



Chronic respiratory conditions

Web report | Last updated: 14 Dec 2023 | Topic: [Chronic respiratory conditions](#)

About

Respiratory conditions affect the airways, including the lungs as well as the passages that transfer air from the mouth and nose into the lungs. They can be long lasting (chronic) or short term (acute) and can cause ill health, disability and death.

This report is regularly updated with data from a range of sources. There are differences in the source year and frequency of publication. For more information, see [notes](#).

Cat. no: ACM 42

Findings from this report:

- Asthma expenditure on medication was over 4 times the proportion for total health expenditure (53% compared with 11%)
 - Around 2.7 million Australians (11% of the total population) had asthma in 2020-21
 - In 2023, COPD was the 5th leading cause of total disease burden (DALY), accounting for 3.6% of total DALY
 - [In 2021, COPD was a leading underlying cause of death in Australia, representing 4.1% of all deaths](#)
-

Summary

Chronic respiratory conditions is an [Australia's health](#) topic

- [Chronic conditions and multimorbidity](#) | 14 Dec 2023
- [Chronic kidney disease](#) | 14 Dec 2023
- [Diabetes](#) | 14 Dec 2023

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Chronic respiratory conditions affect the airways, including the lungs and the passages that transfer air from the mouth and nose into the lungs. These conditions are characterised by symptoms such as wheezing, shortness of breath, chest tightness and cough.

Obstructive lung diseases are diseases that cause more difficulty with exhaling air, such as asthma, chronic obstructive pulmonary disease (COPD) and bronchiectasis.

Restrictive lung diseases are diseases that can cause problems by restricting a person's ability to inhale air, such as pulmonary fibrosis, chronic sinusitis and occupational lung diseases (Leader 2019).

This page focuses on asthma and COPD as these are common respiratory conditions and are associated with poor health and wellbeing.

Chronic respiratory conditions in 2020-21

Data for 2020-21 are based on information self-reported by the participants of the Australian Bureau of Statistics (ABS) 2020-21 National Health Survey (NHS). Using the self-reported data from NHS 2020-21, almost one-third (30%) of Australians reported having chronic respiratory conditions. Of the estimated 7.5 million Australians with these conditions:

- 5.1 million (20% of the total population) had allergic rhinitis ('hay fever')
- 2.7 million (11%) had asthma
- 2.0 million (8.0%) had chronic sinusitis (ABS 2022a).

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. Additionally, the impact of COVID-19 and lockdowns might also have had direct or indirect impacts on people's usual behaviour over the 2020-21 period.

Due to these changes, comparisons with previous asthma and COPD data over time are not recommended.

On this page, comparisons over time (trends) only contain data from the NHS 2017-18 and prior versions.

How common are chronic respiratory conditions?

According to the NHS, in 2017-18:

- 7.4 million (31%) people in Australia were affected by chronic respiratory conditions
- 2.7 million (11%) people reported having asthma
- 464,000 (4.8%) people aged 45 and over reported having COPD (ABS 2019).

While COPD is occasionally reported in younger age groups, there is more certainty that the condition is COPD and not another respiratory condition for those aged 45 and over. A range of estimates of the prevalence of COPD have been derived from different surveys (for example, Toelle et al. 2013). It is important to note that accurately estimating the prevalence of COPD requires clinical testing.

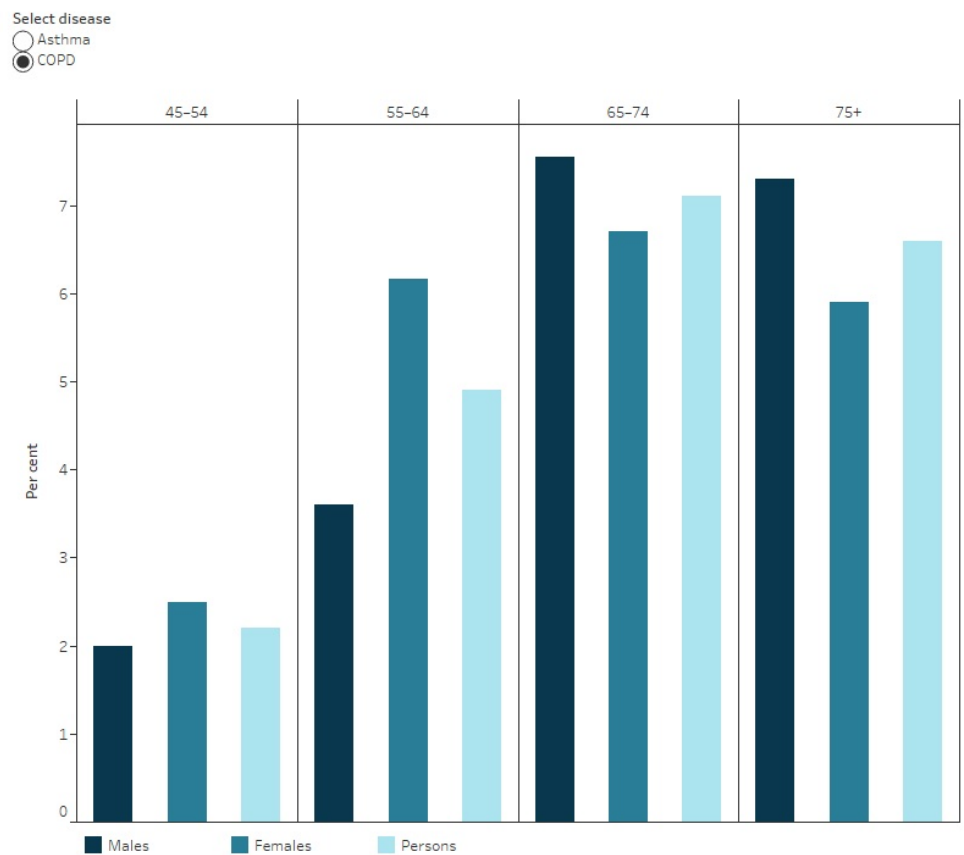
Prevalence by age and sex

According to the NHS, in 2017-18:

- for those aged 0-14, asthma was more prevalent among boys than girls
- for those aged 15 and over, asthma was more prevalent among females than males
- COPD prevalence increased with age. It was more prevalent in females than males for those aged 55-64; but prevalence was similar between sexes in other age groups (Figure 1).

Figure 1: Prevalence of asthma and chronic obstructive pulmonary disease by sex and age, 2017-18

This figure shows that the prevalence of COPD increased from 2.2% for those aged 45-54 to 7.1% for those aged 65-74.



