Australia, just over half (51%) of the country's population. Overall, there are about 102.7 females for every 100 males (ABS 2021b).

The typical Australian female is 39 years old, has a life expectancy of 85.4 years, and there are more females living in *Major cities* when compared with regional areas (ABS 2022r).

#### The female population is ageing

Over the last nearly 20 years, the median age of females, where half the female population is older and half is younger, has increased from 36.9 years in 2003 to 39.4 years in 2022 (ABS 2023c).

Over the last 10 years, the proportion of the female population aged 65 and over has also increased - from 15% of the total female population in 2012 to 18% in 2022. Percentage growth over the same 10-year period shows that females aged 65 and over grew by 36%, compared with those aged under 18 which grew by 10%, and those aged 18-64 which grew by 11% (ABS 2012, ABS 2023c).

#### Some females are more disadvantaged

One in 7 (14%) females in all age groups are living under the poverty line, defined as those living on after-tax household incomes below 50% of the median household income (Davidson et al. 2020).

Around 54,000 females are considered homeless with the greatest proportion being in the 25-34 age range (21%) (ABS 2023b). In 2021-22, around 150,000 females presented to specialist homelessness services as homeless, or at risk of homelessness (AIHW 2022aa).

There are around 3,000 Australian female prisoners in adult corrective services (7.3% of total prisoner population) (ABS 2021h).

#### Females experience a gender pay gap

The average full-time weekly wage is 16% less for females in 2022 (ABS 2023a). Over the last 30 years, employment participation of females has increased - about 74% of females aged 15-64 are employed in 2023 (ABS 2022g).

There are 494,000 females employed part-time who want to work more hours in 2022 (ABS 2022s). Females work about 7 less hours per week, and those aged 65 and over have 19% less in superannuation at retirement than males (ABS 2021c, ABS 2021e).

Almost two-thirds (63%) of the female population aged 15-74 have a non-school qualification, and 35% have a qualification at or above a bachelor's degree compared with 29% of males (ABS 2021d).

# Aboriginal and Torres Strait Islander females

There are nearly 491,000 Aboriginal and Torres Strait Islander females as at 30 June 2021, representing 3.8% of the female population (ABS 2022c).

Indigenous females tend to be younger than non-Indigenous females. Around 3 in 10 (32%) are aged under 15, compared with around 18% non-Indigenous females. Females outnumber males in older age groups (100 Indigenous females for every 85 Indigenous males aged 65 or over) (ABS 2022c).

Around 3 in 5 Indigenous females aged 15 and over (63%) identify with a clan, tribal or language group, and 1 in 5 (19%) speak an Indigenous language (ABS 2016).

Indigenous females have a higher fertility rate (2.31 babies per woman) compared to non-indigenous Australian females (1.63) (ABS 2021a).

The disease groups causing the most ill health and death in Indigenous females are mental and substance use disorders, cancer, musculoskeletal conditions and cardiovascular conditions (AIHW 2022k).

For more information on disease among Indigenous Australians, see Disease burden among Aboriginal and Torres Strait Islander people.

To learn more, see Indigenous Australians.

#### Australian females have diverse backgrounds - 3 in 10 females were born overseas

Three in 10 (30%) of all Australia's females are born overseas. Of these, the most common countries of birth for these females are England (12%), China (8.6%), India (8.5%) and New Zealand (7.1%) (ABS 2022b).

#### Females outnumber males in Major cities

The density of the female population varies across the country. For example, in 2021 in *Major cities* and *Inner regional* areas, there are 103 females for every 100 males, compared with 92 females for every 100 males in *Remote and very remote* areas (ABS 2021f).

According to the latest available data from the 2021 ABS Census (ABS 2021f):

7 in 10 (72%) females live in <i>Major cities</i>
2 in 10 (18%) live in <i>Inner regional</i> areas
nearly 1 in 10 (7.9%) live in <i>Outer regional</i> areas
less than 1 in 50 (1.8%) live in <i>Remote and Very Remote</i> areas.

#### References

ABS (Australian Bureau of Statistics) (2012) <u>Australian Demographic Statistics, Dec 2012 - external site opens in new window</u>, abs.gov.au, accessed 2 May 2023.

ABS (2016) *National Aboriginal and Torres Strait Islander Social Survey, 2014-15 - external site opens in new window,* [Table 4.3 Selected characteristics, by age and sex], abs.gov.au, accessed 3 January 2023.

ABS (2021a) *Births, Australia* - external site opens in new window, [Table 5.1: Aboriginal and Torres Strait Islander peoples], abs.gov.au, accessed 28 September 2022.

ABS (2021b) <u>Census of Population and Housing - external site opens in new window</u>, [Table 4.1: Counts of Aboriginal and Torres Strait Islander Australians, 2021], abs.gov.au, accessed 29 September 2022.

ABS (2021c) Gender indicators, Weekly hours worked - external site opens in new window, abs.gov.au, accessed 28 September 2022.

ABS (2021d) Gender indicators, Education - external site opens in new window, abs.gov.au, accessed 28 September 2022.

ABS (2021e) <u>Gender indicators, Median superannuation balance</u> - external site opens in new window, abs.gov.au, accessed 28 September 2022.

ABS (2021h) *Prisoners in Australia* - external site opens in new window, [Table 1: Prisoner characteristics, Australia data set], abs.gov.au, accessed 28 September 2022.

ABS (2022b) *Estimated resident population, Country of birth, Age and sex 2021*, AIHW analysis of ABS Stat Data Explorer. ABS, Canberra, abs.gov.au, accessed 17 November 2022.

ABS (2022c) *Estimates of Aboriginal and Torres Strait Islander Australians*, 2021 - external site opens in new window, [Table 1.1], abs.gov.au, accessed 28 September 2022.

ABS (2022g) Labour Force, Australia - external site opens in new window, [Table 18: Labour force status for 15-64 year-olds by Sex], abs.gov.au, accessed 10 October 2022.

ABS (2022r) Population: Census - external site opens in new window, abs.gov.au, accessed 28 September 2022.

ABS (2022s) <u>Unemployment - external site opens in new window</u>, [Table 3.1: Underemployed workers], abs.gov.au, accessed 14 November 2022.

ABS (2023a) Average Weekly Earnings, Australia - external site opens in new window, abs.gov.au, accessed 28 February 2023.

ABS (2023b) Estimating Homelessness: Census - external site opens in new window, [Table 1.1], accessed 28 February 2023.

ABS (2023c) *National, state and territory population -* external site opens in new window, [Table 3: Median age], abs.gov.au, accessed 2 May 2023.

AIHW (Australian Institute of Health and Welfare) (2022k) <u>Australian Burden of Disease Study 2022</u>, AIHW website, accessed 7 October 2022.

AIHW (2022aa) Specialist homelessness services annual report 2020-21, [Table CLIENTS.11], aihw.gov.au, accessed 2 December 2022.

Davidson P, Bradbury B and Wong M (2020) 'Poverty in Australia 2020: Part 2, Who is affected?', ACOSS/UNSW Poverty and Inequality Partnership, Report No. 4.

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# How healthy are Australia's females?

## Page highlights

## Self-assessed health status

1 in 2 (55%) of Australian females rate their health as excellent or very good, in 2020-21.

#### Burden of disease

Females lose more healthy years of life from living with disease and injury (58%) than from dying prematurely (42%).

#### **Chronic conditions**

56% of Australian females have 1 or more of the 10 selected chronic conditions.

#### <u>Cancer</u>

An estimated 73,200 new cancer cases will be diagnosed in females, in 2022.

#### Mental Health

Almost half (45%) of Australian females have experienced a mental health problem at some point in their lifetime.

#### <u>Dementia</u>

About 252,000 Australian females aged 30 and over are estimated to be living with dementia, the equivalent of 19.2 per 1,000 females.

#### Sexual health

Around 62,400 new cases of selected notifiable sexually transmitted infections were reported for Australian females, in 2022.

#### Reproductive health

- There were around 44,000 endometriosis-related hospitalisations, a rate of 340 hospitalisations per 100,000 females.
- Around 4 in 5 (82%) endometriosis-related hospitalisations were among females aged 15-44 years.
- About 292,000 Australian females gave birth to around 296,000 babies, in 2020.

#### Life expectancy and mortality

Australian females born in 2019-2021 can expect to live 30 years longer than females born in 1891-1900.

A person's health status is a general measure combining physical, social, emotional and mental health and wellbeing. A person's overall level of health can be measured through:

- self-assessment
- burden of disease analysis
- the health impact of disease
- injury in a population
- presence of chronic conditions and comorbidities
- mental health
- sexual health
- life expectancy.

#### Self-assessed health status

Self-assessed health status reflects a person's perception of their own health at a particular point in time (ABS 2018b). It can give a broad picture of the population's overall health (ABS 2018b).

In 2020-21, 55% of females rated their health as excellent or very good. The proportion of females who rate their health as excellent or very good varies by age group. Over two-thirds of females aged 15-24 (69%) rate their health as excellent or very good, compared with 32% of females aged 75 and over (ABS 2022d).

#### Burden of disease

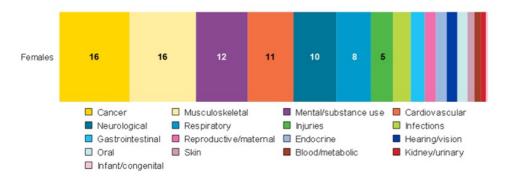
<u>Burden of disease</u> is a measure of the years of healthy life lost from living with, or dying from, disease and injury. The summary measure '<u>disability-adjusted life years</u>' (DALY) measures the years of healthy life lost from premature death (<u>fatal burden</u>) and ill health (<u>non-fatal burden</u>).

#### In 2022 (AIHW 2022k):

- Australian females experience a smaller share of the total disease burden (47%) than males (53%).
- Females lose more healthy years of life from living with disease and injury (58%) than from dying prematurely (which accounted for the remaining 42%).
- The highest proportion of total burden for females is due to these top 5 disease groups; cancer (16%), musculoskeletal disorders (16%), mental and substance use disorders (12%), cardiovascular (11%), and neurological diseases (10%) (Figure 1).

• Females experience a greater share than males of the total burden from some disease groups including reproductive & maternal conditions (94%), blood & metabolic disorders (which includes iron-deficiency anaemia) (59%), neurological conditions (which includes dementia) (57%), and musculoskeletal conditions (56%).

Figure 1: Leading causes of ill health and death (% DALY) by disease group, females, 2022



Note:

DALY = Disability Adjusted Life-Year. This is a measure of healthy life lost, either through premature death or living with disability due to ill health. It is the basic unit used to measure the burden of a disease.

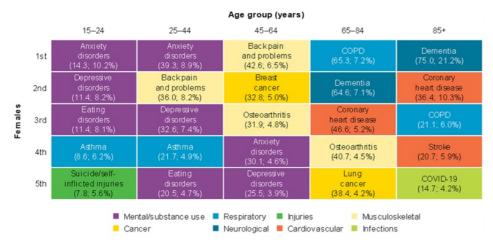
Source: AIHW analysis of AIHW 2022k

#### http://www.aihw.gov.au

Ill health and death also vary across age groups for females. For females aged 15-44, anxiety disorders are the leading condition. For those aged 45-64, back pain and problems is the leading condition, while for those aged 65 and over, dementia is a leading condition causing the highest ill health (Figure 2).

For more information see Australian Burden of Disease Study 2022.

Figure 2: Leading causes of ill health and death (total burden (DALY'000; proportion) among those aged 15 and over, females, 2022



Notes:

- 1. DALY = Disability Adjusted Life-Year. This is a measure of healthy life lost, either through premature death or living with disability due to ill health. It is the basic unit used to measure the burden of a disease.
- 2. COPD = chronic obstructive pulmonary disease.
- 3. Disease rankings exclude 'other' residual conditions from each disease group; for example 'other musculoskeletal conditions'.

Source: AIHW analysis of AIHW 2022k

# Chronic conditions

Chronic conditions pose significant health problems and have a range of potential impacts on individual circumstances. Data in this section focus on 10 common chronic conditions including:

- <u>arthritis</u>
- <u>asthma</u>
- back problems
- <u>cancer</u>
- chronic obstructive pulmonary disease

- diabetes
- heart, stroke and vascular disease
- chronic kidney disease
- osteoporosis
- mental health conditions.

For more information see Chronic conditions.

Among Australian females aged 15 and over, 56% are estimated to have one or more of the 10 selected common chronic conditions. About 1 in 3 females aged 15 and over have one condition (31%), 14% have two, and 11% have three or more (ABS 2022d). Prevalence of the 10 selected most conditions is shown in Table 1 (ABS 2022d, AIHW 2022q).

The self-reported prevalence of the most common chronic conditions increases with age (ABS 2022d):

- 46% of females aged 18-44 have at least one chronic condition.
- 59% of females aged 45-64 have at least one chronic condition.
- 77% of females aged 65 and over have at least one chronic condition.

