



Asthma

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Asthma is a common chronic condition that affects the airways (the breathing passage that carries air into our lungs). People with asthma experience episodes of wheezing, breathlessness and chest tightness due to widespread narrowing of the airways.

Cat. no: ACM 33

Findings from this report:

- In 2017-18, boys aged 0-14 were 1.6 times more likely to be admitted to hospital for asthma than girls
- Around 1 in 4 aged 15 and over with asthma had a written asthma action plan, based on 2017-18 self-reported survey data
- 1 in 9 Australians had asthma in 2017-18 that had been diagnosed by a doctor or nurse based on self-reported survey data
- In 2017-18, females aged 15 and over were 2.3 times more likely to be admitted to hospital for asthma than males

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Asthma

What is asthma?

Asthma is a common chronic condition that affects the airways (the breathing passage that carries air into our lungs). People with asthma experience episodes of wheezing, shortness of breath, coughing, chest tightness and fatigue due to widespread narrowing of the airways (National Asthma Council Australia 2019a).

The symptoms of asthma are usually reversible, either with or without treatment. The severity of asthma ranges from mild, intermittent symptoms, causing few problems for the individual, to severe and persistent wheezing and shortness of breath. In a few people with asthma, the disease has a severe adverse impact on quality of life and may be life-threatening.

It is worth noting that it can be difficult to distinguish asthma from chronic obstructive pulmonary disease (COPD) because the symptoms of both conditions can be similar—both have obstruction to the airways, both are chronic inflammatory diseases that involve the small airways (Buist 2003). Although the current definitions of asthma and COPD overlap, there are some important features that distinguish typical COPD from typical asthma. For more information, see [Chronic obstructive pulmonary disease \(COPD\)](#).

In addition, clinical symptoms of asthma and bronchiectasis may overlap significantly as symptoms of cough, sputum and dyspnoea can occur in either asthma or bronchiectasis (Kang et al. 2014). Although these two diseases present several common characteristics, they have different clinical outcomes. Therefore, it is important to differentiate them at early stages of diagnosis, so appropriate therapeutic measures can be adopted (Athanasio 2012). For more information, see [Bronchiectasis](#).

What causes asthma?

The fundamental causes of asthma are not completely understood. The strongest risk factors for developing asthma are a combination of genetic predisposition with environmental exposure to inhaled substances and particles that may provoke allergic reactions or irritate the airways, such as:

- viral respiratory infections
- indoor allergens (for example, house dust mites in bedding, carpets and stuffed furniture, pollution and pet dander)
- outdoor allergens (such as pollens and moulds)
- tobacco smoke
- chemical irritants in the workplace
- air pollution
- strong odours, such as perfume.

Other triggers can include cold air, change in temperature, thunderstorms, extreme emotional arousal such as anger or fear, hormonal changes, pregnancy and physical exercise. Certain medications can also trigger asthma: aspirin and other non-steroid anti-inflammatory drugs, and beta-blockers (used to treat high blood pressure, heart conditions and migraine) (WHO 2017).

Thunderstorm asthma

Thunderstorm asthma can occur suddenly in spring or summer when there is a lot of pollen in the air and the weather is hot, dry, windy and stormy. People with asthma and/or hay fever need to be extra cautious to avoid flare-ups induced by thunderstorm asthma between September and January in Victoria, New South Wales and Queensland because it can be very serious (National Asthma Council Australia 2019b). In 2016, a serious thunderstorm asthma epidemic was triggered in Melbourne when very high pollen counts coincided with adverse meteorological conditions, resulting in 3,365 people presenting at hospital emergency departments over 30 hours, and 10 deaths (Thien et al. 2018). Following this event, a [thunderstorm asthma forecasting system](#) has been developed to give Victorians early warning of possible epidemic thunderstorm asthma events in pollen season (Victoria State Government 2019).

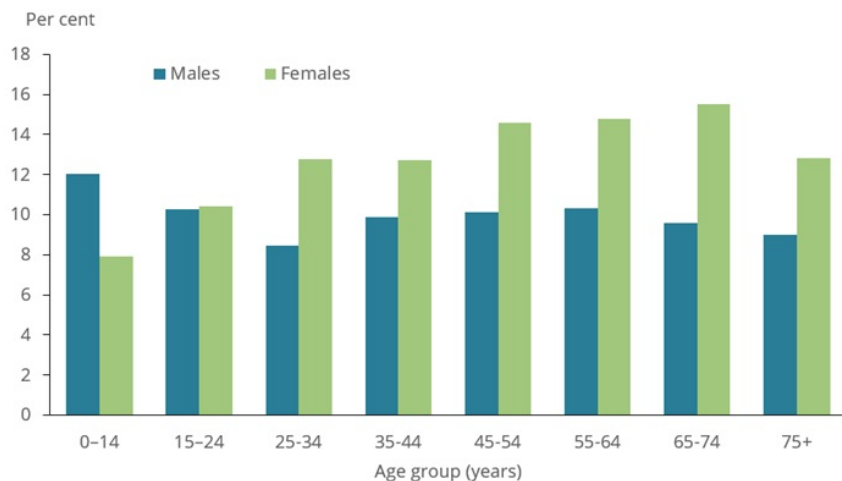
Who gets asthma?

Around 2.7 million Australians (11% of the total population) have asthma, based on self-reported data from the 2017-18 Australian Bureau of Statistics (ABS) National Health Survey (NHS) (ABS 2018).

Prevalence by age and sex

Based on the 2017-18 NHS, among those aged 0-14 asthma was more common among boys. Conversely, among those aged 25-34 and 45 and over asthma was more common among women. Prevalence was similar among males and females aged 15-24 and 35-44 (Figure 1). This change in prevalence for men and women in adulthood is likely due to a complex interaction between changing airway size and hormonal changes that occur during adolescent development, as well as differences in environmental exposures (Almqvist et al. 2007).