[Notes]

Source: AIHW analysis of ABS 2018, 2019.
<https://www.aihw.gov.au>

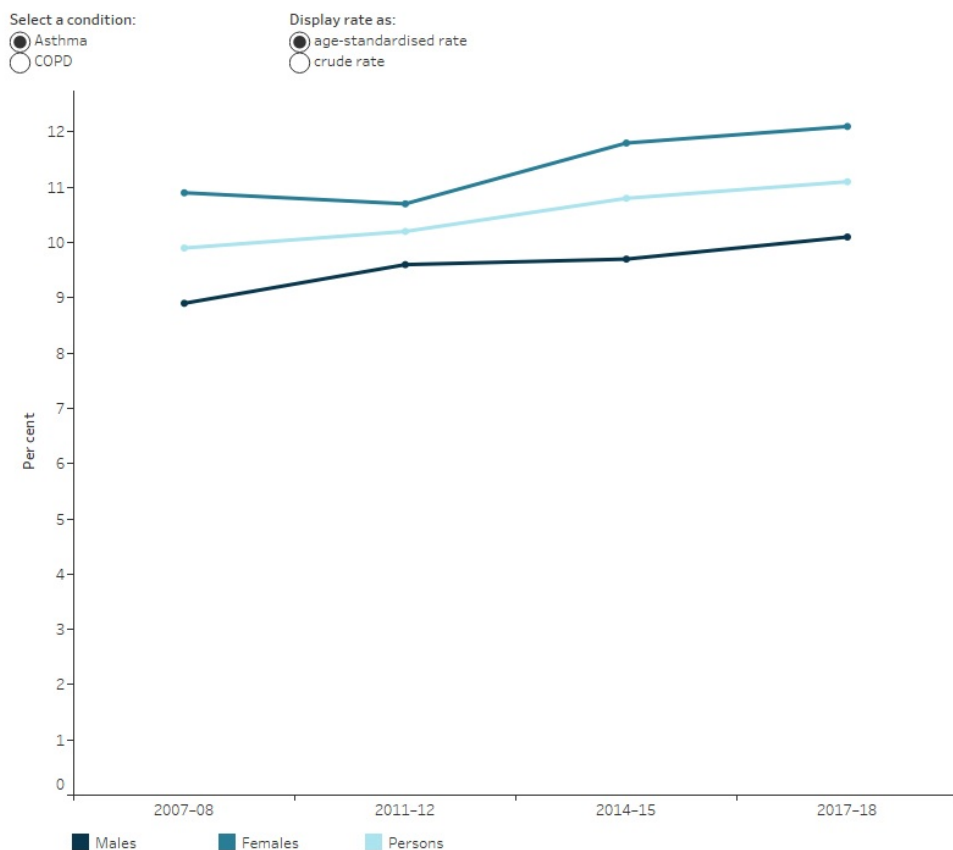
Trends over time

Between 2007-08 and 2017-18, after adjusting for differences in age structure, the prevalence of asthma and COPD remained relatively stable (9.9% to 11%, and 3.9% to 4.6%, respectively) (Figure 2).

For more information, see [Asthma](#) and [Chronic obstructive pulmonary disease](#).

Figure 2: Prevalence of asthma and chronic obstructive pulmonary disease by sex, 2007-08 to 2017-18

This figure shows females have a higher rate of asthma compared with males from 2007-08 to 2017-18.



[Notes]

Source: AIHW analysis of ABS 2010, 2013, 2016, 2019.
<https://www.aihw.gov.au>

Impact of chronic respiratory conditions

Chronic respiratory conditions have varying degrees of impact on the physical, psychological, and social wellbeing of people living with the conditions, depending on disease severity and their level of control. People with these conditions can also be impacted by one-off natural events which occur on a seasonal basis, such as thunderstorms and bushfires.

Impact of natural events on chronic respiratory conditions

Natural disasters or extreme weather changes can affect human health drastically, and events that affect air quality can have a direct impact on chronic respiratory conditions.

Two natural events that have affected chronic respiratory conditions in recent times are thunderstorm asthma and the bushfires of 2019-20. For more information on Thunderstorm asthma see [Asthma](#) and [Natural environment and health](#).

Australian bushfires of 2019-20

The bushfires that swept across Australia in 2019-20 resulted in 33 deaths and the destruction of over 3,000 houses and millions of hectares of land (Parliament of Australia 2020). Bushfire smoke exposure is significantly associated with an increased risk of respiratory morbidity (Liu et al. 2015).

Nationally, hospitalisation and emergency department (ED) presentation rate increases for asthma and COPD coincided with increased bushfire activity during the 2019-20 bushfire season (AIHW 2021a):

- for asthma, the highest hospitalisation rate increase was 36% in the week beginning 12 January 2020 (2.4 per 100,000 population) compared with the previous 5-year average (1.7 per 100,000 population)
- for COPD, the highest hospitalisation rate increase was 30% in the week beginning 1 December 2019 (2.0 per 100,000 population) compared with the previous 5-year average (1.6 per 100,000 population).
- for asthma, the highest ED rate increase was 44% in the week beginning 12 January 2020 (4.7 per 100,000 population) compared with the previous bushfire season (3.3 per 100,000 population)
- for COPD, the highest ED rate increase was 31% in the same week (1.4 per 100,000 population) compared to the previous bushfire season (1.1 per 100,000 population).

For more information see [Natural environment and health](#).

Burden of disease

What is burden of disease?

Burden of disease is measured using the summary metric of disability-adjusted life years (DALY, also known as the total burden). One DALY is one year of healthy life lost to disease and injury. DALY caused by living in poor health (non-fatal burden) are the 'years lived with disability' (YLD). DALY caused by premature death (fatal burden) are the 'years of life lost' (YLL) and are measured against an ideal life expectancy. DALY allows the impact of premature deaths and living with health impacts from disease or injury to be compared and reported in a consistent manner (AIHW 2022a).

In 2023, the respiratory conditions disease group accounted for 7.2% of total disease burden (DALY); 8.5% of non-fatal burden (YLD), and 5.8% of fatal burden (YLL) (AIHW 2023a).