# Table 1: Number and percentage of selected chronic conditions, females aged 15 and over, 2020-21<sup>(1)</sup>

Condition	Number	%(2)
Mental and behavioural conditions <sup>3</sup>	2,559,400	25
Back problems <sup>4</sup>	1,988,300	19
Arthritis <sup>5</sup>	1,833,200	17
Asthma	1,325,800	13
Osteoporosis <sup>6</sup>	748,000	7.2
Diabetes mellitus <sup>7</sup>	624,400	6.1
Heart, stroke and vascular disease <sup>8</sup>	391,500	3.8
Chronic obstructive pulmonary disease (COPD) <sup>9</sup>	261,200	2.5
Cancer	138,600	1.3
Kidney disease	126,500	1.2

Notes:

- 1. This data is self-reported and likely to either over or under report the true prevalence of chronic conditions.
- 2. Percentage is calculated out of the total female population aged 15 and over.
- 3. Includes harmful use or dependence on alcohol and/or drugs, mood (affective) disorders, anxiety related disorders, organic mental disorders, and other mental and behavioural conditions.
- 4. Includes sciatica, disc disorders, back pain/problems not elsewhere classified and curvature of the spine.
- 5. Includes rheumatoid arthritis, osteoarthritis, other and type unknown.
- 6. Includes osteopenia.
- 7. Includes Type 1 and Type 2 diabetes mellitus and type unknown. These estimates include persons who reported they had diabetes mellitus but that it was not current at the time of interview.
- 8. Includes angina, heart attack, other ischaemic heart diseases, stroke and other cerebrovascular diseases, oedema or heart failure, and diseases of the arteries, arterioles and capillaries. Estimates include persons who reported they had angina, heart attack, other ischaemic heart diseases, stroke and other cerebrovascular diseases or heart failure but that these conditions were not current at the time of interview.
- 9. Includes chronic bronchitis, emphysema and chronic airflow limitation. Asthma is reported separately.

Source: ABS 2022d, AIHW 2022q

For more detailed information on chronic conditions, see Chronic conditions.

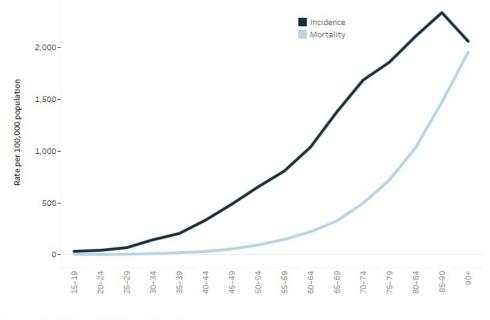
# Cancer

In 2022, the estimated number of new cancer cases in females of all ages is around 73,200, which accounts for 48% of all cases. The most common cancer diagnosis in females of all ages is breast cancer, followed by colorectal cancer, melanoma of the skin, and lung cancer (AIHW 2022m). The risk of Australian females being diagnosed with cancer is 1 in 4 by the age of 75, and 1 in 2 by the age of 85 (AIHW 2019a).

The most common cancer diagnosis among females varies by age. In 2022, leukaemia and colorectal cancer were the most common for females aged under 20. Breast cancer and melanoma were the most common for females aged 20-59, and breast and lung cancer were most common for females aged 60-79. The estimated age-specific incidence of all cancers increases sharply from age 35. The associated mortality rate is delayed and increases sharply from age 60 (Figure 3) (AIHW 2022m).

# Figure 3: Estimated age-specific incidence and mortality rate for all cancers, females, 2022

The figure shows that the incidence of all cancers increases with age, as does the associated mortality. However, mortality is delayed due to the period of living with cancer.



Source: AIHW 2022m. See Table S11 for data and footnotes http://www.aihw.gov.au

#### For more information, see Cancer.

# Mental health

A lifetime mental health disorder refers to people who met the diagnostic criteria for having a disorder at some time in their life. This does not imply that a person has had a disorder throughout their entire life. Based on the 2020-21 National Study of Mental Health and Wellbeing (NSMHW) (ABS 2022j):

- 45% of females aged 16-85 and over report having a mental disorder at some point in their lifetime
- the most common disorders experienced are anxiety (35%) and mood (affective) (18%) disorders.

A 12-month mental health disorder refers to the people who met the diagnostic criteria for having a disorder at some time in their life and had sufficient symptoms of that disorder in the 12 months prior to the survey. Based on the 2020-21 NSMHW, for females aged 16-85:

- one in 4 (25%) had any 12-month mental disorder (ABS 2022j)
- 21% reported an anxiety disorder within the 12 months prior, higher than males at 12% (ABS 2022j)
- 12-month mental health disorders varied by age, with almost half (47%) of females aged 16-24 having a 12-month mental health disorder, compared to 21% of those aged 35-44, and 13% of those aged 65-74 (ABS 2022k).

#### Dementia

Dementia is a significant and growing health and aged care issue in Australia. It has a substantial impact on the health and quality of life of females with the condition, as well as their family and friends. Dementia is the leading cause of ill health and premature death in females overall. It is also the leading cause of death, accounting for 13% of all female deaths in 2020.

Estimates indicate that about 251,700 Australian females aged 30 and over are living with dementia, which is equivalent to 19.2 per 1,000 females. This estimate is projected to increase to 533,800 in 2058 (AIHW 2023b). Significantly more females of all ages are living with dementia (63%) than males (37%).

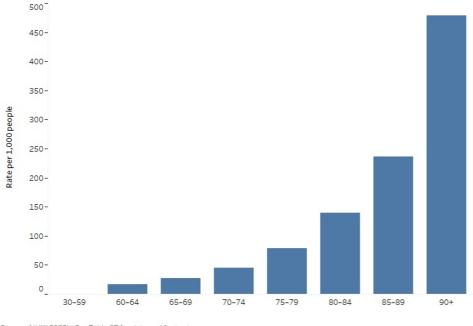
Age is a main risk factor for dementia, with the estimated prevalence of females living with dementia increasing as age increases (Figure 4) (AIHW 2023b). Other modifiable risk factors recognised as having strong evidence for increased risk of developing dementia include low level of education in early life and hearing loss in midlife (AIHW 2023b).

The two leading health risk factors measured by the Australian Burden of Disease Study for dementia are overweight (including obesity) and physical inactivity, which contributed to 19% and 12% respectively to ill health and premature death due to dementia (AIHW 2023b).

For more information on Dementia and its associated risk factors, see Dementia in Australia.

# Figure 4. Prevalence of dementia by age group (per 1,000 population), females, 2022

This bar chart shows the rate of dementia across age groups, with the prevalence increasing with age and highest in the oldest age group.



Source: AIHW 2023b. See Table S7 for data and footnotes. <u>http://www.aihw.gov.au</u>

# Sexual health

Sexual health is a state of physical, mental and social wellbeing in relation to sexuality. Measures of sexual health include the prevalence of sexual difficulties and sexually transmissible infection rates (WHO 2022a).

#### Sexual difficulties

In a sub-study of the Australian Longitudinal Study of Health and Relationships in 2011, of the 2,300 females (aged 20-64) surveyed, 66% indicated that they had experienced at least 1 of the following sexual difficulties in the 12 months prior to the survey (Smith, et al. 2012):

- lacked interest in having sex (50%)
- unable to climax (21%)
- took too long to orgasm (21%)
- had trouble with vaginal dryness (20%)
- did not find sex pleasurable (17%)
- felt anxious about ability to perform sexually (12%)
- physical pain during intercourse (10%)
- came to orgasm too quickly (5%).

For more information, see Sexual and reproductive health - external site opens in new window.

#### Sexually transmissible infections

Sexually transmissible infections (STIs) are a subset of communicable diseases known to be transmitted through sexual contact. More than 30 different viruses, bacteria and parasites are known to be transmitted sexually (WHO 2022b). While some STIs can be cured, a person can have an STI without symptoms of disease. If left untreated, these infections can have serious consequences for long-term health.

Nationally notifiable diseases which are sexually transmissible include chlamydia, gonococcal infection, syphilis, human immunodeficienty virus (HIV), donovanosis, hepatitis B and hepatitis C. It should be noted that HIV, hepatitis B and C are also transmissible via other routes such as exposure to unsafe injecting drug use.

In 2021, there were 58,426 notifications of chlamydia, gonococcal infection, syphilis, hepatitis B and hepatitis C for females, which accounted for less than half (44%) of all notifications in both females and males for these selected diseases which are sexually transmissible (Table 2) (DoHAC 2022).

In 2021, there were 64 new cases of HIV for females. After adjusting for age, the rate of HIV notifications decreased by 44% since 2012 (UNSW 2022).

Table 2: Number, proportion and rate of selected nationally notifiable STI notifications, females, 2020 and 2021 This table shows the number of notifications, per cent of total cases, and age-standardised rates of notifications for chlamydia, gonococcal infection, syphilis, hepatitis b and c for the years 2020 to 2022. For HIV, only 2020 and 2021 data are available.

Year	STI	Number of notifications	Per cent of notifications in females	Age-standardised rate per 100,000
2021	Chlamydia	44,714	51	382
	Gonococcal infection	8,095	31	67
	Infectious Syphilis	1,047	46	9
	Hepatitis B	2,167	46	16
	Hepatitis C	2,403	49	18
	HIV	64	12	1

Source: Kirby Institute, 2022 (HIV)

National Notifiable Disease Surveillance System, ABS National, state and territory population (for obtaining population rates). See Table S12 for data and footnotes.

http://www.aihw.gov.au

#### Note:

- 1. Total cases include all persons, excludes cases where sex was missing.
- 2. Hepatitis B and C notifications include both newly acquired and unspecified cases and could have been transmitted through other routes.
- 3. Syphilis notifications include syphilis of less than 2 years duration (infectious) and excludes syphilis of more than 2 years or unknown duration (unspecified).
- 4. There are no new cases of donovanosis for females in 2020 and 2021.

After adjusting for age, notification rates in females for viral hepatitis B and C have decreased by 35% and 41%, respectively, over 2012 to 2021. In 2021, rates for hepatitis B and C are the highest in females aged 30-39 (33 per 100,000 population and 30 per 100,000 population, respectively) (DoHAC 2022).

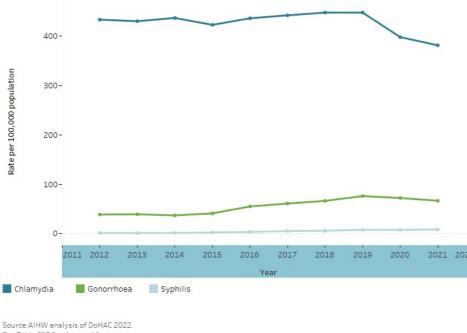
There has been an increase in rates of gonococcal infection and syphilis notifications from 2012 to 2021 (Figure 5). After adjusting for age, compared with 2012, rates of these infections in 2021 for females were:

- 1.7 times higher for gonococcal infection, with the highest rate seen in females aged 20-24
- 6.4 times higher for syphilis, with the highest rates seen in females aged 20-24.

For chlamydia, age-standardised notification rates in females decreased by 12% from 2012 to 2021. In 2021, the highest rate was seen in those aged 20-24. Chlamydia remains the most frequently notified STI in Australia in both females and males.

# Figure 5: Age-standardised rate per 100,000 population of gonococcal infection, syphilis and chlamydia notifications, females, 2012 to 2021

The line graph shows the notification rates for chlamydia, gonorrhoes and syphilis across the years, from 2012 to 2022. It shows an increase in rates of gonococcal infection and syphilis.



See Table S13 for data and footnotes http://www.aihw.gov.au

For more information, see <u>HIV, viral hepatitis and sexually transmissible infections in Australia: Annual surveillance report 2022 - external site opens in new window</u>, and the Department of Health and Aged Care <u>National Notifiable Disease Surveillance System - external site</u> opens in new window.

# Reproductive health

Reproductive health issues surrounding contraception, unwanted pregnancy, miscarriage, endometriosis, fertility, pregnancy difficulties, menopause and service provision have an impact on economic productivity, quality of life and the physical and mental health of females.

# Contraceptive use

Contraceptive choices are complex, and choices made by females may change due to differing circumstances over the life course. A longitudinal study of 17,000 females showed that (Loxton, et al. 2021):

- 60% of females aged 18-23 reported using the contraceptive pill while 45% reported using condoms.
- The use of the oral contraceptive pill decreases from 60% to 34% among females aged 18-23 to those aged 24-29, respectively.
- The use of condoms decreases from 45% to 31% among females aged 18-23 to those aged 24-29, respectively.
- Use of the long-acting reversible contraceptive doubles as females age, increasing from 10% of females aged 28-33 to 24% of those aged 40-45.
- 9% of females aged 18-23 report using no contraception.

# Endometriosis

Endometriosis is a chronic condition that can be painful, affect fertility and lead to reduced participation in school, work and sporting activities. Around 1 in 9 (11.1%) females born in 1973-78 are estimated to have been diagnosed with endometriosis by age 40-44 (Rowlands, et al. 2021). Among females born in 1989-1995, around 1 in 15 (6.6%) females are estimated to have been diagnosed with endometriosis by age 25-29 (AIHW 2019b). It takes an average of 5 years for an Australian female to receive a diagnosis after first seeing a doctor (Armour, et al. 2020).

There were around 43,800 endometriosis-related hospitalisations according to the AIHW <u>National Hospital Morbidity Database (NHMD)</u> in 2020-21, a rate of 340 hospitalisations per 100,000 females. Just over half of these (52%) had endometriosis as the <u>principal diagnosis</u>. Around 4 in 5 (82%) endometriosis-related hospitalisations were among females aged 15-44, which are generally regarded as a woman's reproductive years. This accounts for around 30 out of every 1,000 hospitalisations among females aged 15-44.