Figure 1: Prevalence of asthma, by sex and age group, 2017-18



Note: Asthma refers to people who self-reported that they were diagnosed by a doctor or nurse as having asthma (current and long-term).

Source: ABS 2019a (Data table).

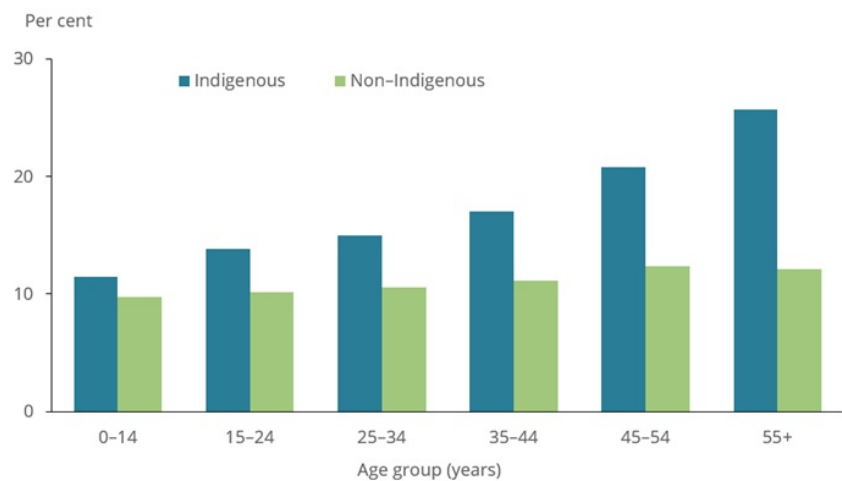
Prevalence by Indigenous status

In 2018-19, 16% of Aboriginal and Torres Strait Islander people had asthma (an estimated 128,000 people), with a higher rate among females (18%) compared with males (13%) (ABS 2019b).

The prevalence of asthma among Indigenous Australians was 1.6 times as high as non-Indigenous Australians after adjusting for difference in age structure.

The difference in asthma prevalence between Indigenous Australians and non-Indigenous Australians exists across all age groups, but is more marked for older adults (Figure 2).

Figure 2: Prevalence of asthma, by age group and Indigenous status, 2018-19



Note: Asthma refers to people who self-reported that they were diagnosed by a doctor or nurse as having asthma (current and long-term).

Sources: ABS 2019a; ABS 2019b (Data table).

Inequalities

The rate of asthma varies by remoteness and socioeconomic area.

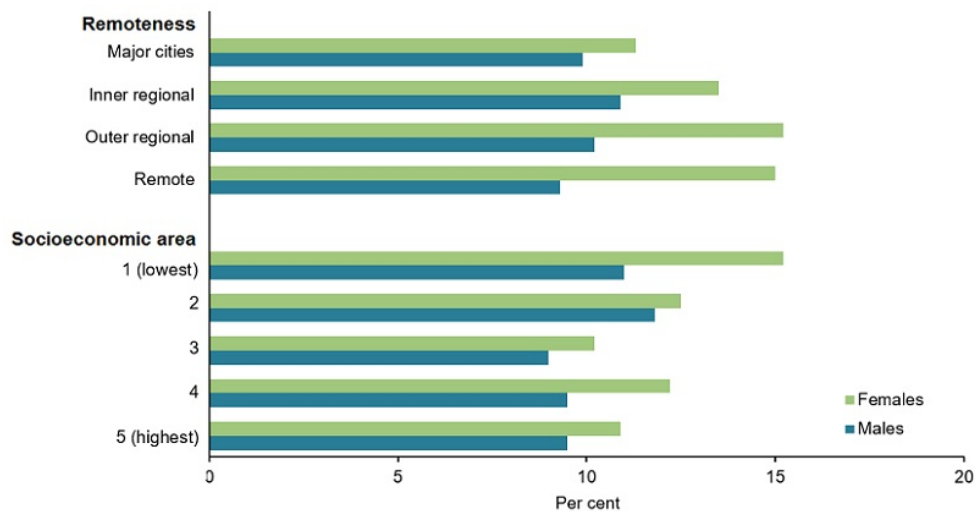
For remoteness:

- the variation for males was not significant
- for females, the prevalence of asthma was highest for those living in *Outer regional areas* (15%) compared with those living in *Major cities* (11%).

For socioeconomic area:

- overall, the prevalence of asthma was highest for people living in the lowest socioeconomic area (13%) compared with those living in the highest socioeconomic area (10%)
- prevalence for males and females varies by socioeconomic area.

Figure 3: Prevalence of asthma, by sex, remoteness and socioeconomic area, 2017-18



Notes

1. Rates have been age-standardised to the 2001 Australian Standard Population as at 30 June 2001. Age groups: 0-14, 15-24, 25-34, 35-44, 45-54, 55-64, 65-74, 75+.
2. Remoteness is classified according to the Australian Statistical Geography Standard (ASGS) 2016 Remoteness Areas structure based on area of residence.
3. Socioeconomic areas are classified according to using the Index of Relative Socio-Economic Disadvantage (IRSD) based on area of residence.