Variation by age and sex

In 2023:

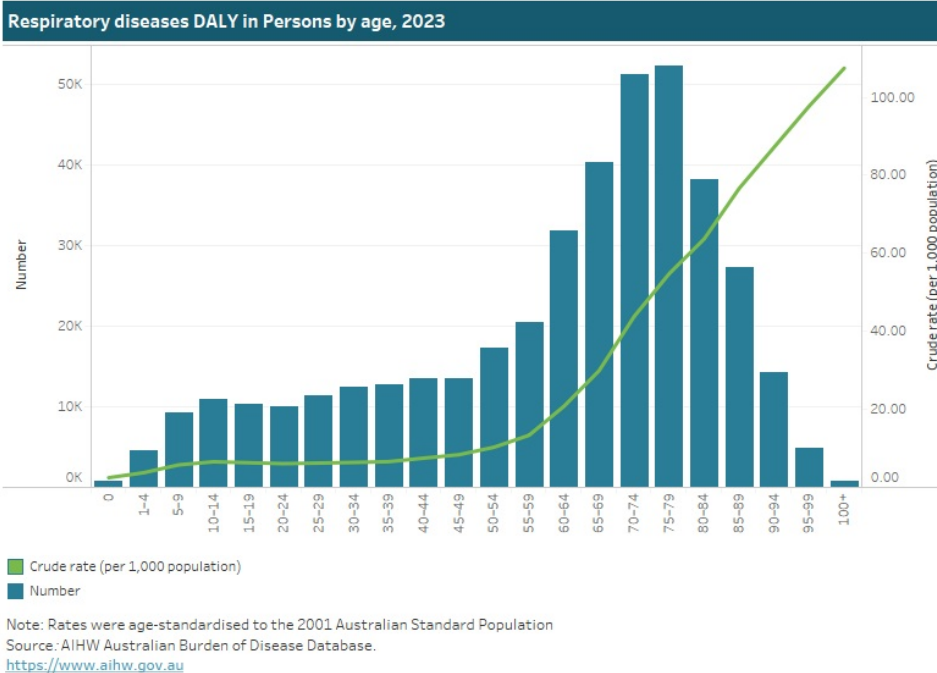
- the rate of burden for the respiratory conditions disease group varied between 6.4 and 8.4 DALY per 1,000 population between the ages of 10-14 and 45-49, then increased steeply, peaking at 54.8 DALY per 1,000 population for those aged 75-79
- the rate of burden for the respiratory conditions disease group was split between COPD and asthma:
 - COPD accounted for 50% of total burden (DALY), 38% of non-fatal burden (YLD), and 71% of fatal burden (YLL)
 - asthma accounted for 35% of total burden (DALY), 52% of non-fatal (YLD), and 5.4% of fatal burden (YLL)
- among individual conditions, COPD was the fifth leading cause of total burden of disease. Asthma was ranked tenth, but was the leading cause of total burden among children aged 1-9 (Figure 3).

Figure 3: Burden of disease due to respiratory conditions by sex, age and year

This figure shows that in 2023 the total burden of disease due to respiratory conditions was higher for females compared with males.



Note: Diseases displaying a rate of 0.00 per 1,000 population refer to a rate <0.005 per 1,000 population.



Trends over time

Between 2003 and 2023, the age standardised rate of respiratory conditions burden decreased by 6% (13.8 to 13.0 DALY per 1,000 population, respectively) - or 0.3% per year on average.

For more information, see [Australian Burden of Disease Study 2023](#).

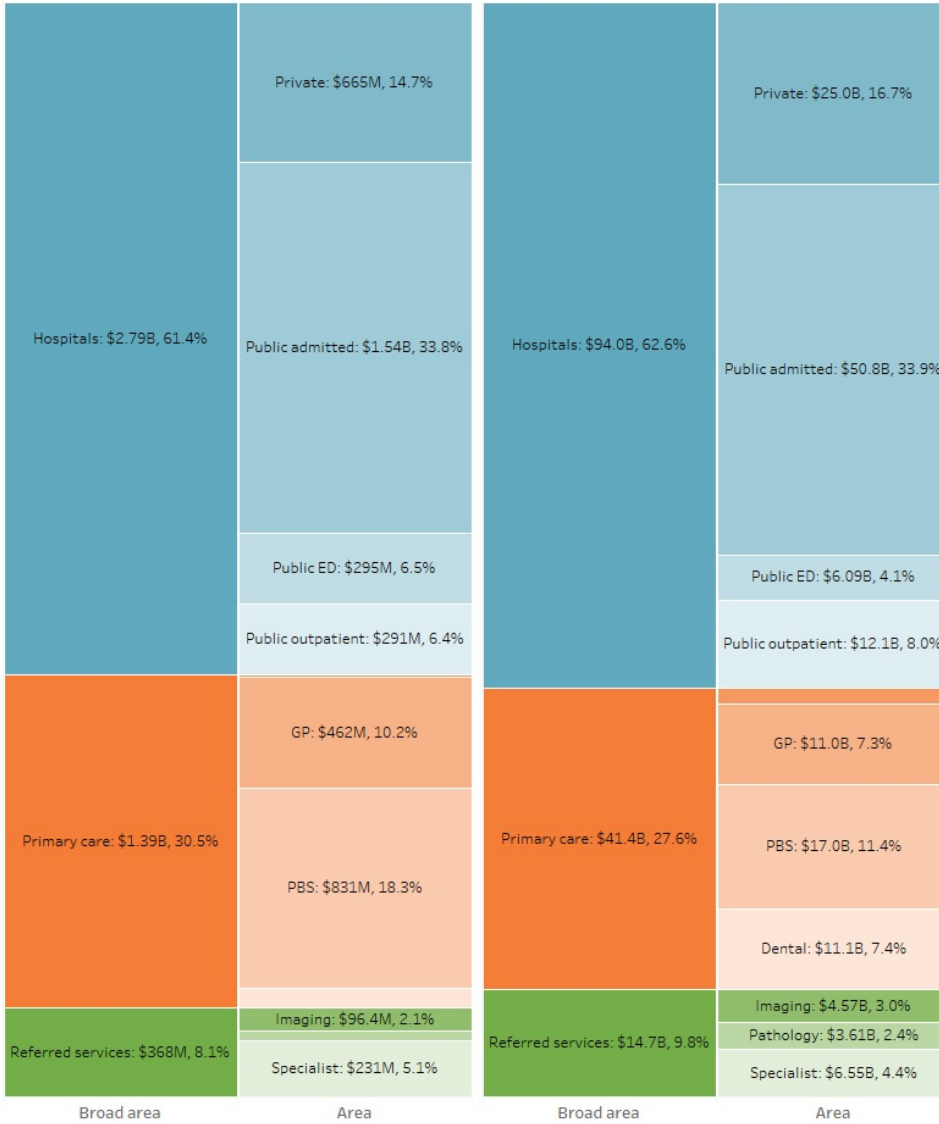
Variation between population groups

In 2018, the age standardised rate of respiratory condition burden:

- was highest for people living in *Remote and very remote* areas and lowest for people living in *Major cities* (18.0 and 12.3 DALY per 1,000 population, respectively)

Respiratory expenditure (\$4.54B)

All conditions expenditure (\$150B)



Note: Total health expenditure includes spending for all disease groups included in the Australian Burden of Disease Study.
 Source: AIHW Disease Expenditure Database.
<https://www.aihw.gov.au>

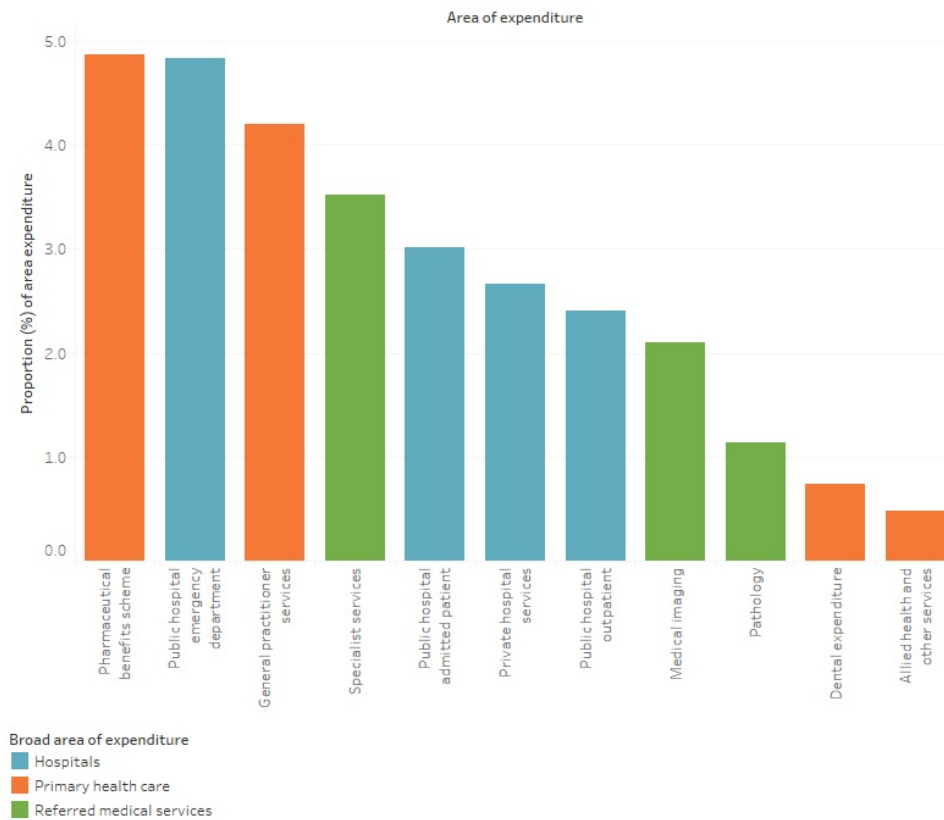
In 2020-21, respiratory conditions accounted for:

- 4.9% (\$830.9 million) of all PBS expenditure (Figure 6)
- 4.8% (\$294.8 million) of all public hospital emergency department expenditure.

Figure 6: Proportion of expenditure attributed to respiratory conditions, for each area of the health system, 2020-21

This figure shows respiratory conditions accounted for 4.2% of all general practitioner services expenditure.

Sex
Total Persons



Source: AIHW Disease Expenditure Database.
<https://www.aihw.gov.au>

Who is the money spent on?

In 2020-21:

- the age distribution of spending on respiratory conditions reflects the prevalence distribution, with most spending being for older age groups (63% for people aged 45 and over)
- the distribution of spending on respiratory conditions was similar amongst females and males (\$2.2 billion and \$2.3 billion, respectively).

For more information, see [Health system spending on disease and injury in Australia, 2020-21](#).

In 2018-19, it was estimated that respiratory condition expenditure per case was:

- 10% higher for males compared with females (\$530 and \$480 per case, respectively)
- 74% lower than expenditure per case for all disease groups \$510 and \$2,000 per case, respectively) (AIHW 2022b).

For more information, see [Health system spending per case of disease and for certain risk factors](#).

How many deaths were associated with chronic respiratory conditions?

In 2021:

- respiratory conditions were recorded as an underlying and/or associated cause for 46,551 deaths or 135 deaths per 100,000 population in Australia, representing 27.1% of all deaths
- respiratory conditions were the underlying cause for 13,593 deaths (29% of respiratory deaths) and an associated cause only, for 32,958 deaths (71% of respiratory deaths)
- COPD and asthma accounted for 52% and 2.6% of underlying-cause respiratory deaths, respectively. Furthermore, they contributed to 36% and 4.3% of any-cause respiratory deaths.

Variation by age and sex

In 2021, respiratory conditions mortality (as the underlying and/or associated cause) in comparison to all deaths, was relatively more concentrated among:

- older people (73% of respiratory deaths were among people aged 75 and over, compared with 67% for total deaths)
- males (55% of respiratory deaths were among males compared with 52% of total deaths) (Figure 7).

Figure 7: Age distribution for respiratory conditions mortality, by sex, 2011 to 2021

This figure shows that death rates due to respiratory conditions increased with age and were highest for people aged 85 and over.