Data from the AIHW <u>National Hospital Morbidity Database (NHMD</u>) show rates of endometriosis-related hospitalisations varied by population group, after adjusting for age:

- Females living in *Inner regional* areas had the highest rate of endometriosis-related hospitalisations (490 per 100,000 females), followed by females living in *Major cities* (410 per 100,000), *Outer regional* areas (375 per 100,000) and *Remote and very remote* areas (265 per 100,000).
- Females living in the highest socioeconomic areas had higher rates of endometriosis-related hospitalisations compared to females in the lowest socioeconomic areas (450 and 335 per 100,000 females, respectively).
- Non-Indigenous females had higher rates of endometriosis-related hospitalisations than Indigenous females (405 and 320 per 100,000 females, respectively).

The reasons for these differences are not known. They could reflect potential variations in access to health services or differences in health-seeking behaviour between population groups, rather than a difference in disease prevalence.

# Mothers

An important life stage for many Australians is when they become a parent. For mothers, her health and that of her baby can be affected by a mother's age, where she lives, the socioeconomic conditions in which she lives, the presence of pre-existing or pregnancy-related medical conditions, and risky behaviours such as smoking and drinking alcohol during pregnancy (Bywood, et al. 2015, UNSW 2022, WHO 2015).

The health and lifestyle behaviours of mothers can have important ongoing implications on both mother and baby. Among Australian females:

- Almost 1 in 10 mothers (9.2%) report smoking at some time during their pregnancy in 2020, a decrease from 14% in 2010 (AIHW 2022j).
- 79% of mothers received antenatal care in the first trimester; 95% had 5 or more care visits (AIHW 2022f).
- Based on pre-pregnancy BMI (calculated based on self-reported height and weight, or measured at first antenatal visit), almost half (48%) of females who gave birth in 2020 were living with overweight or obesity (27% overweight and 22% obese) (AIHW 2022h).
- Most females do not consume alcohol in the first 20 weeks of pregnancy; females are more likely to consume alcohol in the first 20 weeks of pregnancy if they live in *Remote* (4.6%) or *Very remote* (9.9%) areas, are Indigenous (8.2%), or are teenage mothers (aged under 20) (4.5%) (AIHW 2022e).

About 292,000 Australian females gave birth to around 296,000 babies in 2020. The rate of females aged 15-44 giving birth was lower than a decade ago (56 per 1,000 females in 2020 compared with 64 per 1,000 in 2010).

The majority of mothers (74%) live in *Major cities*, 20% of mothers are from the lowest socioeconomic areas, and 36% of mothers are born overseas (AIHW 2022u).

Average maternal age has risen for both first-time mothers (from 30 years in 2010 to 30.9 in 2020) (AIHW 2022g), and those who have given birth previously (from 31.3 years in 2010 to 32 in 2020). The highest proportion of all mothers were aged between 30 and 34 (more than one-third (36%) of all mothers) (AIHW 2022d).

The rate of females giving birth in older age groups has also increased over time. Since 1999 (AIHW 2021h):

- those aged 35-39 giving birth increased by almost 1.5 times, from 47 per 1,000 females in 1999 to 68 per 1,000 females in 2019.
- those aged 40-44 giving birth almost doubled, from 8.4 per 1,000 females in 1999 to 15.5 per 1,000 females in 2019.
- those aged 45-49 giving birth almost quadrupled, from 0.3 per 1,000 females in 1999 to 1.1 per 1,000 females in 2019.

Almost 2 in 3 (63%) mothers had vaginal births, and the remaining 1 in 3 (37%) had caesareans. Caesarean sections were more common among females who were aged 40 and over (56%), and who were overweight (39%) or obese (46%) (AIHW 2022i).

For more information see Mother and babies.

#### Menopause

During menopause, there are changes to the levels of the hormones, oestrogen and progesterone, and it marks the end of the reproductive years.

The effects of these changes in hormonal levels however, are not just limited to reproduction but can extend to overall health and mental wellbeing. Menopause is associated with an increase in health risk factors and some chronic conditions including (Lancet 2022, Nappi and Simonici 2021):

- cholesterol
- high blood pressure
- overweight and obesity
- coronary heart disease
- diabetes
- osteoporosis
- dementia
- cancer.

Menopause generally occurs at around the age of 50 but can happen earlier.

Certain socio-economic, demographic, lifestyle, reproductive, social, and environmental elements are risk factors associated with premature menopause (earlier than 40 years) and early menopause (40-44 years) (Loxton, et al. 2021). These risk factors include smoking, age at which female had first period, females who experience intimate partner violence and underweight females.

For more information see, Jean Hailes for Women's Health page on Menopause - external site opens in new window.

# Life expectancy and mortality

<u>Life expectancy</u> is expressed as either the number of years a newborn baby is expected to live, or the expected years of life remaining for a person at a given age.

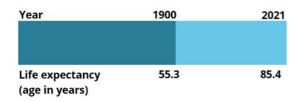


Chart: AIHW. Source: AIHW 2022r.

Life expectancy at birth in Australia has improved dramatically for both sexes in the last century, and shows some variation between population groups:

- Females born in Australia in 2019-2021 can expect to live to the age of 85.4 years on average, an increase of 1.2 years in the past 10 years (ABS 2022h).
- International comparisons of life expectancy at birth indicate that Australian females have the sixth highest life expectancy in the world. Japan ranks first, at 87.7 years (OECD 2021).

For more information, see: Deaths in Australia: Life expectancy.

## Health Adjusted Life Expectancy

Health Adjusted Life Expectancy (HALE) reflects the length of time an individual at a specific age could, on average, expect to live in full health. It can be measured at any age but is typically reported:

- From birth.
- At age 65, describing health in an ageing population.

Life expectancy in Australia for females born in 2022 is 85.3 years, while the average number of healthy years (HALE) for these babies is 74.1 years. The difference between life expectancy and HALE (that is, the time expected in less than full health) is 11.3 years. This means that females can expect to spend 87% of their lives in full health (AIHW 2022k).

Females born in 2022 are expected, on average, to live 4.1 years longer than males, and are expected to have 2.5 more years of healthy life than males (AIHW 2022k).

Life expectancy in 2022 for females aged 65 is 23.0 years, that is they could expect to live to the age of 88. At age 65, females can expect on average 16.8 healthy years of life, and 6.2 years in less than full health (AIHW 2022k).

Between 2003 and 2022, life expectancy and HALE at birth changed little for females. Females gained 2.3 years in life expectancy (from 83.0 in 2003 to 85.3 in 2022) and 1.3 years in HALE (from 72.8 to 74.1 years) (AIHW 2022k).

For more information see Australian Burden of Disease Study.

#### Mortality

Looking at how many people die and what caused their deaths can provide vital information about the health of a population. Patterns and trends in deaths can help explain differences and changes in the health of a population (AIHW 2022r).

Causes of death information can be used to:

- assess the success of interventions to improve disease outcomes
- signal changes in community health status and disease processes
- highlight inequalities in health status between population groups.

In 2021, about 82,000 Australian females died. The median age at death was 84.8, and the leading cause of death was dementia including Alzheimer's disease (13%), followed by coronary heart disease (9%), and cerebrovascular disease (6.8%) (Figure 6). Leading causes of death for females vary by age group, with suicide being the leading cause for females aged 15-44 (Figure 7) (AIHW 2021a).

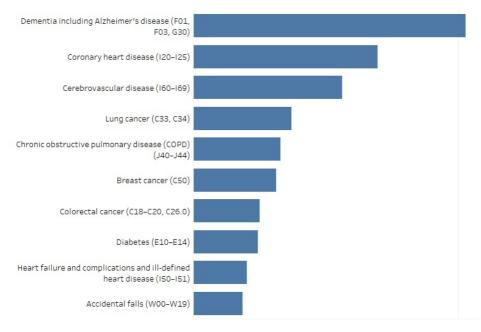
The median age at death for females also varies by population group:

- It decreases from 85 in *Major cities* to 66 in *Very remote* areas (AIHW 2022x).
- It decreases from 87 in the highest socioeconomic area to 83 in the lowest socioeconomic area (AIHW 2022y).

For more information see Deaths in Australia: Leading causes of death.

#### Figure 6: Leading causes of death, females of all ages, 2021

This horizontal bar chart shows the leading causes of death in females. Leading causes of death include dementia including Alzheimer's disease, coronary heart disease and cerebrovascular disease.



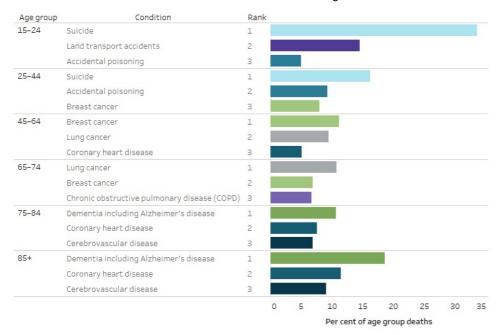
Source: AIHW 2021a. See Table S14 for data and footnotes. http://www.aihw.gov.au

#### Notes:

- 1. Year refers to year of registration of death. Deaths registered in 2021 are based on the preliminary version of cause of death data and are subject to further revision by the Australian Bureau of Statistics (ABS).
- 2. Rates are calculated using the sum of estimated resident populations at 30 June for each year. Estimated resident populations for 2020 and 2021 have been impacted by COVID-19.
- 3. Leading causes of death are based on underlying causes of death and classified using an AIHW-modified version of Becker et al. 2006.
- 4. International Statistical Classification of Diseases (ICD-10) codes are presented in parentheses.

# Figure 7: Leading 3 underlying causes of death (number, %), by age group, females, 2019-21

This horizontal bar chart shows the top three causes of death in rank order, and the changes with increasing age groups. Suicide affects younger age groups most (those aged 15 to 44) but declines in middle age. From age 45 to 74, breast cancer and lung cancer become number 1 ranked causes of deaths. Dementia is ranked number 1 in those aged 75 and over.



Source: 2021a. See Table S15 for data and footnotes. http://www.aihw.gov.au

#### Notes:

- 1. Year refers to year of registration of death. Deaths registered in 2019 are based on the revised version, deaths registered in 2020 and 2021 are based on the preliminary version. Revised and preliminary versions are subject to further revision by the Australian Bureau of Statistics.
- 2. Leading causes of death are based on underlying causes of death and classified using an AIHW-modified version of Becker et al. 2006.
- 3. Data by causes of death have been adjusted for Victorian additional death registrations in 2019. A time series adjustment has been applied to causes of death to enable a more accurate comparison of mortality over time. When the time series adjustment is applied, deaths are presented in the year in which they were registered (that is, removed from 2019 and added to 2017 or 2018). For more detail please refer to Technical note: Victorian additional registrations and time series adjustments in Causes of death, Australia, 2019 (ABS Cat. no. 3303.0).
- 4. Per cents have been calculated using the adjusted number of deaths due to all causes (see note 2) as the denominator, however the number of deaths due to all causes presented in the table have not been adjusted.

# Premature and potentially avoidable deaths

Premature mortality or death refers to deaths occurring before the age of 75. Nearly 3 in 10 (27%) of all deaths are premature in females, and females account for 38% of all premature deaths. The mortality rate varies between population groups in 2020. After <u>adjusting for age</u>, which removes the effects of age when comparing rates between population groups with different age structures (AIHW 2022w):

- 66% of female deaths are premature in *Very remote* areas compared to 26% in *Major cities*. The premature mortality rate in females also increases as remoteness increases, with rates in *Very remote* areas 2.3 times higher (315 deaths per 100,000 people) than the rate in *Major cities* (132 per 100,000 people).
- Around 3 in 10 (31%) deaths are premature in the lowest socioeconomic areas compared to 23% in the highest socioeconomic areas. The premature mortality rate in females in the lowest socioeconomic areas (199 deaths per 100,000 people) is nearly twice the rate in the highest socioeconomic areas (102 per 100,000).

Potentially avoidable deaths refer to deaths before the age of 75 from conditions that are potentially preventable through individualised care and/or treatable through existing primary or hospital care. Potentially avoidable deaths account for 13% of total deaths in females, and 47% of all premature deaths in females. The proportion of premature deaths that are potentially avoidable and the rate of potentially avoidable deaths varies between population groups. After adjusting for age (AIHW 2022x, AIHW 2022y):

- Females in *Very remote* areas have a higher proportion of premature deaths that are potentially avoidable (58%), compared to females in *Major cities* (45%). The rate of potentially avoidable deaths in *Very remote* areas (181 deaths per 100,000 people) is almost 3 times that of the rate in *Major cities* (61 per 100,000).
- The proportion of premature deaths that are potentially avoidable did not differ greatly between the lowest socioeconomic areas (48%) and the highest (46%). However, females in the lowest socioeconomic areas have twice the rate of potentially avoidable deaths per 100,000 population compared with females in the highest socioeconomic areas (98 and 48 per 100,000, respectively).

For more information see: Mortality Over Regions and Time.

#### References

ABS (2018b) Self-assessed health status - external site opens in new window, abs.gov.au, accessed 15 May 2023.

ABS (2022d) <u>Health Conditions Prevalence 2020-21 - external site opens in new window</u>, [Table 1.3 Summary health characteristics, by age and sex], abs.gov.au, accessed 30 September 2022.

ABS (2022h) Life tables, (2019 - 2021), - external site opens in new window [Table 1.9: Life tables, states, territories and Australia - 2019-2021], abs.gov.au, accessed 30 September 2022.

ABS (2022j) National Study of Mental Health and Wellbeing (2020-21), - external site opens in new window [Table 1.3: Summary results, Lifetime mental disorders, 2020-21], abs.gov.au, accessed 30 September 2022.

ABS (2022k) National Study of Mental Health and Wellbeing, Prevalence of mental disorders, 2020-21 - external site opens in new window, abs.gov.au, accessed 30 September 2022.