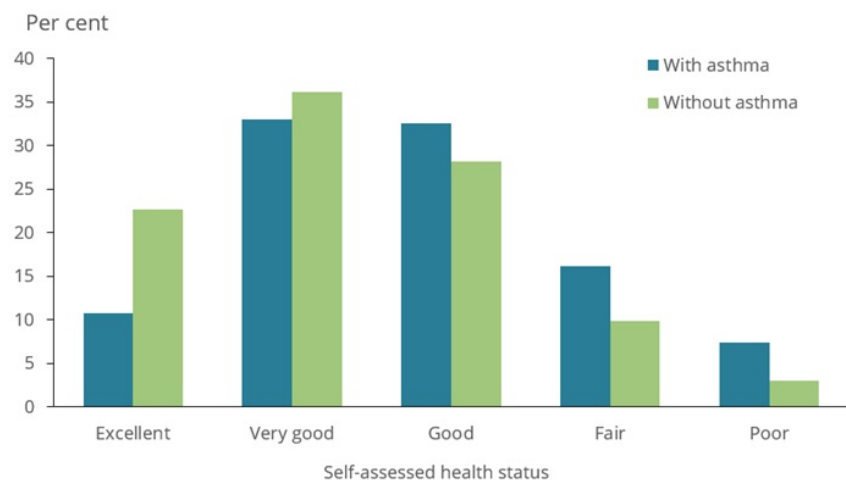
Source: ABS 2019a (Data table).

How does asthma affect quality of life?

Asthma has varying degrees of impact on the physical, psychological and social wellbeing of people living with the condition, depending on disease severity and the level of control. People with asthma are more likely to describe themselves as having a poor quality of life. This is more pronounced among people with severe or poorly controlled asthma (Australian Centre for Asthma Monitoring 2004; Australian Centre for Asthma Monitoring 2011). Asthma is described as well-controlled when there are few symptoms and little reliever use (e.g. less than 2 days/week), and no night waking or limitation of activity. A survey conducted in 2012 of 2,686 Australians aged 16 years and over with current asthma found that asthma was not well-controlled in almost half (45%) of people. More than half of this group were not using a preventer inhaler, or were using it infrequently (Reddel et al. 2015).

In 2017-18, self-assessed health status among people with asthma aged 15 and over was, on average, worse than among those without asthma. For example, people with asthma were less likely to describe themselves as having excellent health compared with people without asthma (11% and 23%, respectively), and more likely to describe themselves as having fair health compared with people without asthma (16% and 9.9%, respectively). Conversely, people with asthma were more likely to describe themselves as having poor health compared with people without asthma (7.4% and 3.0%, respectively) (Figure 4).

Figure 4: Self-assessed health of people aged 15 and over with and without asthma, 2017-18

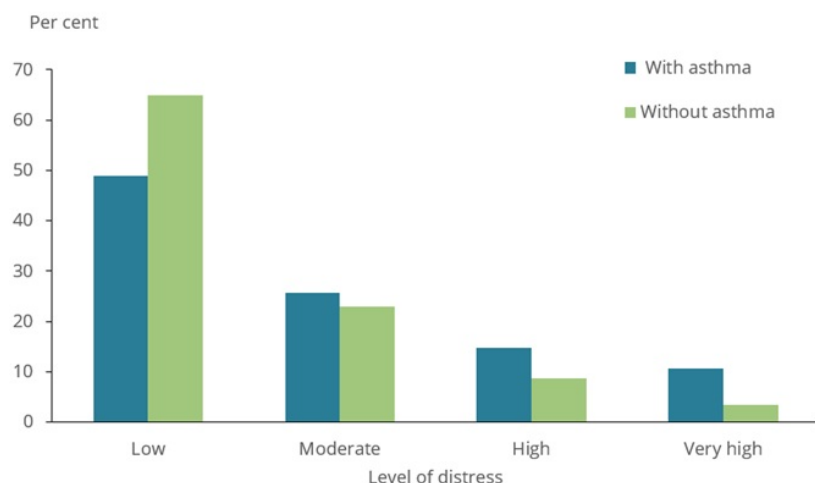


Note: Rates have been age-standardised to the 2001 Australian Standard Population as at 30 June 2001. Age groups: 15-24, 25-34, 35-44, 45-54, 55-64, 65-74, 75+.

Source: ABS 2019a (Data table).

In 2017–18, people with asthma were more likely to experience high (15%) and very high (11%) levels of psychological distress compared with those without asthma (8.7% and 3.4%, respectively) (Figure 5).

Figure 5: Psychological distress experienced by people aged 18 and over with and without asthma, 2017-18



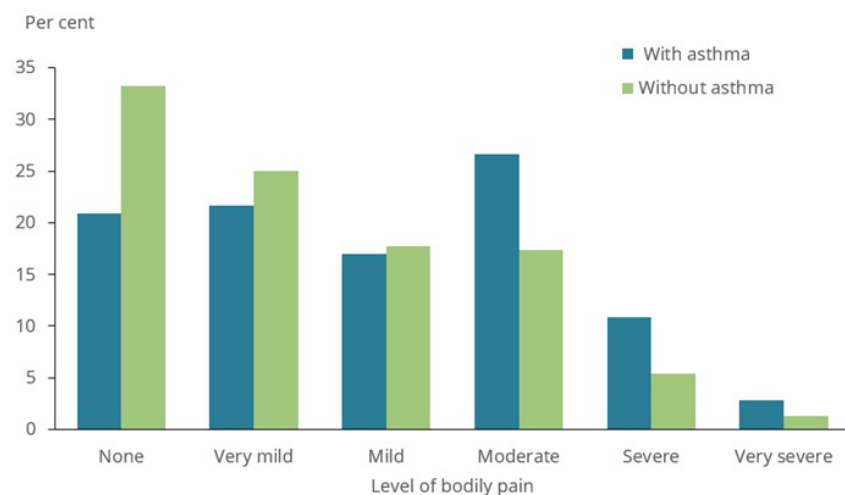
Notes

1. Rates have been age-standardised to the 2001 Australian Standard Population as at 30 June 2001. Age groups: 18-24, 25-34, 35-44, 45-54, 55-64, 65-69, 70-74, 75-79, 80-84, 85+.
2. Psychological distress is measured using the Kessler Psychological Distress Scale (K10), which involves 10 questions about negative emotional states experienced in the previous 4 weeks. The scores are grouped into Low: K10 score 10-15, Moderate: 16-21, High: 22-29, Very high: 30-50.