Select measure
Deaths

Year
2021

Scope

- 1. Underlying cause of condition
- 2. Associated-only cause of condition
- 3. Underlying and/or associated cause of condition

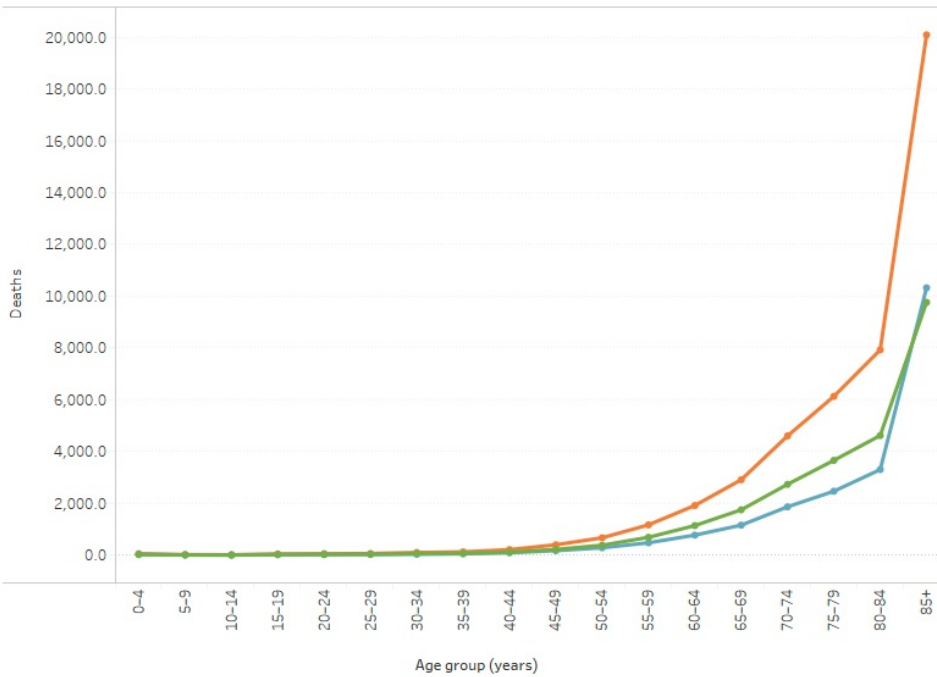
Select sex

- Females
- Males
- Persons

Sex

- Males
- Females
- Persons

Deaths due to Respiratory conditions, 2021



Source: AIHW analysis of the NHMD
<https://www.aihw.gov.au>

Trends over time

Age standardised mortality rates for respiratory conditions (as the underlying and/or associated cause) between 2011 and 2021:

- trended down from 172 to 135 per 100,000 population
- were 1.5 to 1.6 times as high as for males compared with females (Figure 8).

Figure 8: Trends over time for respiratory conditions mortality, 2011 to 2021

This figure shows that between 2011 and 2021, deaths rates due to respiratory conditions were highest in 2017 and lowest in 2020.

Select measure
Deaths

Select age group
All ages

Scope

1. Underlying cause of condition
 2. Associated-only cause of condition
 3. Underlying and/or associated cause of condition

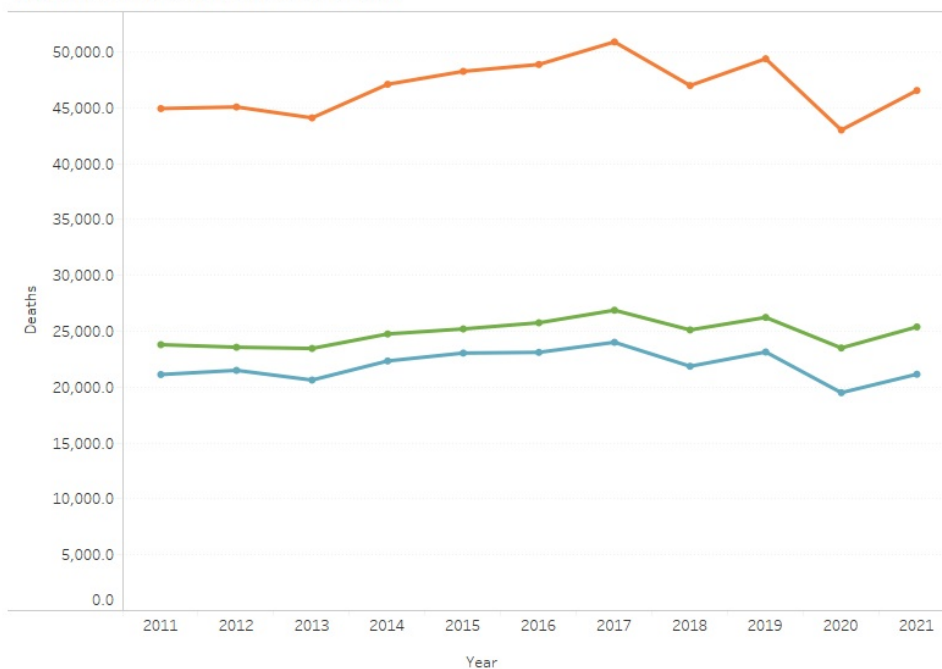
Select sex

- Females
 Males
 Persons

Sex

- Males
 Females
 Persons

Deaths due to Respiratory conditions, 2011 to 2021



Source: AIHW analysis of the NHMD
<http://www.aihw.gov.au/>

Variation between population groups

In 2021, age standardised mortality rates for respiratory conditions (as the underlying and/or associated cause of death) were:

- highest for people living in *Remote and very remote* areas and lowest for people living in *Major cities* (183 and 129 per 100,000 population, respectively)
- highest for people living in the lowest socioeconomic areas (with the most level of disadvantage) and lowest for people living in the highest socioeconomic areas (with the least disadvantage) (160 and 94 per 100,000 population, respectively).

Treatment and management of chronic respiratory conditions

Primary care

General practitioners (GPs) play an important role in managing chronic respiratory conditions in the community, but there is currently no nationally consistent primary health care data collection to monitor provision of care by GPs.

For more information, see [General practice, allied health and other primary care services](#).

Hospital treatment

People with chronic respiratory conditions require admission to hospital when they cannot be managed at home or by a GP, or their symptoms exacerbate acutely. Hospitalisations due to asthma and COPD are classified as potentially preventable. Data from the National Hospital Morbidity Database (NHMD) show that in 2020-21:

- asthma was the principal diagnosis in 25,500 hospitalisations for people of all ages
- COPD was the principal diagnosis in 54,400 hospitalisations for people aged 45 and over.

From 2011-12 to 2021-22, the hospitalisation rate for:

- asthma decreased from 170 to 100 per 100,000 population
- COPD for people aged 45 years and over, decreased steeply from 2016-17 to 2021-22 (805 to 500 per 100,000 population) (Figure 9).