AIHW (2019a) Cancer in Australia 2019, aihw.gov.au, accessed 15 February.

AIHW (2019b) Endometriosis in Australia: prevalence and hospitalisations, AIHW website, accessed 16 September 2022.

AIHW (2021a) AIHW National Mortality Database, AIHW website, accessed 7 January 2023.

AIHW (2021h) Older mothers in Australia 2019, AIHW website, accessed 17 October 2022.

AIHW (2022d) Australia's mothers and babies, AIHW website, accessed 17 October 2022.

AIHW (2022e) Australia's mothers and babies: Alcohol consumption during pregnancy, AIHW website, accessed 7 October 2022.

AIHW (2022f) Australia's mothers and babies: antenatal care, AIHW website, accessed 7 October 2022.

AIHW (2022g) Australia's mothers and babies: babies, AIHW website, accessed 7 October 2022.

AIHW (2022h) Australia's mothers and babies: body mass index, AIHW website, accessed 7 October 2022.

AIHW (2022i) Australia's mothers and babies: method of birth. AIHW website, accessed 7 October 2022.

AIHW (2022j) Australia's mothers and babies: smoking during pregnancy, AIHW website, accessed 7 October 2022.

AIHW (2022k) Australian Burden of Disease Study 2022, AIHW website, accessed 7 January 2023.

AIHW (2022m) Cancer data in Australia: Cancer summary data visualisation, AIHW website, accessed 7 October 2022.

AIHW (2022q) Chronic conditions and multimorbidity, AIHW website, accessed 7 January 2023.

AIHW (2022r) Deaths in Australia, AIHW website, accessed 17 December 2022.

AIHW (2022u) Health of mothers and babies, AIHW website, accessed 17 October 2022.

AIHW (2022w) Mortality Over Regions and Time (MORT) books, AIHW website, accessed 27 October 2022.

AIHW (2022x) Mortality Over Regions and Time (MORT) books, Remoteness area, 2016-2020, [Table 1: Deaths due to all causes (combined), by sex and year, 2016-2020], AIHW website, accessed 27 October 2022.

AIHW (2022y) Mortality Over Regions and Time (MORT) books, Socioeconomic area, 2016-2020, [Table 1: Deaths due to all causes (combined), by sex and year, 2016-2020], AIHW website, accessed 27 October 2022.

AIHW (2023b) Dementia in Australia, aihw.gov.au, accessed 27 February 2023.

Armour M, Sinclair J, Ng C, Hyman M, Lawson K, Smith C and Abbott J (2020) 'Endometriosis and chronic pelvic pain have similar impact on women, but time to diagnosis is decreasing: an Australian survey', Scientific reports, 10(16253):https://doi.org/10.1038/s41598-020-73389-2.

Bywood P, Raven M and Erny-Albrecht K (2015) Improving health in Aboriginal and Torres Strait Islander mothers, babies and young children: a literature review, Adelaide: Primary Health Care Research & Information Service.

DoHAC (Department of Health and Aged Care) (2022) National Notifiable Disease Surveillance System - external site opens in new window, health.gov.au, accessed 18 January 2023.

Lancet (2022) 'Menopause: a turning point for women's health, Editorial', The Lancet Diabetes & Endocrinology, 10(6):373, https://doi.org/10.1016/S2213-8587(22)00142-5.

Loxton D, Byles J, Tooth L, Barnes I, Byrnes E, Cavenagh D, Chung HF, Egan N, Forder P, Harris M, Hockey R, Moss K, Townsend N and Mishra G (2021) Reproductive health: Contraception, conception, and change of life - Findings from the Australian Longitudinal Study on Women's Health, alswh.org.au, accessed 31 January 2023.

Nappi R and Simonici T (2021) 'Menopause transition: a golden age to prevent cardiovascular disease', The Lancet Diabetes & Endocrinology, 9(3):135-137, https://doi.org/10.1016/S2213-8587(21)00018-8.

OECD (Organisation for Economic Co-operation and Development) (2021) Health Status, Life expectancy at birth - external site opens in new window, data.oecd.org, accessed 4 October 2022.

Rowlands I, Abbott J, Montgomery G, Hockey R, Rogers P and Mishra G (2021) 'Prevalence and incidence of endometriosis in Australian women: a data linkage cohort study", BJOG: an International Journal of Obstetrics & Gynaecology, 128(657-665, doi.org/10.1111/1471-0528.16447.

Smith M, Lyons A, Ferris JA, Richters J, Pitts MK, Shelley JM, Simpson JM, Heywood W and Patrick K (2012) 'Incidence and Persistence/Recurrence of Women's Sexual Difficulties: Findings From the Australian Longitudinal Study of Health and Relationships', Journal of Sex & Marital Therapy, 38(4):378-393, doi.org/10.1080/0092623X.2011.615898.

UNSW (The Kirby Institute) (2022) HIV, viral hepatitis and sexually transmissible infections in Australia: Annual surveillance report 2022 external site opens in new window, kirby.unsw.edu.au, accessed 17 May 2022.

WHO (World health Organisation) (2015) State of inequality: reproductive, maternal, newborn and child health - external site opens in new window, www.who.int, accessed 17 May 2022.

WHO (2022a) Sexual and reproductive health: defining sexual health - external site opens in new window, www.who.int/health, accessed 17 May 2022.

WHO (2022b) Sexually transmitted infections (STIs), - external site opens in new window www.who.int, accessed 17 May 2022.

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# Impact of COVID-19 on the health of Australia's females

# Page highlights

#### How has COVID-19 affected Australia's females directly?

- From December 2021 to December 2022, the rate of COVID-19 cases in females was 39,400 per 100,000 population.
- About 6,000 females died from COVID-19 in Australia by March 2023.

#### What are some of the indirect impacts of the COVID-19 pandemic on females?

- 6% of females aged 25-31, and 2% of females aged 42-47 had difficulty accessing contraceptives, most commonly the contraceptive pill, as a result of the pandemic.
- Females were more adversely impacted than males in terms of mental of health; showing significantly higher levels of psychological distress.

COVID-19 is a disease caused by the virus severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2). It is a major health threat resulting in both direct and indirect effects on the health of Australia's females.

For more information on AIHW COVID-19 reporting see COVID-19 and Changes in the health of Australians during the COVID-19 period.

# How has COVID-19 affected Australia's females directly?

From 15 December 2021 to 18 December 2022, the rate of COVID-19 cases in females was around 39,400 per 100,000 population, a higher case rate than males by about 4,500. The highest rate was seen in those aged 18-29 (CDI 2023).

About 6,000 females died from COVID-19 in Australia by March 2023. The highest rates of deaths were seen in females aged 90 and over (ABS 2022a). The most common associated causes of death were pneumonia and respiratory failure.

COVID-19 is the 12<sup>th</sup> leading cause of disease burden in females, responsible for 2.5% of total ill health and premature death in Australia in 2022. In comparison, COVID-19 ranked 7<sup>th</sup> among specific diseases in males and was responsible for 3.0% of total disease burden. In females, the burden from COVID-19 was predominantly due to premature death, accounting for 67% of total COVID-19 disease burden. The total disease burden due to COVID-19 was the highest in females aged 80-84 and 85-89 (both 11.2%) (AIHW 2022k).

For more information on COVID-19 disease burden and impacts see the Australian Burden of Disease Study 2022.

#### What are some of the indirect impacts of the COVID-19 pandemic on females?

#### Family planning and contraceptive use in 2020

In September 2020, the Australian Longitudinal Study on Women's Health asked females aged 25-31 and 42-47 on their plans for pregnancy, and about contraceptive use during the pandemic (Loxton, et al. 2020):

- 6% of females aged 25-31, and 2% of females aged 42-47 had difficulty accessing contraceptives, most commonly the contraceptive pill, as a result of the pandemic.
- 10% of females aged 25-31 indicated that their plans for pregnancy had changed since the start of the pandemic, with 6% delaying pregnancy and 4% planning to become pregnant sooner than they had planned prior to the pandemic.
- Less than 1% of females aged 42-47 reported changing their pregnancy plans since the pandemic started.

#### COVID-19 and mental health from 2020 to 2021

For some Australians, the COVID-19 pandemic and associated implications have had a negative effect on mental health. Negative effects can result from concerns about the virus itself, and the impact of the measures used to contain the spread of the virus (NMHC 2020).

A survey of mental health and wellbeing during COVID-19 in Australia found that during the first 2 years of COVID-19, females were more adversely impacted than males; showing significantly and substantially higher levels of psychological distress than prior to the pandemic (Biddle, et al. 2022).

While different data collecting methods impact comparability of mental health measures from pre pandemic and pandemic levels, and changing service delivery methods have impacted access, data from MBS, PBS and crisis support and information organisations indicate an increase in mental health service use since the start of the pandemic (AIHW 2022v).

For detailed information see Mental health impact of COVID-19.

#### Delayed and foregone health care during 2020 and 2021

Due to lockdowns, isolation requirements and restrictions on some health services during 2020 and 2021, there was concern people may not have received the care they required if they were unable to access a General Practitioner (GP) which provide primary care in Australia.

Based on the ABS 2021 Patient Experience Survey, females aged 15 and over were more likely than males to delay using the following health services when needed due to COVID-19 (ABS 2021g):

- dental professionals (14.4% of females compared to 9.4% of males)
- GPs (12.5% compared to 6.8%)
- after-hours GPs (8.5% compared to 5.4%)
- medical specialists (8.4% compared to 6.0%).

There was a large increase in female visits to GPs in 2021, well above the expected rate based on projections from data for the period to 2019. This increase was likely driven by the large role GPs played in the vaccine rollout (AIHW 2022c).

Females also had had a quicker return than males in 2021 toward expected rates for some procedures such as MBS subsidised colonoscopies, and operations in hospitals (AIHW 2022c).

Access to, and use of cancer screening programs was also impacted. In particular, breast screening services were suspended from late March 2020 to early May 2020 due to COVID-19 restrictions. The suspension of the services resulted in a significant decline in mammograms, decreasing from more than 70,000 mammograms in March 2020 to just over 1,100 in April 2020 (AIHW 2021d).

While suspension of the services was lifted in May 2020, breast screening resumed in a staged approach. Additionally, the rate at which breast screening services could resume was impacted by various jurisdictional social distancing guidelines (AIHW 2021d).

For more information, see <u>Changes in the health of Australians during the COVID-19 period</u>, <u>Cancer Screening</u> and <u>Cancer screening</u> and <u>COVID-19 in Australia</u>

#### Family and domestic violence during COVID-19 in 2021

A survey during the COVID-19 pandemic found many females who had previously experienced partner violence reported that violence had increased during the pandemic (Boxall and Morgan 2021):

- 42% said physical violence had increased in frequency or severity, and 43% said sexual violence had increased in frequency or severity.
- One in 4 females (26%) who had experienced physical or sexual violence also said they had been unable to seek assistance on at least one occasion due to safety concerns.

Around 74% of hospitalisations for family and domestic violence (FDV) are females. Between 2017-18 and 2020-21, the rate of FDV hospitalisations per 100,000 persons increased by 9.6% in females, while staying stable for males (AIHW 2022s).

#### References

ABS (2021g) Patient Experiences in Australia: Summary of Findings, - external site opens in new window [Table 25.3: Impact of COVID-19 on health service use in the last 12 months], abs.gov.au, accessed 17 May 2022.

ABS (2022a) COVID-19 Mortality in Australia: Deaths registered until 30 November 2022 - external site opens in new window, abs.gov.au, accessed 11 February 2023.

AIHW (2021d) Cancer screening and COVID-19 in Australia, AIHW website, accessed 18 May 2023.

AIHW (2022c) <u>Australia's health 2022: data insights, chapter 2, Changes in the health of Australians during the COVID-19 period</u>, AIHW website, accessed 7 November 2022.

AIHW (2022k) Australian Burden of Disease Study 2022, AIHW website, accessed 7 January 2023.

AIHW (2022s) *Family, domestic and sexual violence data in Australia*, [Table 1b: Family and domestic violence hospitalisations, by sex, 2017-18 to 2020-21], AIHW website, accessed 7 February 2023.

AIHW (2022v) Mental health: Mental health impact of COVID-19, AIHW website, accessed 16 March 2023.

Biddle N, Gray M and Rehill P (2022) 'Mental health and wellbeing during the COVID-19 period in Australia', ANU Centre for Social Research and Methods, Australian National University (Canberra July 7).

Boxall H and Morgan A (2021) 'Intimate partner violence during the COVID-19 pandemic: A survey of women in Australia', *ANROWS*, (Research report, 03/2021).

CDI (Communicable Diseases Intelligence) (2023) <u>COVID-19 Epidemiology and Surveillance Team COVID-19 Australia: Epidemiology -</u> <u>external site opens in new window</u>, health.gov.au/cdi, accessed 12 February 2023.

Loxton D, Anderson A, Cavenagh D, Townsend N, Harris M, Mishra G, Tooth L and Byles J (2020) 'ALSWH COVID-19 Survey, Report 10: Survey 10', ALSWH, 2 September 2020.

NMHC (National Mental Health Commission) (2020) <u>Pandemic response plan - external site opens in new window</u>, NHMC website, accessed 19 July 2022.

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# Health behaviours and risk factors of Australia's females

# Page highlights

#### Which risk factors cause the most ill health and premature deaths in females?

- 34% of ill health and premature death among females could have been potentially prevented by avoiding or reducing exposure to certain risk factors.
- The leading risk factors contributing to the most total disease burden among females are tobacco, overweight (including obesity), dietary risk factors and high blood pressure.