Source: ABS 2019a (Data table).

In 2017-18, people with asthma were more likely to experience moderate (27%), severe (11%) and very severe (2.8%) bodily pain compared with people without asthma (17%, 5.4% and 1.3%, respectively) (Figure 6).

Figure 6: Pain experienced by people aged 18 and over with and without asthma, 2017-18



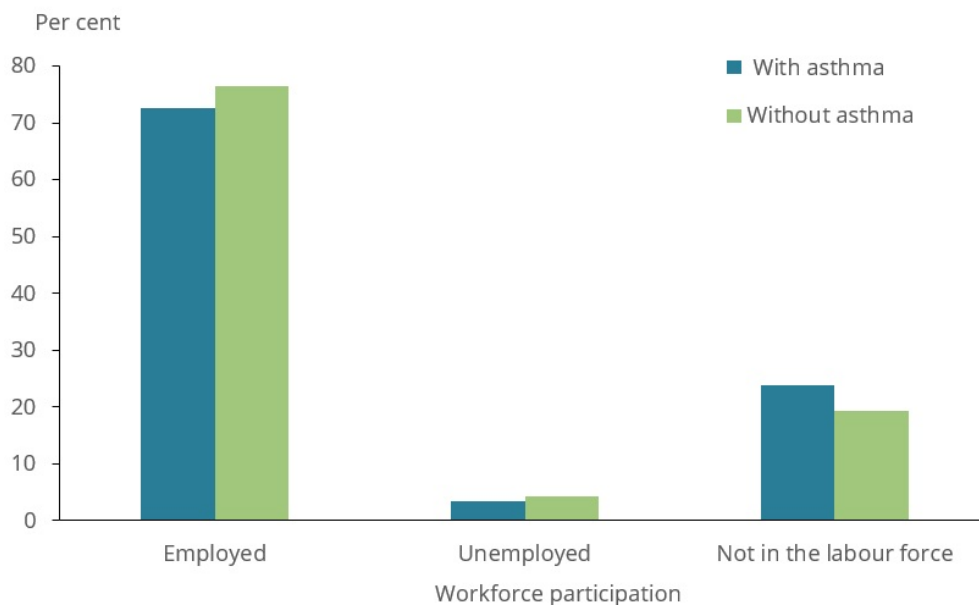
Notes

1. Rates have been age-standardised to the 2001 Australian Standard Population as at 30 June 2001. Age groups: 18-24, 25-34, 35-44, 45-54, 55-64, 65-69, 70-74, 75-79, 80-84, 85+.
2. Bodily pain experienced in the 4 weeks prior to interview.

Source: ABS 2019a (Data table).

In 2017-18, people aged 15 to 64 years with asthma were slightly less likely to be employed (73%) compared with people without asthma (77%) (Figure 7).

Figure 7: Workforce participation of people aged 15-64 with and without asthma, 2017-18



Note: Rates have been age-standardised to the 2001 Australian Standard Population as at 30 June 2001. Age groups: 15-24, 25-34, 35-44, 45-54, 55-64.

Source: ABS 2019a ([Data table](#)).

Comorbidities

People with asthma often have other chronic and long-term conditions. See [Asthma, associated comorbidities and risk factors](#).

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Treatment & management

Treatment for asthma

In general, symptoms of asthma are easily controlled in most people by making lifestyle changes and using medications, so they can have normal lives. The main aims of asthma treatments are:

- to stop asthma from interfering with school, work or play
- to prevent flare-ups or 'attacks'
- to keep symptoms under control
- to keep lungs as healthy as possible (National Asthma Council Australia 2020).

What medicines are used to treat asthma?

There are several medicines available to treat asthma. Different asthma medicines are used to achieve different goals, as follows:

- **Relievers** are medicines used for the rapid relief of asthma symptoms when they occur. They can also be used before exercise, to prevent exercise-induced bronchoconstriction (constriction of the airways).
- **Preventers** are medicines used every day in asthma control to minimise symptoms and reduce the likelihood of episodes or flare-ups. Inhaled corticosteroids are the most commonly used preventers.
- **Other medicines** are used for management of difficult-to-treat asthma or as add-on options for management of severe asthma flare-ups.

Based on self-reported survey data, one-third (33%) of Australians with asthma had taken a respiratory medicine in the last 2 weeks in 2017-18 (ABS 2018). These medicines may have been used to treat asthma or another respiratory condition, as most of the medicines used for asthma are also used for patients with other chronic lung diseases, in particular Chronic obstructive pulmonary disease (COPD).

For more detailed information about medicines used to treat asthma, refer to [Australian Asthma Handbook, Version 2.0](#). It provides Australia's national guidelines for asthma management.

Management of asthma

As asthma is a chronic disease, it has to be cared for all the time, not just when symptoms are present. The four parts of managing asthma are:

- Identify and minimise exposure to asthma triggers.
- Understand and use medications as prescribed so as to have good asthma control.
- Monitor asthma to recognise signs when it is getting worse.
- Know what to do when asthma gets worse (Stanford Children's Health 2020).

For more detailed information about management of asthma for different population groups, refer to the [Australian Asthma Handbook, Version 2.0: Management for children, adolescents, and adults](#).

What role do GPs play in managing asthma?