Figure 9: Age distribution for asthma and chronic obstructive pulmonary disease hospitalisations, by sex, 2011-12 to 2021-22

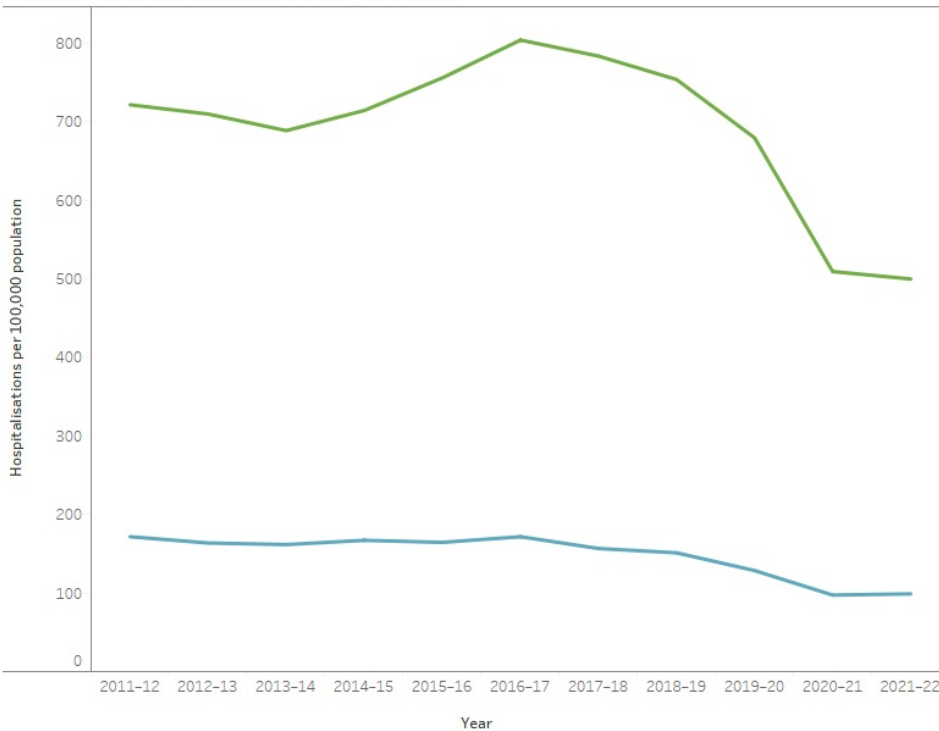
This figure shows that between 2011-12 and 2021-22, hospitalisation rates for asthma decreased by 42% and for COPD, rates decreased by 36%.

Select diagnosis scope
 Principal diagnosis of condition
 Any diagnosis of condition

Select measure
 Hospitalisations per 100,000 population

Condition, age group
■ COPD, 45+ years
■ Asthma, All ages

Hospitalisations per 100,000 population for Asthma & COPD



Notes

Source: AIHW analysis of the NHMD
<https://www.aihw.gov.au>

COVID-19 impact on chronic respiratory conditions

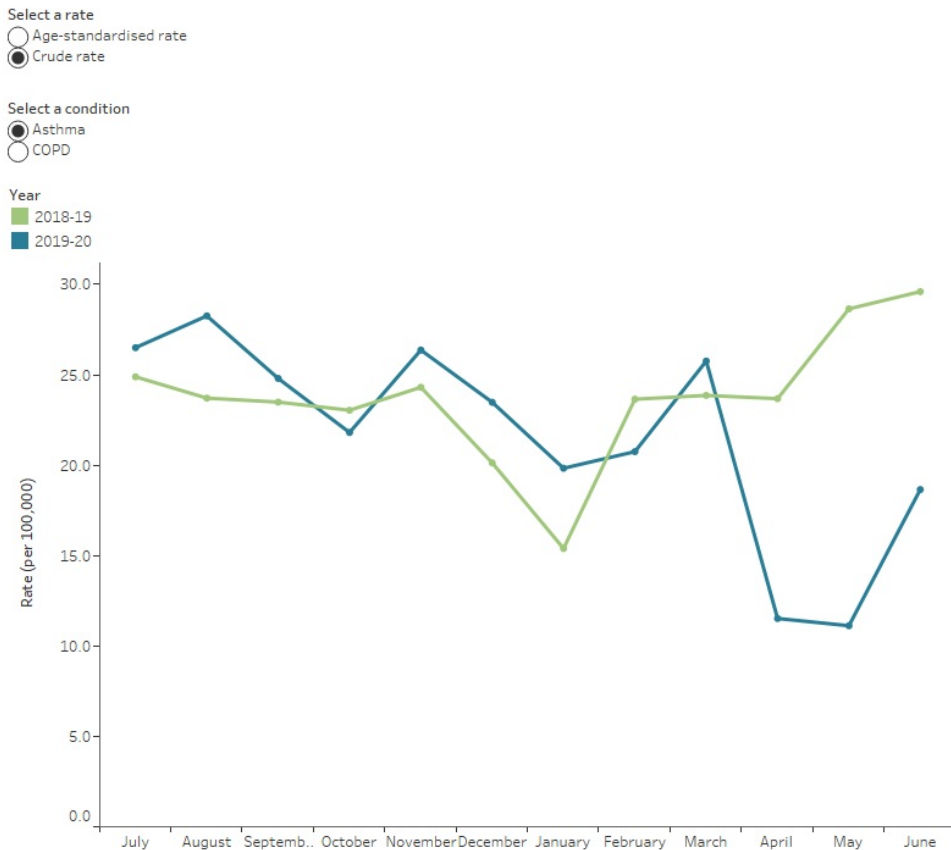
The overall rate of hospitalisations and emergency department presentations decreased at the start of the COVID-19 pandemic. The hospitalisation rates for asthma and COPD in 2019-20 and 2020-21 were the lowest recorded in the last 10 years. This was potentially attributable to an indirect impact of the COVID-19 pandemic and the health protection measures put in place which supported physical distancing, promotion of hand-hygiene and mask wearing. See ‘Chapter 2 Changes in the health of Australians during the COVID-19 period’ in [Australia’s health 2022: data insights](#).

During the national lockdown beginning on 23 March 2020 following the pandemic outbreak, emergency department presentations for asthma and COPD decreased:

- For asthma, rates decreased from March to May 2020 (26 to 11 per 100,000 population). In June 2020, when restrictions began to ease across the country, rates increased to 19 per 100,000 population (Figure 10). When compared with April and May in 2019, the rates of asthma presentations observed in 2020 were halved.
- For COPD, rates decreased from March to April 2020 (39 to 28 per 100,000 population). This rate increased slightly in May and June 2020 (30 and 33 per 100,000 population). When compared with April and May in 2019, the rates of COPD presentations observed in 2020 fell by 29% and 34%, respectively (Figure 10).

Figure 10: Monthly emergency department presentation rates for asthma and chronic obstructive pulmonary disease (45 years and over), 2018-19 compared with 2019-20

This figure shows that in 2019-20, emergency department presentations were highest in August for asthma and in July for COPD.