#### Tobacco, alcohol and other drugs

- Tobacco is the leading preventable cause of ill health and premature death in females, responsible for 8.0% of total disease burden.
- Around 1 in 11 (8.2%) Australian females smoke daily.
- Around 7.5% of females used an e-cigarette or vaping device at least once in their lifetime.
- About 1 in 8 (13%) females drank more than 10 standard drinks per week.
- Over 4 in 10 (41%) females have tried at least one illicit drug in their lifetime.

#### **Overweight and obesity**

- Overweight (including obesity) is the 2<sup>nd</sup> leading preventable cause of ill health and premature deaths in females, responsible for 7.8% of total disease burden.
- 3 in 5 (60%) of Australian females are living with overweight or obesity.

#### <u>Diet</u>

- Dietary risk factors are the 3<sup>rd</sup> leading preventable cause of ill health and premature death in females, responsible for 4.1% of total disease burden.
- About 1 in 10 (9%) Australian females meet the recommended daily fruit and vegetable intake guidelines, in 2020-21.

#### **Physical inactivity**

- 59% of Australian females are sufficiently physically active.
- Only 25% of females do enough strength or toning activities on 2 or more days per week.

#### Occupational exposures and hazards

Deaths from traumatic injuries in the workplace are rare in females - 6 out of 169 traumatic injury fatalities.

#### Violence against females

Almost 2 in 5 (39%) Australian females have experienced physical and/or sexual violence since the age of 15.

A person's health and wellbeing are influenced by many factors, including individual health behaviours, socioeconomic factors and the environment in which they live. Health behaviours including physical activity, a well-balanced diet, a safe occupation and maintaining a healthy body weight reduces the risk of poor health. Risk factors such as smoking tobacco, alcohol consumption, using illicit substances or being exposed to violence, increase the likelihood of poor health.

#### Which risk factors cause the most ill health and premature deaths in females?

Around 34% of ill health and premature death in Australian females was potentially preventable in 2018 - that is, it could have been potentially prevented had exposure to certain risk factors been reduced or avoided (AIHW 2023a).

The leading risk factors contributing to ill health and premature deaths in Australia among females are tobacco use, followed by overweight and obesity, all dietary risks, and high blood pressure in 2018 (AIHW 2022k). Risk factors that have the most impact on the burden of disease for females vary across age groups (Figure 8).

For more information see Burden of disease.

Figure 8: Leading risk factor contribution to ill health and premature death (attributable DALY per 1,000 population; proportion of DALY), females aged 15 and over, 2018

		Age group (years)				
		15-24	25-44	45-64	65-84	85+
	1st	Child abuse/neglect (10.5; 7.7%)	Child abuse/neglect (26.2; 6.5%)	Tobacco (56.5; 8.8%)	Tobacco (99.1; 13.1%)	Blood pressure (33.7; 10.8%)
	2nd	Alcohol (7.6; 5.6%)	Illicit drug use (18.2; 4.5%)	Overweight/ obesity (54.6; 8.5%)	Overweight/ obesity (79.8; 10.6%)	Overweight/ obesity (31.6; 10.1%)
Females	3rd	Illicit drug u⊛ (5.4; 4.0%)	Overweight/ obesity (15.5; 3.8%)	Diet (26.1; 4.1%)	Blood pressure (46.2; 6.1%)	Tobacco (26.3; 8.4%)
	4th	Partner violence (2.7; 2.0%)	Partner violence (15.1; 3.7%)	Blood glucose (24.1; 3.8%)	Blood glucose (43.0; 5.7%)	Diet (24.3; 7.8%)
	5th	Bullying victimisation (2.4; 1.8%)	Alcohol (13.3; 3.3%)	Alcohol (19.6; 3.1%)	Diet (41.6; 5.5%)	Physical inactivity (20.1; 6.4%)

# Notes:

- 1. DALY = Disability Adjusted Life-Year. This is a measure of healthy life lost, either through premature death or living with disability due to ill health. It is the basic unit used to measure the burden of a disease.
- 2. Note: For age groups under 25, many risk factors were not measured due to data limitations of linked diseases among these age groups.
- 3. Partner violence = Intimate partner violence; Blood glucose = High blood glucose; Blood pressure = High blood pressure.

Source: AIHW analysis of AIHW 2022k

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# Tobacco, alcohol and other drugs

#### Tobacco smoking

Tobacco was the leading preventable cause of ill health and premature deaths for females, responsible for 8.0% of the total burden of disease in Australia in 2018. Tobacco is linked to a number of common and serious health conditions, including many respiratory diseases, cardiovascular diseases, and cancers (AIHW 2021b).

Tobacco use contributed to around 8,800 deaths among females (11.5% of all female deaths). The burden of tobacco use is 2.7 times higher for females in the lowest socioeconomic areas when compared with the highest areas (AIHW 2021b).

The latest data pooled from multiple ABS surveys report that 8.2% of females are current daily smokers, while 0.9% are current smokers who smoke less than daily (ABS 2022f).

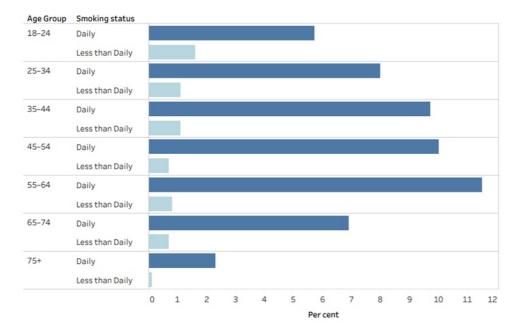
Smoking rates for current daily smokers varies by age group among females, peaking in the age group of 55-64 at 12%, with rates being lowest in females aged 75 and over (2.3%) (Figure 9) (ABS 2022f).

The proportion of females who smoke daily varies by population groups. After adjusting for differences in age structures:

- females living in the lowest socioeconomic areas were almost 4 times as likely to smoke daily as females in the highest socioeconomic areas (19% and 5.2%, respectively), in 2017-18 (Figure 10) (ABS 2019a)
- females living in *Outer regional and remote* areas were 1.6 times as likely to smoke daily than males in *Major cities* (16% and 9.9%, respectively), in 2017-18 (Figure 10) (ABS 2019a)
- Aboriginal and Torres Strait Islander females were 3 times as likely to smoke daily as non-Indigenous females, with 37% of Indigenous females aged 15 and over smoking daily, according to 2018-19 data (AIHW 2020a, AIHW 2020b)
- the proportion of Indigenous females who are current smokers was the highest in *Remote and very remote* areas (51%) compared with non-remote areas, such as *Major cities* (30%), *Inner regional* (40%) and *Outer regional* (41%) areas (AIHW 2020a).

For more information, see Smoking.

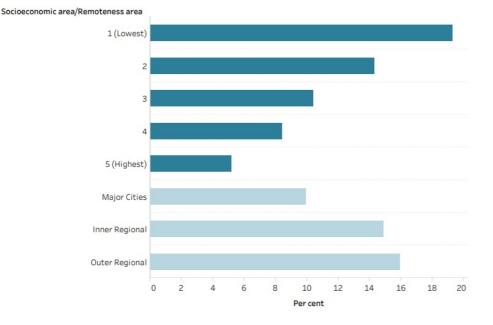
Figure 9: Current daily smoking status and age group (percentage), females, 2020-21



Source: ABS 2022f. See Table S8 for data and footnotes.

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Figure 10: Daily smoking by socioeconomic group and remoteness areas (percentage), females, 2017-18



Source: ABS 2019a. See Table S8 for data and footnotes.

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## Electronic cigarettes/e-cigarettes or vapes

Electronic cigarettes/e-cigarettes or vapes are personal vaping devices where users inhale vapour rather than smoke. The inhaled vapour usually contains flavourings and may contain nicotine as well.

In 2020-21, around 7.5% of females reported using an e-cigarette or vaping device at least once in their lifetime (ABS 2022m). Just over 1 in 5 (22%) of females aged 18-24 had tried an e-cigarette or vaping device, the highest proportion of any female age group.

Around 1.6% of females currently use an e-cigarette or vaping device in 2020-21. Females aged 18-24 (4.8%) and 25-34 (3.6%) have the highest proportions of those currently using an e-cigarette or vaping device (ABS 2022m).

#### Alcohol

Alcohol was the 6<sup>th</sup> leading preventable cause of ill health and premature mortality in females, responsible for 2.6% of ill health and death in Australia in 2018. Alcohol use is linked to alcohol use disorders, mental health, accidental poisoning, cancer, heart disease, chronic liver disease, and injuries.

Alcohol contributed to around 2,400 deaths (3.2% of all female deaths). The burden of alcohol use is 1.7 times higher for females in the lowest socioeconomic areas when compared with the highest areas (AIHW 2021b).

To reduce the risk of harm from alcohol-related disease or injury, it is recommended females should drink no more than 10 standard drinks a week, and no more than 4 standard drinks on any one day. The less you drink, the lower your risk of harm from alcohol (NHMRC 2020).

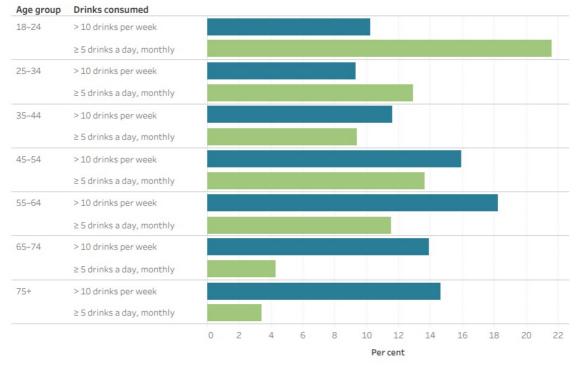
Reporting against these guideline recommendations, in 2020-21 (ABS 2022l):

- 13% of females exceed the guideline by consuming more than 10 standard drinks per week, and of these 71% are drinking more than 14 drinks.
- 11% of females exceed the guideline by consuming 5 or more standard drinks on a single day, at least monthly in the last 12 months.
- The percentage of females who exceed 10 standard drinks per week is highest in those aged 55-64 (18%), while the percentage who exceed 5 drinks on a single day at least monthly is highest in the youngest age group of 18-24 (22%) (Figure 11).

After adjusting for differences in age structures, the proportion of females exceeding the lifetime alcohol risk guidelines (drinking more than 2 standard drinks per day) is (Figure 12) (AIHW 2022a):

- 1.4 times higher in the highest socioeconomic areas (9.9%) compared to the lowest socioeconomic areas (6.9%) based on the 2017-18 NHS (Figure 11)
- 1.5 times higher in females living in Outer regional and remote areas (12%) compared with females living in Major cities (8.2%).

# Figure 11: Alcohol drink consumption by age group (percentage) against the recommended guideline, females, 2020-21



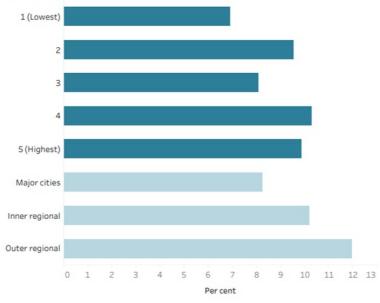
Source: 2022I. See Table S9 for data and footnotes. http://www.aihw.gov.au

#### Source: 2022l. See Table S9 for data and footnotes.

#### http://www.aihw.gov.au

Figure 12: Lifetime alcohol use by socioeconomic group and remoteness areas (percentage), females, 2017-18

Socioeconomic area/Remoteness areas



## Source: AIHW 2022a. See Table S9 for data and footnotes.

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#### Illicit use of drugs

<u>Illicit use of drugs</u> includes use of illegal drugs, non-medical use of pharmaceuticals and inappropriate use of other substances, such as naturally occurring hallucinogens.

Illicit drug use is estimated to contribute to 1.8% of ill health and premature mortality in females; in females aged 25-44, it is the 2<sup>nd</sup> leading preventable cause of ill health and death (Figure 7). Illicit drug use includes opioid use (responsible for 0.5% of ill health), amphetamine use (0.4%), unsafe injecting practices (0.4%), cannabis use (0.2%), as well as cocaine and other illicit drug use (both 0.1%) (AIHW 2021b). Illicit drug use is linked to accidental poisoning, drug use disorders, infectious disease, chronic liver disease, mental health conditions and road traffic injuries.

Illicit drug use contributes to around 840 deaths among females (1.1% of all female deaths). The burden of illicit drug use is almost 2 times higher for females living in the lowest socioeconomic areas when compared with the highest socioeconomic areas (AIHW 2021b).

Among females, 41% have used at least one illicit drug at some point in their lifetime. Females aged 40-49 are the most likely to have used an illicit drug in their lifetime (53%) (AIHW 2020b).

In the previous 12 months, 13% of all females used an illicit drug, with the greatest use in females aged 20-29 (25%), compared with 6.3% of females aged 60 or over (AIHW 2020c).

For more information, see Alcohol, tobacco and other drugs in Australia, National Drug Strategy Household Survey report 2019.

For more information on the disease burden due to illicit drug use, see Burden of disease.

#### Overweight and obesity

Overweight (including obesity) is the 2<sup>nd</sup> leading preventable cause of ill health and premature mortality for females, responsible for 7.8% of ill health and premature death in Australia in 2018 (AIHW 2021b). Overweight (including obesity) is linked to 30 diseases for females, including 17 types of cancer, 4 cardiovascular diseases, 3 musculoskeletal conditions, type 2 diabetes, dementia, asthma, and chronic kidney disease.