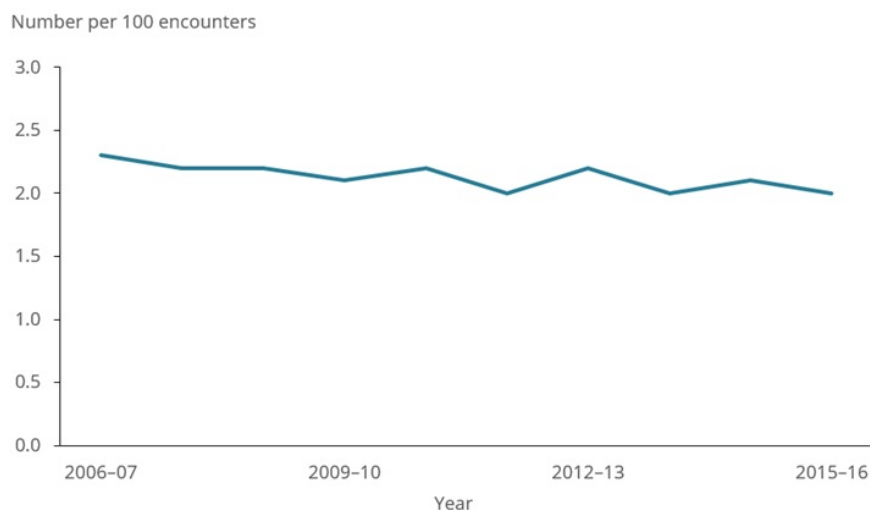
General practitioners (GPs) play a central role in the management of asthma in the community. This role includes assessment, diagnosis, prescription of regular medications, education, provision of written action plans, and regular review as well as managing asthma flare-ups. Asthma-related visits to GPs may occur for a variety of reasons, including:

- the acute or reactive management of asthma symptoms
- a review during or following a flare-up
- a review or initiation of a written action plan
- a visit for maintenance activities, such as monitoring and prescription of regular medications
- review asthma with other possible co-morbidities
- referral to a specialist and other health professionals.

In 2012, a survey of 2,686 Australians aged 16 and over with current asthma identified that 628 participants (23%) had visited a GP urgently about asthma at least once during the previous year, and 269 participants (10%) had attended a hospital or emergency department one or more times, with, in total, 769 participants (29%) reporting an urgent visit (urgent GP visit and/or hospital or emergency department visit) (Reddel et al. 2015).

According to the Bettering the Evaluation and Care of Health (BEACH) survey, asthma was one of the most frequently managed chronic problems in the decade up to 2015-16 (Britt et al. 2016). In the ten-year period from 2006-07 to 2015-16, the estimated rate of asthma management in general practice declined from 2.3 in 100 encounters to 2.0 in 100 encounters (Figure 1). It is worth noting that there is currently no nationally consistent primary health care data collection to monitor provision of care by GPs.

Figure 1: General practice encounters for asthma, all ages, 2006-07 to 2015-16



Notes

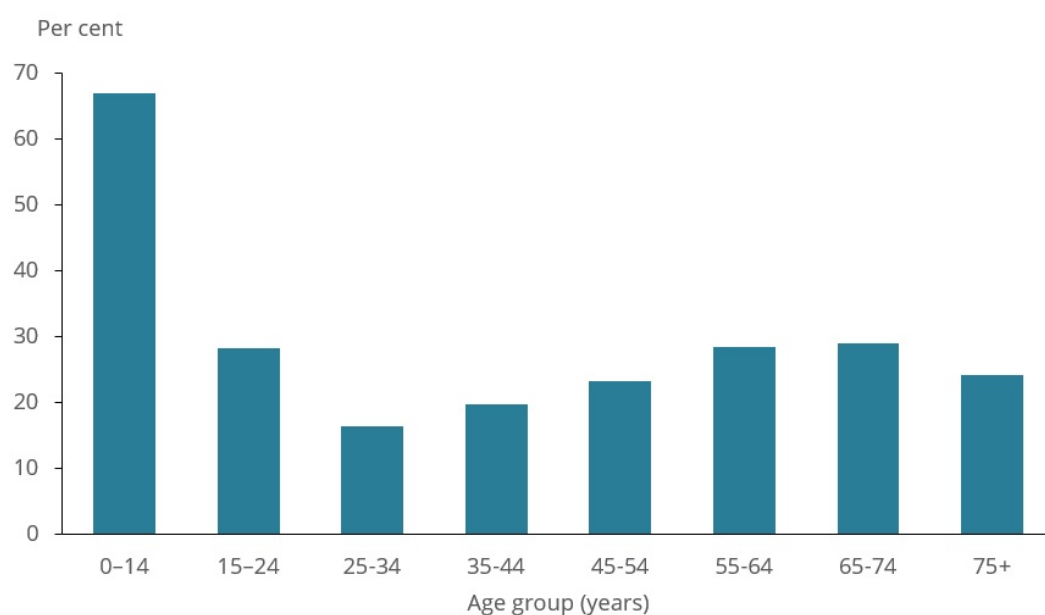
1. Asthma is classified according to International Classification of Primary Care, 2nd edition (ICPC-2) code R96.
2. The Bettering the Evaluation and Care of Health (BEACH) year is from April to March.
3. An encounter relates to a consultation between a patient and a GP.
4. Statistics on general practice activities based on BEACH data are derived from a random sample survey of GPs and their encounters with patients, and should be interpreted with caution.

Source: Britt et al. 2016 ([Data table](#)).

An asthma action plan is a written self-management plan which is prepared for patients with asthma by a health care professional and can help people with asthma to manage their condition and reduce the severity of acute asthma flare-ups. There is no 'standard' asthma action plan, as everyone's asthma is different. A patient's plan needs to be developed to deal with his/her own triggers, signs and symptoms, and medication. Asthma action plans have formed part of the National Asthma Council Australia's guidelines for the management of asthma for 30 years (National Asthma Campaign 1990) and have been promoted in public education campaigns (including by the National Asthma Council Australia) on the basis that individualised written action plans improve asthma health outcomes (National Asthma Council Australia 2019).