[Notes]

Source: AIHW National Non-admitted Patient Emergency Department Care database.
<https://www.aihw.gov.au>

Death rates from all respiratory diseases combined showed a substantial fall in 2020, with rates particularly low for females and during the winter months compared with previous years. This is discussed in detail in ‘Chapter 2 Changes in the health of Australians during the COVID-19 period’ in Australia’s health 2022: data insights.

During the COVID-19 pandemic (as at 31 October 2022), chronic respiratory conditions were certified as a pre-existing condition in 18% of the deaths with a chronic condition mentioned, the third highest of all chronic conditions (ABS 2022b). Between January and August 2022, the overall deaths due to chronic respiratory conditions were slightly higher (2.5%) than historical average for the same period (Figure 11).

Figure 11: Age-standardised deaths rate due to asthma and chronic obstructive pulmonary disease, 2009 to 2020

This figure shows the rate of deaths due to COPD among people aged 45 and over was 53 per 100,000 population in 2020.



[Notes]

Source: AIHW National Mortality Database.
<https://www.aihw.gov.au>

While the long-term impact of COVID-19 on the respiratory system is being researched, evidence shows that COVID-19 does not directly impact the risk of increasing asthma severity and vice versa (Lee et al. 2020; Lieberman-Cribbin et al. 2020; Mather et al. 2021). However, there is increasing evidence showing that COPD patients with COVID-19 have greater risk of mortality, severity of infection and higher likelihood of requiring Intensive Care Unit (ICU) support than those without COPD (Cazzola et al. 2021; Clark et al. 2021; Wells 2021).

See 'Chapter 1 The impact of a new disease: COVID-19 from 2020, 2021 and into 2022' in [Australia's health 2022: data insights](#).

Comorbidities of chronic respiratory conditions

People with chronic respiratory conditions often have other chronic and long-term conditions (comorbidities). In the 2017-18 NHS, for people aged 45 and over with:

- asthma: 81% had at least one other chronic condition; among them, 49% had arthritis and 37% had back problems. For more information, see [Asthma](#)
- COPD: 90% had at least one other chronic condition; among them, 55% had arthritis and 43% had asthma. For more information, see [COPD](#).

Where do I go for more information?

For more information on chronic respiratory conditions, see:

- ABS [National Health Survey: first results \(2017-18\)](#)
- ABS [Health Conditions Prevalence](#)
- [Australian Centre for Monitoring Population Health](#).

For more on this topic, visit [Chronic respiratory conditions](#).

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Technical notes

Data sources

Australian Burden of Disease Database

The Australian Burden of Disease Database contains aggregate burden of disease metrics from the Australian Burden of Disease Study (ABDS) undertaken by the AIHW. This includes measures of fatal burden (years of life lost, YLL), non-fatal burden (years lived with disability, YLD) and total burden (disability-adjusted life years, DALY)

The 2023 study builds on the AIHW's previous burden of disease studies and disease monitoring work and provides Australian-specific estimates for over 200 diseases and injuries in 2023, including comparisons with previous studies.

The 2018 (ABDS) also provides estimates of how much of the burden can be attributed to 40 different risk factors. Results were published in November 2021.

For further information see [Burden of disease](#).

Disease Expenditure Database

The AIHW Disease Expenditure Database provides a broad picture of the use of health system resources classified by disease groups and conditions.

It contains estimates of expenditure by the Australian Burden of Disease Study diseases and injuries, age group, and sex for admitted patient, emergency department and outpatient hospital services, out-of-hospital medical services, and prescription pharmaceuticals.

It does not allocate all expenditure on health goods and services by disease - for example, neither administration expenditure nor capital expenditure can be meaningfully attributed to any particular condition due to their nature.

For more information see [Disease expenditure in Australia](#).

Medicare Benefits Schedule

Statistics were extracted by the AIHW from the Medicare Benefits Schedule (MBS) claim records data in the Australian Government Department of Health Enterprise Data Warehouse or from online MBS published reports.

The MBS provides a subsidy for services listed in the MBS, for all Australian residents and certain categories of visitors to Australia. The major elements of Medicare are contained in the Health Insurance Act 1973. See details of the [services covered by the MBS](#).

MBS items for pathology tests are subject to episode coning. Episode coning is an MBS funding arrangement that applies to general practitioners ordering more than three items in an episode for a non-hospitalised patient on the same day. Under the coning rule, Medicare benefits are only payable for the three most expensive items. The remaining items are coned out. As a result of the application of this rule, MBS data for some items will not reflect the number of tests performed for non-hospitalised patients.

Pathology services requested for hospitalised patients, or ordered by specialists, are not subject to these coning arrangements. Episode coning was introduced to prevent over servicing by doctors.

For more information, see [Medicare Benefits Schedule \(MBS\) data collection](#).

National Aboriginal and Torres Strait Islander Health Survey

The National Aboriginal and Torres Strait Islander Health Survey (NATSIHS) is conducted by the Australian Bureau of Statistics (ABS) to obtain national information on the health of First Nations people, their use of health services and health-related aspects of their lifestyle. The most recent NATSIHS was conducted in 2018-19.

The NATSIHS collects information from First Nations people of all ages in non-remote and remote areas of Australia, including discrete First Nations communities.

For more information, see the [National Aboriginal and Torres Strait Islander Health Survey, 2018-19](#).

National Health Survey

The National Health Survey (NHS) is conducted by the ABS to obtain national information on the health status of Australians, their use of health services and facilities, prevalence of long-term health conditions and health risk factors. The most recent NHS was conducted in 2020-21. It is important to note that the 2020-21 NHS data should be considered a break in time series from previous NHS collections and used for point-in-time national analysis only. The survey was collected during the COVID-19 pandemic, via an online, self-complete form, which significantly changed the data collection and survey estimates.

The NHS collects self-reported data on whether a respondent had one or more long-term health conditions; that is, conditions that lasted, or were expected to last, 6 months or more.

When interpreting data from the NHS, some limitations need to be considered:

- Data that are self-reported rely on respondents knowing and providing accurate information.
- The survey does not include information from people living in nursing homes or otherwise institutionalised.
- Residents of *Very remote* areas and discrete First Nations communities were excluded from the survey. This is unlikely to affect national estimates, but will impact prevalence estimates by remoteness.

For more information, see the [Physical activity topic](#), the [overweight and obesity topic](#) and the [smoking topic](#).