Overweight (including obesity) contributed to around 7,800 deaths among females (10% of all female deaths) and this has the greatest impact on those aged over 65 years. The burden of overweight (including obesity) is 2.3 times higher for females in the lowest socioeconomic areas compared with the highest socioeconomic areas (AIHW 2021c).

For more information on the disease burden due to overweight (including obesity), see Burden of disease.

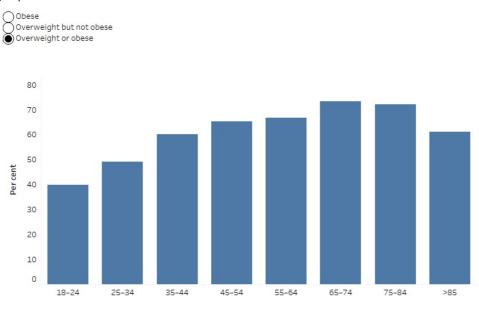
According to 2017-18 NHS data:

- 3 in 5 (60%) Australian females are living with overweight or obesity.
- 3 in 10 (30%) are living with overweight (but not obesity).
- 3 in 10 (30%) are living with obesity.

Overweight and obesity is more common in older age groups. Around 3 in 4 females (73%) aged 65-74 are living with overweight or obesity, compared with 2 in 5 females (40%) aged 18-24 (AIHW 2023e) (Figure 13).

Figure 13: Prevalence of various weight classifications by age group (percentage), females, 2017-18

By selecting the various weight classifications in this bar chart, the prevalence of the individual classification will be shown across age groups.



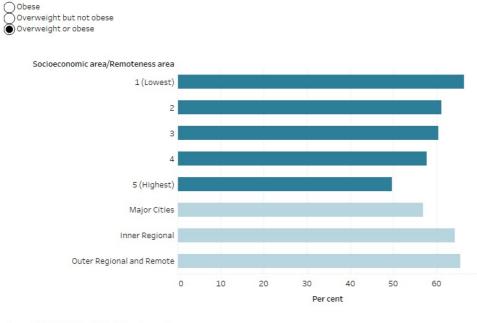
Source: AIHW 2020d. See Table S4 for data and footnotes. http://www.aihw.gov.au

The proportion of females who are living with overweight or obesity varies for some population groups. After adjusting for age (AIHW 2023d):

- females living in *Outer regional and remote* areas are 1.2 times as likely to be living with overweight or obesity as females in *Major cities* (66% and 57%, respectively)
- females in the lowest socioeconomic areas are 1.3 times as likely to be living with overweight or obesity as females in the highest socioeconomic areas (66% and 50%, respectively) (Figure 14).

For more information see Overweight and obesity.

Figure 14: Prevalence of various weight classifications by socioeconomic group and remoteness areas (percentage), females, 2017-18 By selecting the various weight classifications in this bar chart, the prevalence of the individual classification will be shown across different socioeconomic areas.



Source: AIHW 2020d. See Table S5 for data and footnotes. http://www.aihw.gov.au

## Waist circumference

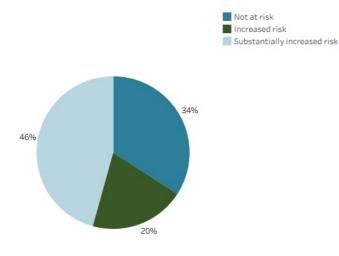
Waist circumference is another common measure of overweight and obesity. For females, a waist circumference above 80cm is associated with an increased risk of metabolic complications, and above 88cm a substantially increased risk (AIHW 2023c).

Among Australian females, 2 in 3 (66%) have a high-risk waist circumference; that is, one associated with an increased or substantially increased risk of metabolic complications (Figure 15). The average waist circumference for females in 2017-18 is 88 cm (ABS 2018a).

A high-risk waist circumference is more common in older females:

- Around 4 in 5 females aged 75 and over (84%) have a high-risk waist circumference.
- Around 2 in 5 females aged 18-24 (37%) have a high-risk waist circumference.

## Figure 15: Waist circumference by health risk category (percentage), females, 2017-18



Source: ABS 2018a. See Table S6 for data and footnotes.

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# Management of overweight and obesity

While excess weight is commonly managed using dietary intervention and exercise, for those who are living with morbid obesity, or conditions related to their excess weight, weight loss surgery may be appropriate. Weight loss surgery (bariatric surgery) aims to help patients lose weight and lower the risk of medical problems by restricting the amount of food, or altering the process of digestion so that fewer calories are absorbed.

Females accounted for 80% of procedures for weight loss surgery (over 33, 300 procedures) in 2020-21. This was an increase from 23,700 procedures in 2015-16 to 31,600 procedures in 2017-18 (Figure 16) (AIHW 2022y).

#### Figure 16: Waist loss surgeries, females, 2015-16 to 2020-21

This line graph shows that weight loss surgeries have been increasing over time until 2019-20 when there was a decrease, possibly due to pandemic restrictions, however this recovered quickly as restrictions eased.



Source: AIHW 2022aa. See Table S18 for data and footnotes http://www.aihw.gov.au

# Diet

Dietary risks factors are the 3<sup>rd</sup> leading preventable cause of ill health and premature death in females, responsible for 4.1% of ill health and premature death in Australia in 2018. Dietary risk factors include components where adequate amounts in the diet are required to prevent disease and diets where excessive consumption contributes to disease development. The 12 individual dietary risks were:

- a diet low in: fruit and vegetables, milk, nuts and seeds, whole grains and high fibre cereals, legumes, polyunsaturated fat, and fish and seafood
- a diet high in: sodium, sugar-sweetened beverages, and red and processed meats.

All dietary risks contribute to 47% of coronary heart disease, 26% of type 2 diabetes, 26% of bowel cancer, 24% of stroke, and 23% of oesophageal cancer.

All dietary risk factors contribute to about 6,900 deaths (9.0% of all female deaths). The ill health and death attributable to all dietary risks for females was 2.2 higher in the lowest socioeconomic areas compared with the highest socioeconomic areas (AIHW 2021b).

For more information on the disease burden due to dietary risks, see Burden of disease.

# Fruit and vegetables

The <u>2013 Australian Dietary Guidelines</u> - external site opens in new window recommend for females to consume a minimum of 2 serves of fruit and 5 serves of vegetables each day, depending on age, to ensure good nutrition and health.

Among females:

- about half (48%) meet the guidelines for fruit intake
- 13% meet the vegetable intake guideline
- 9.0% meet the guideline for both fruit and vegetables (ABS 2022o) (Figure 17).

The proportion of females meeting both fruit and vegetable intake guidelines varies little by age group. About 10% of females aged between 25-34 meet the guidelines compared to 9.5% of those aged 75 and over years (Figure 18).

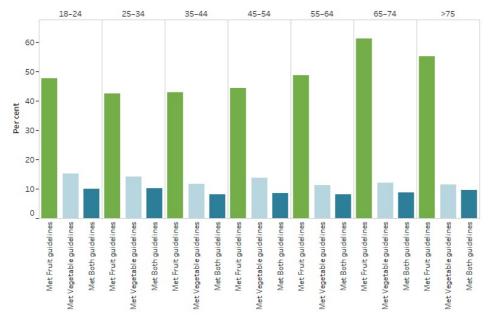
Figure 17: Fruit and vegetable consumption against the Australian Dietary Guidelines (percentage), females, 2020-21

Source: ABS 20220. See Table S2 for data and footnotes.

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Figure 18: Fruit and vegetable consumption against the Australian Dietary Guidelines (percentage) by age group, females, 2020-21

The bar chart shows that the percentage of people who meet the fruit and vegetable intake guideline varies little across age groups. Females generally eat more fruit than vegetables, and this is highest in the 65-74 age group where 61.4% meet the fruit intake guideline.



Source: ABS 2022o. See Table S2 for data and footnotes <u>http://www.aihw.gov.au</u>

Whether females eat enough fruit and vegetables varies for some population groups. In 2017-18, after adjusting for age (ABS 2019b).

- females living in *Inner regional* areas are 1.5 times as likely than females in *Major cities* to be eating enough vegetables (14% and 9.5%, respectively)
- females living in the highest socioeconomic areas are 1.1 times as likely to be eating enough fruit as females in the lowest socioeconomic areas (58% and 52%, respectively)
- females living in the highest socioeconomic areas are 1.4 times as likely to be eating enough vegetables as females in the lowest socioeconomic areas (12% and 8.3%, respectively).

#### Sugar sweetened and selected diet drinks

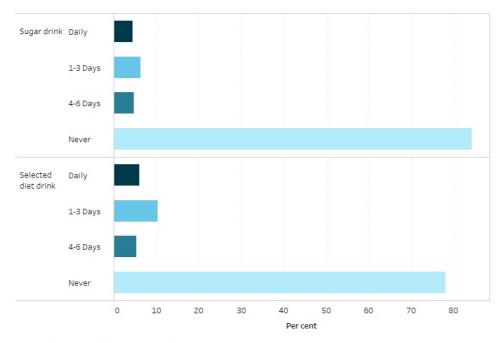
Discretionary foods like sugar sweetened and selected diet drinks are not an essential part of a healthy diet and a limited intake of these is recommended in the <u>Australian Dietary Guidelines</u> - external site opens in new window. A diet high in sugar sweetened drinks is linked to type 2 diabetes and coronary heart disease, and contributes to around 60 deaths among females (0.1% of all female deaths) (AIHW 2021b).

According to 2020-21 NHS data (Figure 19) (ABS 2022n):

- 4.5% of females drink sugar sweetened drinks daily, and 11% drink them less than daily (usually consume 1-6 days per week)
- 6.1% of females drink diet drinks daily, and 16% drink them less than daily (usually consume 1-6 days per week).

Figure 19: Consumption of sugar sweetened or selected diet drinks, by usual consumption per week, females, 2020-21

This horizontal bar chart shows the percentage of females who consume sugar sweetened or selected diet drinks by usual consumption per week. It shows that 6.1% of females drink diet drinks daily and 4.5% drink sugar sweetened drinks daily.



Source: ABS 2022n, ABS 2022o. See Table S3 for data and footnotes http://www.aihw.gov.au

#### Notes:

- 1. Sugar sweetened drinks includes soft drink, cordials, sports drinks or caffeinated energy drinks and may include soft drinks in ready to drink alcoholic beverages. Fruit juice, flavoured milk, 'sugar free' drinks or coffee/hot tea are excluded.
- 2. Selected diet drinks include those that have artificial sweeteners added to them rather than sugar. Includes diet soft drink, cordials, sports drinks or caffeinated energy drinks. May include diet soft drinks in ready to drink alcoholic beverages. Excludes non-diet drinks, fruit juice, flavoured milk, water or flavoured water or coffee/tea flavoured with sugar replacements.

The percentage of females who consume sugar sweetened drinks daily varies by age group. More females aged 18-24 (8.4%) than males aged 65 and over (1.8%) drink sugar sweetened drinks daily (ABS 2022o).

Consumption also varies for some population groups. After adjusting for age (ABS 2019b):

- females living in *Outer regional and remote* areas are almost twice as likely to drink sugar sweetened drinks daily as females in *Major cities* (10% and 5.9%, respectively)
- females living in the lowest socioeconomic areas are 5 times as likely to drink sugar sweetened drinks daily as females in the highest socioeconomic areas (12% and 2.4%, respectively) (Figure 20).

Figure 20: Daily consumption of sugar sweetened drinks by socioeconomic group and remoteness areas (percentage), females, 2017-18

lates, 2017 10		

Note:

Sugar sweetened drinks includes soft drink, cordials, sports drinks or caffeinated energy drinks and may include soft drinks in ready to drink alcoholic beverages. Fruit juice, flavoured milk, 'sugar free' drinks or coffee/hot tea are excluded.

Source: AIHW analysis of ABS 2019b. See Table S3 for data and footnotes.

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For more information on diet as a risk factor for poor health, see Diet.

# Physical inactivity

Low levels of physical activity are a major risk factor for many chronic conditions. Being physically active improves mental and musculoskeletal health and reduces other risk factors such as overweight and obesity, high blood pressure and high blood cholesterol.

Physical inactivity is the 8<sup>th</sup> leading preventable cause of ill health and premature death among females, responsible for 2.5% of ill health and premature death in Australia in 2018 (AIHW 2021b). Physical inactivity is linked to type 2 diabetes, coronary health disease and stroke and 3 types of cancer.

Physical inactivity contributes to around 4,500 deaths (5.9% of all female deaths) (AIHW 2021c). The ill health and death attributable to physical inactivity for females is 1.9 times greater in the lowest socioeconomic areas compared with the highest socioeconomic areas.

For more information on the disease burden due to insufficient physical activity, see Burden of disease.

#### Australia's Physical Activity and Sedentary Behaviour Guidelines

<u>Australia's Physical Activity and Sedentary Behaviour Guidelines - external site opens in new window</u> outline the minimum amount of physical activity required for health benefits (DoHAC 2019). These recommend that adults aged 18-64:

- accumulate 150 to 300 minutes (2.5 to 5 hours) of moderate intensity physical activity or 75 to 150 minutes (1.25 to 2.5 hours) of vigorous intensity physical activity or an equivalent combination of both moderate and vigorous activities, each week.
- do muscle-strengthening activities on at least 2 days each week.

For adults aged 65 and over, the Guidelines recommend at least 30 minutes of moderate intensity physical activity on most, but preferably all days.