Despite the Australian Asthma Handbook recommending all people with asthma have an asthma action plan, many people with asthma do not have a current written plan. In 2017-18, an estimated 839,000 (31%) people with asthma across all ages had a written asthma action plan (ABS 2018). Over two-thirds of children aged 0-14 had an asthma action plan (67%), however, this rate in people aged 15 and over was only about one-quarter (24%) (Figure 2). The results indicate that children aged 0-14 were the most likely to have a written asthma action plan compared with other age groups.

Figure 2: Proportion of people with asthma who have a written asthma action plan, by age group, 2017-18



Note: Asthma refers to people who self-reported that they were diagnosed by a doctor or nurse as having asthma (current and long-term).

Source: ABS 2019 ([Data table](#)).

The National Asthma Strategy

The National Asthma Strategy 2018 (the Strategy) was launched in January 2018. The Strategy aims to outline Australia's national response to asthma and inform how existing limited health care resources can be better coordinated and targeted across all levels of government (Department of Health 2017). The Strategy identifies the most effective and appropriate interventions to reduce the impact of asthma in the community and continue to be an international leader in asthma prevention, management and research (Department of Health 2017). In 2019, the AIHW reported on the 10 national asthma indicators to monitor the outcome measures associated with the Strategy. For more information, see [National Asthma Strategy 2018](#), and [National asthma indicators - an interactive overview](#).

What role do hospitals play in treating asthma?

People with asthma require admission to hospital when flare ups or 'attacks' are potentially life-threatening or when they cannot be managed at home or by a GP. Data from the AIHW [National Hospital Morbidity Database \(NHMD\)](#) show that in 2017-18, there were 38,792 hospitalisations where asthma was the principal diagnosis. The rate of hospitalisations for asthma was 158 per 100,000 population. The rate among children aged 0-14 (363 per 100,000 population) was markedly higher than the rate among people aged 15 and over (106 per 100,000 population).

During the last decade, the age-standardised rate of hospitalisations for asthma for children aged 0-14 decreased overall, falling from 542 per 100,000 population in 2009-10 to 363 per 100,000 population in 2017-18. Over the same period, the age-standardised rate of hospitalisations for asthma for those aged 15 and over fluctuated between 87 and 112 per 100,000 population.

Hospitalisation rates differ by sex and age (Figure 3). In 2017-18, boys aged 0-14 were 1.6 times as likely as girls of the same age to be admitted to hospital for asthma. Conversely, of those aged 15 and over, females were 2.3 times as likely as males to be admitted to hospital for asthma. These differences in hospitalisation by sex and age reflect in part the difference in the prevalence of asthma—which is more common in boys than girls for those under 15, and generally more common in females than in males for those over 25. See [Prevalence by age and sex](#).

Figure 3: Age-standardised hospitalisation rate due to asthma, by sex and broad age group, 2008-09 to 2017-18

The line chart shows hospitalisation rates for asthma among children and adults from 2008-09 to 2017-18. During the last decade, the age-standardised rate of hospitalisations for asthma for children aged 0-14 decreased overall, falling from 542 per 100,000 population in 2009-10 to 363 per 100,000 population in 2017-18. Over the same period, the age-standardised rate of hospitalisations for asthma for those aged 15 and over fluctuated between 87 and 112 per 100,000 population.

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Seasonal variation in hospitalisations for asthma

Among children, the peaks for asthma hospitalisations occur in late summer (February) and autumn (May) (Figure 4). The peak in February is likely related to respiratory infections associated with returns to school and childcare after the summer break. This has been found during similar peaks in September in Northern Hemisphere countries; lower use of preventer medication during holidays may also contribute.

Among adults, hospitalisations for asthma are highest in winter and early spring (June through to September), particularly in people aged 65 years and older (Figure 4). This coincides with the annual winter 'flu' season and may reflect the rise in respiratory infections observed then.

Figure 4: Weekly variation in hospitalisations due to asthma, by age group, 2017

The line chart shows weekly variation in hospitalisation rates for asthma in all age groups in 2017. For children aged 2-4 years, the peak for asthma hospitalisations (by admission period) occurred in February, while for children aged 5-14 years, the peaks occurred in February and May.

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Age profile of hospitalisations for asthma compared with hospitalisations for all causes

While most hospitalisations for all causes in 2017-18 were for older people, 44% of the 39,000 hospitalisations for asthma in Australia were for children aged 0-14 (Figure 5). The age profile of hospitalisations for asthma was much younger compared with hospitalisations for all causes in the same year.

Figure 5: Hospitalisations due to asthma and hospitalisations due to all causes, by age group, 2017-18

The bar chart shows hospitalisations for asthma and for all causes for different age groups in 2017-18. Most asthma hospitalisations were children aged 0-14 years (44%), whereas, most hospitalisations for all causes were for people aged 65 years and over (42%).

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Impact

Deaths

How many people die from asthma?

Death from asthma is uncommon and effective management can reduce the risk even further. In 2018, there were 389 deaths due to asthma in Australia (0.2% of all deaths), which corresponds to a mortality rate of 1.3 per 100,000 population. The statistics presented in this section relate to deaths where asthma was listed as the underlying cause of death.

During the past decade, the overall trend of death due to asthma has decreased from 1.7 deaths per 100,000 population in 2009 and 2010, to 1.3 deaths per 100,000 population in 2018.

Attribution of death due to asthma is more certain among those aged 5-34, thus this age group is commonly used for examining time trends. There has been little change in the rate of mortality due to asthma in this age group over the last 10 years, with the rate ranging from 0.2 to 0.4 per 100,000 population.