Further information can also be found in the [National Health Survey: First results, 2017-18](#).

National Hospital Morbidity Database

The National Hospital Morbidity Database (NHMD) is a compilation of episode-level records from admitted patient morbidity data collection systems in Australian hospitals.

Reporting to the NHMD occurs at the end of a person's admitted episode of care (separation or hospitalisation) and is based on the clinical documentation for that hospitalisation.

The NHMD is based on the Admitted Patient Care National Minimum Data Set (APC NMDS). It records information on admitted patient care (hospitalisations) in essentially all hospitals in Australia, and includes demographic, administrative and length-of-stay data, as well as data on the diagnoses of the patients, the procedures they underwent in hospital and external causes of injury and poisoning.

The hospital separations data do not include episodes of non-admitted patient care given in outpatient clinics or emergency departments. Patients in these settings may be admitted subsequently, with the care provided to them as admitted patients being included in the NHMD.

The following care types were excluded when undertaking the analysis: 7.3 (newborn - unqualified days only), 9 (organ procurement - posthumous) and 10 (hospital boarder).

Further information about the NHMD, see the [National Hospitals Data Collection, Admitted patient care NMDS 2020-21](#) and [Admitted patient care NMDS 2021-22](#).

National Mortality Database

The National Mortality Database (NMD) holds records for deaths in Australia from 1964. It comprises information about causes of death and other characteristics of the person, such as sex, age at death, area of usual residence and Indigenous status. The cause of death data are provided to the AIHW by the Registries of Births, Deaths and Marriages and the National Coronial Information System (managed by the Victorian Department of Justice) and include cause of death coded by the ABS. The data are maintained by the AIHW in the NMD.

Revised and preliminary versions are subject to further revision by the ABS. For data by Indigenous status, the level of identification of Indigenous status is considered sufficient to enable analysis in 5 jurisdictions - New South Wales, Victoria, Queensland, Western Australia and the Northern Territory.

The data quality statements underpinning the AIHW NMD can be found in the following ABS publications:

- ABS quality declaration summary for [Deaths, Australia](#).
- ABS quality declaration summary for [Causes of death, Australia](#).

For more information see [National Mortality Database \(NMD\)](#).

National Non-admitted Patient Emergency Department Care Database

The AIHW National Non-admitted Patient Emergency Department Care Database (NNAPEDCD) is a compilation of episode-level records (including waiting times for care) for non-admitted patients registered for care in emergency departments in selected public hospitals. The database only captures information for physical presentations to emergency departments and does not include advice provided via telehealth or videoconferencing.

Patients being treated in emergency departments may be subsequently admitted, including admission in the emergency department, another hospital ward or to hospital-in-the-home. For this reason, there is an overlap in the scope of the NNAPEDCD NMDS and the Admitted Patient Care National Minimum Data Set (APC NMDS).

For more information, see the [National Hospitals Data Collection](#).

Pharmaceutical Benefits Scheme

Statistics were extracted by the AIHW from the Pharmaceutical Benefits Scheme (PBS) records data in the Australian Government Department of Health Enterprise Data Warehouse or from published reports.

The Australian Government subsidises the cost of a wide range of medicines through the Pharmaceutical Benefits Scheme (PBS) and the Repatriation Pharmaceutical Benefits Scheme (RPBS). Claims for reimbursement for the supply of PBS- or RPBS-subsidised medicines are submitted by pharmacies through Services Australia for processing and are provided to the Australian Government Department of Health.

Subsidies for prescription medicines are available to all Australian residents who hold a current Medicare card, and overseas visitors from countries with which Australia has a Reciprocal Health Care Agreement. In general, patients pay a contribution to the cost of the medicine (co-payment), and the Australian Government covers the remaining cost. This remaining cost is referred to as the benefit paid.

PBS data are from records of prescriptions dispensed under the PBS and RPBS, where either:

- the Australian Government paid a subsidy
- the prescription was dispensed at a price less than the relevant patient co-payment (under co-payment prescriptions) and did not attract a subsidy.

PBS data cover all PBS prescriptions dispensed by approved suppliers, including community pharmacies, public and private hospital pharmacies and dispensing doctors.

For more information, see [Pharmaceutical Benefits Scheme \(PBS\) data collection](#).

Classifications

Australia uses the International Statistical Classification of Diseases and Related Health Problems (ICD) to code causes of death (WHO 2019). In this report, deaths were coded using the 10th Revision (ICD-10) (Table 1).

Table 1: International Classification of Disease (ICD) codes

Respiratory condition	ICD-10 edition codes
Asthma	J45-J46
COPD	J40-J44
<i>All respiratory conditions</i>	J00-J99

Source: WHO 2019.

For hospital diagnoses and procedures and emergency department (ED) presentations, a classification modified for Australia is used. Hospital data were coded using the ICD-10-AM classification (International Statistical Classification of Diseases and Related Health Conditions, 10th Revision, Australian Modification) (Table 2).

Table 2: ICD-10-AM codes

Respiratory condition	ICD-10-AM 7 th to 11 th edition codes
Asthma	J45-J46
COPD	J40-J44
Acute respiratory infection	J00-J22

References

ABS (2022) *National Health Survey: First results methodology*, ABS website, accessed 27 September 2023.

WHO (World Health Organization) (2019) International Statistical Classification of Diseases and Related Health Problems, 10th Revision (ICD-10), Geneva: WHO.

Notes

Data sources

These web articles were last updated on 14 December 2023. See table below for details of updates by data source.

Updates to content by data source

Topic	Data source	Latest time period reported	Measure content last update
Burden of Disease	Australian Burden of Disease Study 2023	2023	14 December 2023
Health expenditure	Disease expenditure in Australia 2020-21	2020-21	14 December 2023
Hospitalisations	National Hospital Morbidity Database (NHMD)	2021-22	14 December 2023
Deaths	National Mortality Database (NMD)	2021	30 June 2023
Emergency Department (ED) presentations	National Non-Admitted Patient Emergency Department Care Database (NAPEDC)	2020-21	30 June 2023
Medications use	Pharmaceutical Benefits Scheme (PBS)	2020-21	30 June 2023
Medicare service use	Medicare Benefits Schedule (MBS)	2021-22	30 June 2023
Prevalence (survey, self-report)*	National Health Survey	2017-18*	8 December 2020

*Asthma web pages include data from 2020-21 NHS, updated on 30 June 2023



Data





Related material

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Related topics

- [Chronic disease](#)
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