'Sufficiently physically active' refers to meeting the physical activity component of the Guidelines and is defined in this report as:

- completing 150 minutes or more of moderate to vigorous physical activity per week (where vigorous activity is multiplied by 2) and,
- being active on 5 or more days per week.

Among females, 59% do sufficient moderate and vigorous physical activity per week, and only 25% do sufficient strength or toning activities on 2 or more days per week, in 2020-21 (ABS 2022i).

Overall, only 21% of females meet both the physical activity and strength guidelines (Figure 21).

The proportion of females who are sufficiently physically active varies by age and for some population groups:

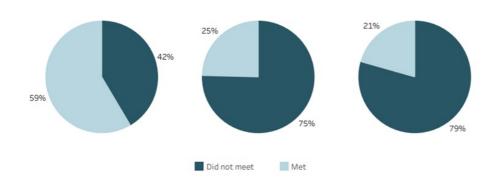
- Around 70% of females aged 18-24 are sufficiently physically active compared with around 47% aged 65 and over (Figure 22) (ABS 2022i).
- After adjusting for age, 49% of females living in the highest socioeconomic areas are sufficiently physically active compared with 34% in the lowest areas in 2017-18 (AIHW 2020b).

For more information, see Physical activity.

For information on physical activity for children and young people see Physical activity across the life stages report.

#### Figure 21: Physical activity guidelines compliance (percentage), females, 2020-21

Physical activity only Strength only Both physical activity and strength



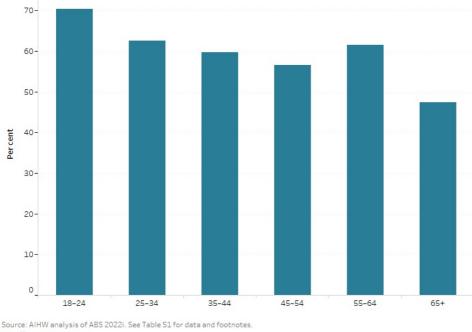
Note: Includes workplace activity

Source: AIHW analysis of ABS 2022i. See Table S1 for data and footnotes.

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# Figure 22: Sufficient physical activity by age group, females, 2020-21

The bar chart shows the distribution of people who are sufficiently active across various age groups; physical activity generally decreases with age, with the most active age groups being 18-24 (70.3% met the physical activity guideline) and 55-64 (61.5% met the guideline).



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# Occupational exposures and hazards

Occupational exposures and hazards was the 14<sup>th</sup> leading risk factor for ill health and premature deaths for females (AIHW 2021b). It was estimated to contribute to 1.0% of ill health and premature death among females aged 15 and over in 2018 (AIHW 2021b). Occupational exposures and hazards is linked to a number of serious health conditions, including silicosis, asbestosis, COPD, falls, lung and ovarian cancers.

Occupational exposures and hazards contribute to around 170 deaths among females (0.2% of all female deaths) with the common causes of death being lung cancer, COPD, and acute myeloid leukaemia. (AIHW 2021b). The burden of Occupational exposures and hazards is almost 2 times higher for females in the lowest socioeconomic areas compared with the highest socioeconomic areas (AIHW 2021b).

Deaths from traumatic injuries in the workplace are reported to SafeWork Australia. These are rare in females (6 of 169 traumatic injury fatalities in 2021). Over time, the rate of females killed at work has declined, from 0.5 deaths per 100,000 workers in 2007 to 0.1 per 100,000 workers in 2021(SWA 2021).

The most common types of workplace injuries among females in 2021 are (SWA 2021):

- Traumatic joint, ligament and muscle and/or tendon injury (41% of serious claims)
- Musculoskeletal and connective tissue diseases (18%)
- Mental health conditions (14%).

For more information see Safe Work Australia - external site opens in new window.

#### Violence against females

Violence is a broad term, often used to encompass a wide range of behaviours and definitions that vary according to different legislation and practices. Harm from violence can be wide-ranging, including physical, sexual and psychological, with serious and long-term impacts on individuals, families and communities (AIHW 2022s).

Family, domestic and sexual violence (FDSV) is a term used to capture forms of violence that occur within family relationships, and sexual violence that occurs in both family and non-family relationships. Broadly speaking, family relationships are between persons such as partners (or previous partners), parents, siblings, and other family members or kinship relationships.

## Experiences of violence since the age of 15

Almost 2 in 5 females (39%) have experienced physical and/or sexual violence since the age of 15. One in 3 (31%) experienced at least one incident of physical violence, and 1 in 5 (22%) experienced at least one incident of sexual violence (ABS 2023d). Females experience more violence, whether physical or sexual, from a known person (35%) than from a stranger (11%).

#### Experiences of violence, and emotional abuse in the last 12 months

In the last 12 months, 4.2% of females have experienced physical and/or sexual violence (ABS 2023d). There was also 3.9% of females who experienced emotional abuse in the last 12 months (ABS 2023e).

Based on 2016 data, the highest rates of physical and/or sexual violence was reported as the highest among females aged 18-24 (12%) and the lowest among those aged 65 and over (1.2%) (ABS 2017a). The experience of physical and/or sexual violence has also previously been reported as being 1.4 times greater in the lowest socioeconomic areas compared with the highest socioeconomic areas (ABS 2017a).

#### Intimate partner violence

Violence between partners is sometimes referred to as partner violence, or intimate partner violence, and can cover cohabiting partners and boyfriend/girlfriend/dates (AIHW 2022s).

Intimate partner violence is responsible for 1.4% of ill health and deaths in females (AIHW 2021b). Among females aged 15 and over, intimate partner violence contributes to 46% of homicide & violence ill health, and 19% of suicide & self-inflicted injuries. In addition, it contributes 17% of early pregnancy loss, 15% of depressive disorders, 12% of anxiety disorders and 4% of alcohol use disorders (AIHW 2021c).

Intimate partner violence contributed to about 230 deaths among females (0.3% of all female deaths) in 2018. The burden of intimate partner violence is 2.5 times greater in the lowest socioeconomic areas compared with the highest socioeconomic areas (AIHW 2021b).

Since the age of 15, experiences of intimate partner violence, either sexual or physical, was reported by 23% of females (ABS 2023d).

In the previous 12 months, 1.5% of females indicated they had experienced intimate partner violence (ABS 2023e).

Almost 23% of females have experienced emotional abuse since the age of 15 from a cohabiting partner (ABS 2023d). Based on 2016 data, females reported that being shouted at, yelled at or verbally abused to intimidate them was the most common abusive behaviour they experienced from a current (58%) or previous (63%) partner (ABS 2017b).

For information on family, domestic and sexual violence see Family, domestic and sexual violence in Australia.

#### References

ABS (2017a) Personal Safety, Australia 2016, - external site opens in new window [Table 6.3], abs.gov.au, accessed 29 September 2022.

ABS (2017b) Personal Safety, Australia 2016 - external site opens in new window, [Table 28.3], abs.gov.au, accessed 29 September 2022.

ABS (2018a) Overweight and obesity - external site opens in new window, abs.gov.au, accessed 6 December 2022.

ABS (2019a) Microdata: National Health Survey, 2017-18, detailed microdata, DataLab. Findings based on AIHW analysis of ABS microdata, ABS DataLab, Canberra, accessed 9 December 2022.

ABS (2019b) Microdata: National Health Survey, 2018-19, AIHW analysis of fruit and vegetable consumption, ABS DataLab, Canberra, accessed 9 December 2022.

ABS (2022f) Insights into Australian smokers, 2021-22 - external site opens in new window, [Table 2.3 Current smoker status by age and sex], accessed 23 February 2023.

ABS (2022i) Microdata: National Health Survey, 2020-21, AIHW analysis of Physical activity by age, ABS DataLab, Canberra, accessed 14 June 2022.

ABS (2022l) <u>NHS 2020-21, Alcohol consumption - external site opens in new window</u>, [Table 7.3, Alcohol by age and sex], abs.gov.au, accessed 29 September 2022.

ABS (2022m) NHS 2020-21, Smoking, - external site opens in new window [Table 6.3: Smoking], abs.gov.au, accessed 29 September 2022.

ABS (2022n) <u>NHS, Dietary behaviour, - external site opens in new window</u> [Table 9.11: Consumption of fruit, vegetables and sugar sweetened diet drinks, 2020-21], abs.gov.au, accessed 29 September 2022.

ABS (2022o) <u>NHS, Health Conditions Prevalence - external site opens in new window</u>, [Table 9.11: Consumption of fruit, vegetables and sugar sweetened diet drinks, 2020-21], abs.gov.au, accessed 29 September 2022.

ABS (2023d) Personal Safety, Australia 2021-22 - external site opens in new window, [Table 1.3], abs.gov.au, accessed 17 March 2023.

ABS (2023e) Personal Safety, Australia 2021-22 - external site opens in new window, [Table 2.3], abs.gov.au, accessed 17 March 2023.

AIHW (2020a) <u>Aboriginal and Torres Strait Islander Health Performance Framework - external site opens in new window</u>, AIHW website, accessed 7 December 2022.

AIHW (2020b) National Drug Strategy Household Survey 2019 [Table s4.4], AIHW website, accessed 16 May 2022.

AIHW (2020c) National Drug Strategy Household Survey 2019, [Data tables: National Drug Strategy Household Survey 2019 - 4, Table 4.15, Illicit use of drugs supplementary tables], AIHW website, accessed 16 May 2022.

AIHW (2021b) Australian Burden of Disease Study 2018: Interactive data on risk factor burden, AIHW website, accessed 17 October 2022.

AIHW (2021c) <u>Australian Burden of Disease Study: Impact and causes of illness and death in Australia 2018</u>, AIHW website, accessed 7 October 2022.

AIHW (2022a) <u>Alcohol, tobacco & other drugs in Australia</u>, [Table S2.2: Exceedance of lifetime alcohol risk guidelines], AIHW website, accessed 27 February 2023.

AIHW (2022k) Australian Burden of Disease Study, AIHW website, accessed 7 October 2022.

AIHW (2022s) Family, domestic and sexual violence: National data landscape 2022, AIHW website, accessed 8 February 2023.

AIHW (2022y) Procedures data cubes, 2020-21, AIHW website, accessed 22 November 2022.

AIHW (2023a) AIHW analysis of Australian Burden of Disease Study, 2018, AIHW, accessed 24 May 2023.

AIHW (2023c) Overweight and obesity, AIHW website, accessed 19 May 2023.

AIHW (2023d) *Overweight and obesity*, [Table S5], AIHW website, accessed 19 May 2023.

AIHW (2023e) Overweight and obesity, [Table S2], AIHW website, accessed 19 May 2023.

DoHAC (Department of Health and Aged Care) (2019) <u>Physical activity and exercise guidelines for all Australians</u> - external site opens in <u>new window</u>, health.gov.au, accessed 23 October 2022.

NHMRC (National Health and Medical Research Council) (2020) <u>Australian guidelines to reduce health risks from drinking alcohol - external</u> site opens in new window, nhmrc.gov.au, accessed 22 February 2023.

SWA (Safe Work Australia) (2021) <u>Work-related traumatic injury fatalities Australia 2021 - external site opens in new window</u>, safeworkaustralia.gov.au, accessed 8 June 2022.

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How do Australia's females access health care?

# Page highlights

#### Medicare services

Australian females claimed more than 293 million services through Medicare, which equates to an average of 22.7 Medicare services per person, in 2020-21.

#### Cancer screening

The number of females participating in breast screens was 1.7 million in 2020-21, a 10% drop in numbers since 2018-19, which is likely due to COVID-19 restrictions.

#### Primary Health Care

- Almost 9 in 10 (88%) Australian females aged 15 and over visited a GP in the previous 12 months.
- Over 2 in 10 (26%) females aged 15 and over who needed to and saw a GP, waited longer than they felt acceptable to get an appointment with a GP, in 2020-21,

#### Private health insurance

Three in 5 (60%) Australian females had some form of private health insurance, in 2020-21.

#### Hospital care

There were 4.5 million emergency department presentations among females, with rates of presentations highest in those aged 85 and over, in 2020-21.

The Australian health system provides a wide range of preventive, treatment and palliative health care services. Monitoring people's health needs, their help-seeking behaviours, and their patterns of health service use helps government and health service providers to identify inequalities in access and predict future health care needs.

#### **Medicare services**

The Medicare Benefits Schedule (MBS) is a listing of the Medicare services subsidised by the Australian Government. Claims data comprise information on services that qualify for a Medicare Benefit, for which a claim has been processed (including bulk billed services). Australian females claimed more than 293 million services through Medicare in 2021-22, an increase from 245 million services in 2019-20. This equates to an average of 22.7 Medicare services per person in that year (SA 2022).

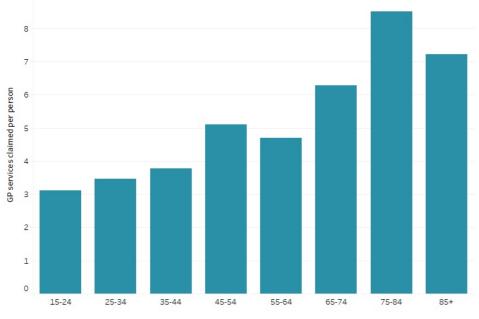
Australian females (of all ages) claimed more than 53 million General Practitioner (GP) services, in 2021-21 (SA 2022). This equates to an average of 4.1 GP services per person in that year.

The average number of GP services claimed by females varies by age group. In 2021-22, (Figure 23) (SA 2022):

- females aged under 45 claimed 5.9 services per person
- females aged 75 and over claimed 8.1 services per person.