For information on long-term trends, see [General Record of Incidence of Mortality \(GRIM\) books](#). For more information on how deaths are registered, coded and updated, see [Deaths data](#).

Figure 1: Age-standardised death rate due to asthma, by sex, 2009-2018

The line chart shows the trends of death due to asthma from 2009 to 2018. During the past decade, the overall trend of death due to asthma has decreased from 1.7 deaths per 100,000 population in 2009 and 2010, to 1.3 deaths per 100,000 population in 2018.

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Higher death rate from asthma in certain population groups

Certain population groups have a higher mortality rate due to asthma. Asthma mortality rates increased with increasing remoteness of residence. Mortality rates due to asthma were higher among people residing in *Outer regional* (1.6 per 100,000 population) and *Remote and very remote* areas (1.9 per 100,000 population) than in *Major cities* and *Inner Regional* areas (1.2 and 1.4 per 100,000 population, respectively). Meanwhile, the mortality rate was higher among people residing in the lowest socioeconomic area (2.4 per 100,000 population) compared to those residing in the highest socioeconomic area (1.3 per 100,000 population) (AIHW: Poulos et al. 2014).

In addition, Aboriginal and Torres Strait Islander people experience higher asthma mortality rates than non-Indigenous Australians. In the 5-year period from 2014-2018, 63 Aboriginal and Torres Strait Islander people died from asthma, with a mortality rate of 1.8 per 100,000 population (based on five jurisdictions with adequate Indigenous identification (NSW, Qld, WA, SA and NT)). After adjusting for differences in age structure, the mortality rate of asthma among Indigenous Australians was 2.2 times as high as non-Indigenous Australians (3.4 compared with 1.5 per 100,000 population).

The mortality rate differences between these population subgroups may be due to differences in smoking rates, access to health services, or other social and environmental factors. Smoking rates are higher among people living in more remote areas, among people living in areas of lower socioeconomic status, and among Indigenous Australians (AIHW 2018).

Burden of disease

Burden of disease measures the gap between the ideal of living to old age in good health, and the current situation where healthy life is shortened or lost by illness, injury, disability and death (AIHW 2019a). It combines health loss from living with illness and injury (non-fatal burden, or years lived with disability, or YLD) and dying prematurely (fatal burden, or years of life lost, or YLL) to estimate total health loss (total burden, or disability-adjusted life years, or DALY). One DALY is one year of 'healthy life' lost due to illness and/or death.

What is the burden of disease due to asthma?

Asthma affects people of all ages and has a substantial impact on the community. In Australia, asthma accounted for 34% of the total burden of disease due to respiratory conditions and 2.5% of the total disease burden in 2015 (AIHW 2019a). Between 2003 and 2015, there was a 3.1% increase in the total disease burden from asthma.

Asthma was the leading cause of total burden in children aged 5-14 years, contributing 14% of total burden for boys and 12% of total burden for girls in 2015 (AIHW 2019a).

However, most of the disease burden due to asthma consisted of non-fatal burden (94%) rather than fatal burden (6%) in 2015. Among children aged 0-14, asthma was the leading cause of non-fatal burden. Among people aged 15 and over, asthma still caused a substantial non-fatal burden but was ranked progressively lower with increasing age (AIHW 2019a).

In the younger age groups (ages 0-14), the rate of non-fatal burden (YLD) due to asthma was higher in males than females (Figure 2). The rate of fatal burden (YLL) was highest among those aged 75 and over for both males and females.

Figure 2: Burden of disease due to asthma, age-specific rate, by sex and age, 2015

The bar chart shows the DALY due to asthma in different age groups by sex in 2015. In younger age group (0–14), the DALY due to asthma was higher in boys than in girls. Meanwhile, in other older age groups (15 and over), the DALY due to asthma was higher in women than in men.

Visualisation not available for printing

Variation across population groups

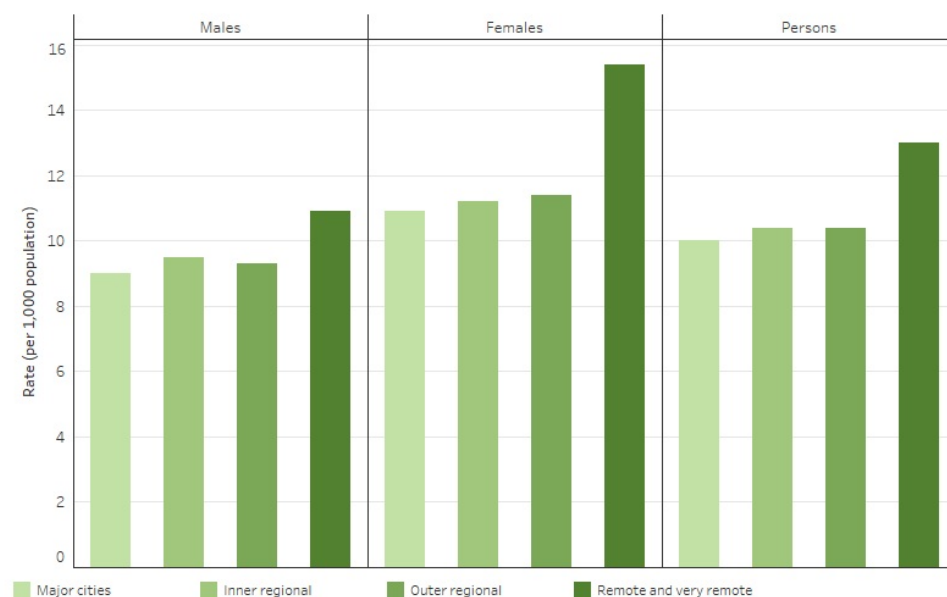
The asthma disease burden varies across different population groups. The rate of total burden (DALY) due to asthma in *Remote and very remote* areas was 1.3 times as high as the rate in *Major cities*. Meanwhile, the rate of total burden (DALY) due to asthma in the lowest socioeconomic area was 1.8 times as high as the rate for the highest socioeconomic area. People living in *Inner regional* and *Outer regional* areas had a higher rate of fatal burden (YLL) than those living in *Major cities* and *Remote and very remote* areas (Figure 3).