Figure 23: Average number of GP services per person, claimed through Medicare, by age group, females, 2021-22

This bar chart shows the average number of GP services claimed per person across age groups, with the number of services claimed increasing with age, peaking in those aged 75-84.



Source: Services Australia (SA 2022). See Table for data and footnotes. http://www.aihw.gov.au

# Cancer screening

Population-based cancer screening involves testing for signs of cancer or conditions that cause cancer before a person has symptoms. Early detection of cancer allows for early intervention, which can improve outcomes.

# Breast cancer

BreastScreen Australia aims to reduce illness and death from breast cancer using screening mammography for early detection and early treatment of unsuspected breast cancer. Australian females aged 40 and over are eligible for free mammograms every 2 years, with females aged 50-74 actively targeted to participate in the program.

In 2019-2020 the number of participating females fell slightly to almost 1.8 million and continued to fall in 2020-2021 to about 1.7 million - a 10% drop in numbers since 2018-2019, which is likely due to restrictions associated with the COVID-19 pandemic.

In 2020-21, 48% of females aged 50-74 had a screening mammogram (AIHW 2022m). Females aged 65-69 have the highest participation rate of 52%.

For more information, see Breast cancer screening.

#### Bowel cancer

For the National Bowel Cancer Screening Program, participation refers to the proportion of people invited who returned a completed a screening test during a specified period and is measured over 2 calendar years to align with the 2-year recommended screening interval.

For bowel cancer screening, the 2020-2021 preliminary data show that females have a higher participation rate than males (43% compared with 39%) across the 50-74 target age group. Participation increases across female age groups from 32% among those aged 50-54 years, to 52% in the 70-74 age group (AIHW 20220).

For more information, see <u>Bowel cancer screening</u>.

## Cervical cancer

From 1 December 2017, the National Cervical Screening Program changed to 5-yearly cervical screening for those aged 25-74. For the period 2018-2022, 4.7 million people (defined as females and people who have a cervix) aged 25-74 had a cervical screening human papillomavirus (HPV) test, an estimated 4-year participation rate of 68% (AIHW 2022n). The National HPV Vaccination Program has been immunising adolescent girls since 2007 and was extended to boys in 2013. Immunisation against the HPV can prevent cervical and other cancers, and other HPV-related diseases. In 2021, the proportion of 15-year-olds who were fully immunised against HPV was (Hull, et al. 2022):

- 80% of girls, and 73% for Indigenous girls
- 77% of boys, and 66% for Indigenous boys.

For more information, see Cervical cancer screening.

# Primary Health Care

In Australia, primary health care is usually a person's first encounter with the health system when they have a health concern. Primary health care broadly encompasses health care not related to a hospital visit.

Among females aged 15 and over, 88% were estimated to have visited their general practitioner (GP) in the last 12 months in 2021-22. The proportion increases as age increased, with 83% of females aged 15-24 compared to 96% of females aged 65 and over having seen a GP in the last 12 months (ABS 2022q).

Barriers to accessing health services may impede the best possible health outcomes for females. In 2020-21, among females aged 15 and over (ABS 2021f):

- 26% who needed to and saw a GP waited longer than they felt acceptable to get an appointment with a GP
- 4.3% delayed seeing, or did not see, a GP when needed because of cost reasons at least once in the past 12 months
- 6.1% delayed getting, or did not get prescribed medication because of cost.

Among females aged 15 and over:

- 21% needed to and saw a mental health professional, in 2021-22
- 2.8% reported that they saw another mental health professional other than their GP, psychologist or psychiatrist (such as mental health nurse, social worker, counsellor or occupational therapist), in 2021-22 (ABS 2022p)
- 15% of females discussed the issue of reaching a healthy weight with their GP, and this was most discussed in the 55-64 age group (21%) (ABS 2022e)
- 50% of females indicated that they saw dentist or dental professional in the last 12 months, while 23% reported that the last time they had a consultation was more than 2 years ago (ABS 2022e).

For more information see Primary health care.

## Private health insurance

In Australia, private health insurance is available for those who wish to fully or partly cover the costs of being admitted to hospital as a private patient and/or the costs of other ancillary health services.

Based on the 2020-21 ABS Patient Experience Survey, 3 in 5 Australian females (60%) had some form of private health insurance (ABS 2022d):

- Around half (48%) had both hospital and extras cover.
- 6% had hospital cover only.
- 6% had extras only cover.

# Hospital care

#### Emergency department care

Hospital emergency departments provide care for patients who present for urgent medical attention.

In 2021-22, there were about 4.5 million emergency department presentations among all Australian females, accounting for 51% of all presentations, with rates of presentations highest in those aged 85 and over (AIHW 2021g).

For females aged 15 and over, one of the most common reasons for emergency care is 'Injury and poisoning'. Other reasons for emergency care varied across age group. For those aged 25-44, 'pregnancy, childbirth and the puerperium' was one of the top 3 reasons, while for those aged 45-64 and over 65, 'Musculoskeletal system diseases' and 'Circulatory system diseases' were among the top reasons, respectively (AIHW 2022b).

For more information see Emergency department care.

#### Admitted patient care

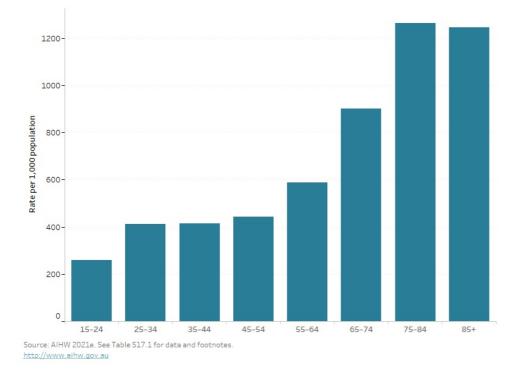
Admitted patient care refers to care provided by public and private hospitals to admitted patients. A hospitalisation is an episode of hospital care that starts with the formal admission process and ends with the formal <u>separation</u> process.

In 2020-21, there were 6.2 million hospitalisations among Australian females, accounting for 52% of all hospitalisations (AIHW 2021f). Hospitalisation rates generally increase with age and are highest among females aged 75 and over (Figure 24) (AIHW 2021e).

The reasons for hospitalisation vary by age and sex as females experience different health issues throughout different times of their lives. For females aged 15-44, the top reason was 'Pregnancy, childbirth and the puerperium'; For females aged 5-14, the top reasons included 'Perinatal period conditions', 'Respiratory system diseases' and 'Injury and poisoning.' For all other age groups (45-64 and 65 and over), 'Digestive system diseases' and 'Musculoskeletal system diseases' were among the top reasons for hospitalisation (AIHW 2022b).

# Figure 24: Hospitalisations per 1,000 population by age group, females, 2020-21

This bar chart shows the rate of hospital admissions across age groups, with the prevalence increasing with age and highest in those aged 75 and over.



For more information see Admitted patient care.

#### References

<u>ABS (2021f)</u> Patient Experiences - external site opens in new window, [Table 5.3: experience of GP services], abs.gov.au, accessed 17 May 2022.

ABS (2022d) *Health Conditions Prevalence 2020-21* - external site opens in new window, [Table 2.3: Long-term health conditions, by age and sex], abs.gov.au, accessed 30 September 2022.

ABS (2022e) <u>Health Conditions Prevalence: Health service usage and type of health professional consulted by age - external site opens in new window</u>, [Table 15.3: experience of GP services], abs.gov.au, accessed 17 May 2022.

ABS (2022p) Patient Experiences - external site opens in new window, [Table 27.3 Experience of mental health services], abs.gov.au, accessed 18 May 2022.

ABS (2022q) Patient Experiences - external site opens in new window, [Table 2.3 Experience of health services in the last 12 months], abs.gov.au, accessed 3 May 2023.

AIHW (2021e) Hospital activity, AIHW website, accessed 27 October 2022.

AIHW (2021f) Hospitals: Admitted patients, AIHW website, accessed 27 October 2022.

AIHW (2021g) <u>Hospitals: Emergency department care 2021-22 [Table 3.1: Emergency department presentations by age and sex]</u>, AIHW website, accessed 17 December 2022, AIHW website, accessed 27 October 2022.

AIHW (2022b) Australia's hospitals at a glance, Hospital activity, AIHW website, accessed 8 February 2023.

AIHW (2022m) Cancer screening programs: quarterly data: BreastScreen Australia, AIHW website, accessed 7 October 2022.

AIHW (2022n) Cancer screening programs: quarterly data: Cervical screening participation, AIHW website, accessed 7 October 2022.

AIHW (2022o) <u>Cancer screening programs: quarterly data: National Bowel Cancer Screening Program</u>, AIHW website, accessed 7 October 2022.

Hull B, Hendry A, Dey A, Brotherton J, Macartney K and Beard F (2022) 'Annual Immunisation Coverage Report 2021', National Centre for Immunisation Research and Surveillance Australia.

SA (Services Australia) (2022) Medicare - external site opens in new window, services australia.gov.au, accessed 23 November 2022.

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# How does the health of females and males compare?

This section brings together data from the male and female health reports on a number of key risk factors and health outcomes that apply to both males and females. For more detailed information on each of these risk factors and outcomes, see the main reports for <u>males</u> and <u>females</u>.

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# **Technical notes**

# Data gaps and opportunities

Comprehensive, accurate and timely data are needed for effective population health monitoring of the health of Australia's females. Although national health information collections and research continue to develop and improve, data and information gaps still remain on many topic areas related to female health.

Current gaps on female health topics include:

- data on sexual and reproductive health issues including prevalence, health service use and the impacts of:
  - heavy menstruation
  - premenstrual dysphoric disorder and pre-menstrual syndrome
  - assisted fertility treatments
  - contraception use
  - surgical and medical pregnancy terminations
  - ectopic pregnancy
  - polycystic ovarian syndrome
  - miscarriage
- information on menopause and it impacts the health of females, for example as an independent risk factor for chronic conditions
- data on incontinence and how it impacts risk factors such as physical activity
- data for priority population groups relating to reproductive and sexual health such as females who:
  - are Aboriginal and Torres Strait Islander
  - live in rural and remote areas
  - identify as LGBTIQA+
  - live with a disability
  - $\circ~$  are from culturally and linguistically diverse (CALD) communities
  - are in the justice system
  - $\circ~$  are carers or receiving care.

# Commonwealth investment in female health research

Between 2000 and 2022, the National Health and Medical Research Council (NHMRC) has expended \$1.7 billion towards research relevant to female health.

From its inception in 2015, to 31 March 2023 the Medical Research Future Fund has invested \$196.4 million in 92 grants with a focus on female health research. This includes research grants focussing on clinical trials, treatment and support for metastatic breast cancer, endometriosis research, ovarian and other female reproductive tract cancers, as well as long-term maternal health and wellbeing of females.

These grants include:

- \$15 million to Monash University for a clinical trial to investigate the use of mitochondrial donation (a reproductive technology) to enable females at risk for passing on mitochondrial DNA disease to reduce their risk of having an affected child
- \$5 million to Charles Darwin University for a study to establish exemplar Birthing on Country maternal child health services in rural, remote and very remote Australia in 5 years
- \$3 million to the St Vincent's Institute of Medical Research to assess the effectiveness of an AI mammogram reader in breast cancer screening to improve accuracy and experience. Ultimately this can enable a more effective and personalised BreastScreen service to the one million females who are annually screened for breast cancer.

# Data sources and quality

The data presented in this report come from multiple data sources, including surveys and administrative data sources. These sources include:

- Australian Longitudinal Study on Women's Health
- Australasian Menopause Society
- Australian Government Department of Health and Aged Care
- Australian Institute of Health and Welfare's (AIHW) Australian Burden of Disease Study 2018: Interactive data on risk factor burden
- AIHW Australian Burden of Disease Study: Impact and causes of illness and death in Australia 2018
- AIHW Australian Burden of Disease Study 2022
- AIHW National Drug Strategy Household Survey 2019
- The Australian Bureau of Statistics (ABS) 2020-21 National Health Survey (NHS)
- ABS 2018-19 Australian Aboriginal and Torres Strait Islander Health Survey

- ABS 2017-18 NHS
- ABS National Study of Mental Health and Wellbeing
- ABS 2016 Personal Safety Survey
- COVID-19 Epidemiology and Surveillance Team
- National Mental Health Commission
- National Health and Medical Research Council (NHMRC)
- Organisation for Economic Co-operation and Development (OECD)
- Safe Work Australia
- Services Australia Medicare
- The Royal Women's Hospital
- University of NSW The Kirby Institute
- World Health Organization.

# Data considerations

Previous versions of the NHS have primarily been administered by trained ABS interviewers and were conducted face to face. The 2020-21 NHS was conducted during the COVID-19 pandemic. To maintain the safety of survey respondents and ABS Interviewers, the survey was collected via online, self-completed forms.

Non-response is usually reduced through interviewer follow-up of households who have not responded. As this was not possible during lockdown periods, there were lower response rates than previous NHS cycles, which impacted sample representativeness for some sub-populations. Therefore, the 2020-21 NHS was not used to produce estimates at sub-national levels. For this reason, 2017-18 NHS data are used when there are sub-national levels estimates.

As the 2020-21 NHS was considered a break in cycle, therefore direct comparisons to previous NHS surveys cannot be made.

For further information, refer to the ABS National Health Survey: First results methodology - external site opens in new window.

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# Data

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# **Related material**

Resources

**Related topics** 

- <u>Chronic disease</u>
- <u>Risk factors</u>

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