Figure 3: Burden of disease due to asthma, age-standardised rate, by remoteness and socioeconomic area, 2015

The bar chart shows DALY due to asthma by remoteness in 2015. The DALY due to asthma was highest in *Remote and very remote* areas, and the DALY due to asthma in *Major cities*, *Inner Regional* and *Outer Regional* areas were similar.

Select a population group:
Remoteness

Select a measure:
DALY



Notes

1. Rates have been age standardised to the 2001 Australian Standard Population and are expressed per 1,000 population.
 2. Remoteness is classified according to the Australian Statistical Geography Standard 2011 Remoteness Areas structure based on Statistical Area Level 2 (SA2) of usual residence.
 3. Socioeconomic areas are classified according to population-based quintiles using the Index of Relative Socio-Economic Disadvantage (IRSD) based on Statistical Area Level 2 (SA2) of usual residence.
 4. YLD rates are not reported due to data quality issues.
- Source: AIHW Australian Burden of Disease Database.
<http://www.aihw.gov.au/>

Disease expenditure

How much does asthma cost the health system?

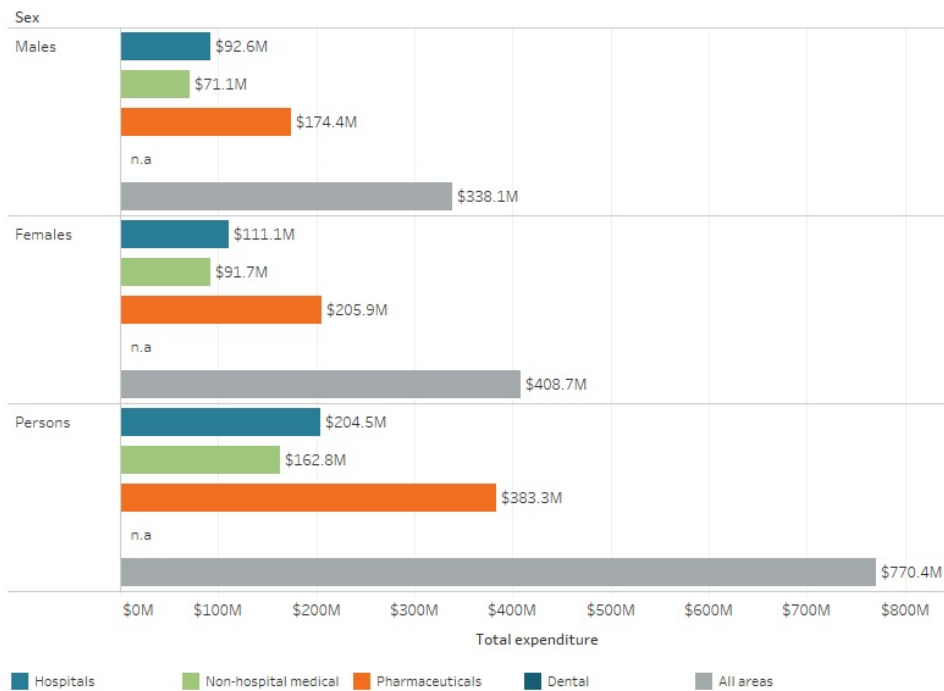
In 2015–16, asthma cost the Australian health system an estimated \$770 million, representing 19% of disease expenditure on respiratory conditions and 0.7% of total disease expenditure (AIHW 2019b).

This expenditure consisted of:

- \$205 million for hospitals (27% of total expenditure on asthma)
- \$163 million for non-hospital medical services (21%)
- \$383 million for pharmaceuticals (50%)

Figure 4: Health expenditure on asthma, by area of expenditure and sex, 2015–16

The bar chart shows the health expenditure on asthma in 2015–16. In general, asthma cost the Australian health system an estimated \$770 million. Among them, \$205 million for hospitals, \$163 million for non-hospital medical services, and \$383 million for pharmaceuticals.



Notes

1. Hospital expenditure includes public hospital admitted patient, outpatient, and emergency department services, and private hospital services.
 2. Non-hospital medical expenditure includes general practice (GP), specialist, medical imaging, pathology, and allied health and other services.
 3. Pharmaceutical benefit expenditure includes over and under-copayment prescriptions.
 4. Dental expenditure is not available (n.a).
 5. Sums may not add to totals due to services not reported by sex.
- Source: AIHW Disease Expenditure Database.
<http://www.aihw.gov.au>

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AIHW 2019a. Australian Burden of Disease Study 2015: Interactive data on disease burden. Cat. no. BOD 24. Canberra: AIHW.

AIHW 2019b. Disease expenditure in Australia. Cat. no. HWE 76. Canberra: AIHW.

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Notes

Amendments

6 Jan 2020 - Correction to Notes associated with Figure 1: Prevalence of asthma, by age and sex, 2017–18. Correction to axis label for Remote areas in Figure 3: Prevalence of asthma, by remoteness and socioeconomic area, 2017–18 and row heading for Remote areas in Table 1.3: Prevalence of asthma by remoteness and socioeconomic area, 2017–18.

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Data

Data tables: [Asthma 2020](#)

Download Data tables: [Asthma 2020](#). Format: [XLS 295Kb](#) [XLS 295Kb](#)

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