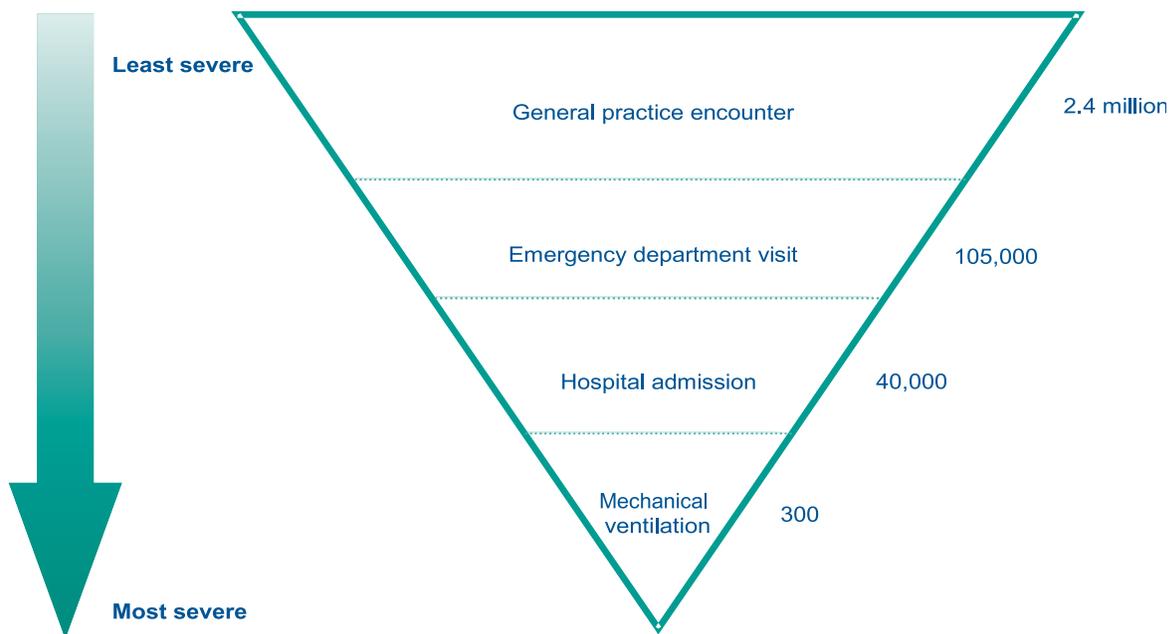


Figure 5.1

Types of health service use, with approximate number of episodes of care for asthma in one year and severity of asthma exacerbations



## 5.1 General practice encounters

General practitioners (GPs) play a central role in the management of asthma in the community. This role includes assessment, prescription of regular therapy, education and review, and managing acute exacerbations of disease for most people with asthma. It is important to monitor data on general practice encounters for asthma to provide information on trends and differentials in the use of health care resources for asthma and in accessibility to general practice care for patients with asthma. Variations in resource utilisation and accessibility provide important information for policy and planning purposes, including the development and evaluation of community interventions.

Asthma-related visits to general practitioners may occur for a variety of reasons, including: the acute or reactive management of asthma symptoms; a review during or following an acute episode; or a visit for maintenance activities such as monitoring and prescription of regular medications. The GP may initiate an opportunistic review when the patient visits for another condition or the patient or the GP may schedule a structured asthma review visit.

With the introduction of a number of strategies to improve the management of asthma in general practice, there was an expectation that the number of planned review encounters would increase (at least initially), while visits for acute episodes or exacerbations of asthma would decrease. Although there is information on the number of review visits for which specific re-imbursment is claimed under the Practice Incentive Program (PIP) (see the section on 'Asthma 3+ Visit Plan PIP claims'), there is no data source that can provide information, separately, on the rate of acute and review asthma-related general practice encounters.

This section presents information on all asthma-related general practice encounters. These estimates are based on data from the Bettering the Evaluation and Care of Health (BEACH) survey (AIHW GPSCU 2002), which are derived from a set of encounters reported by a rolling random sample of general practitioners. Rates are expressed as population-based rates and as proportions of all general practice encounters. For more details about BEACH data and methods see Appendix 1, Section A1.3. A summary of these data is provided in Appendix 2, Table A2.10. This section also reports data on PIP claims for reimbursement for structured general practice review visits for asthma (the Asthma 3+ Visit Plan).

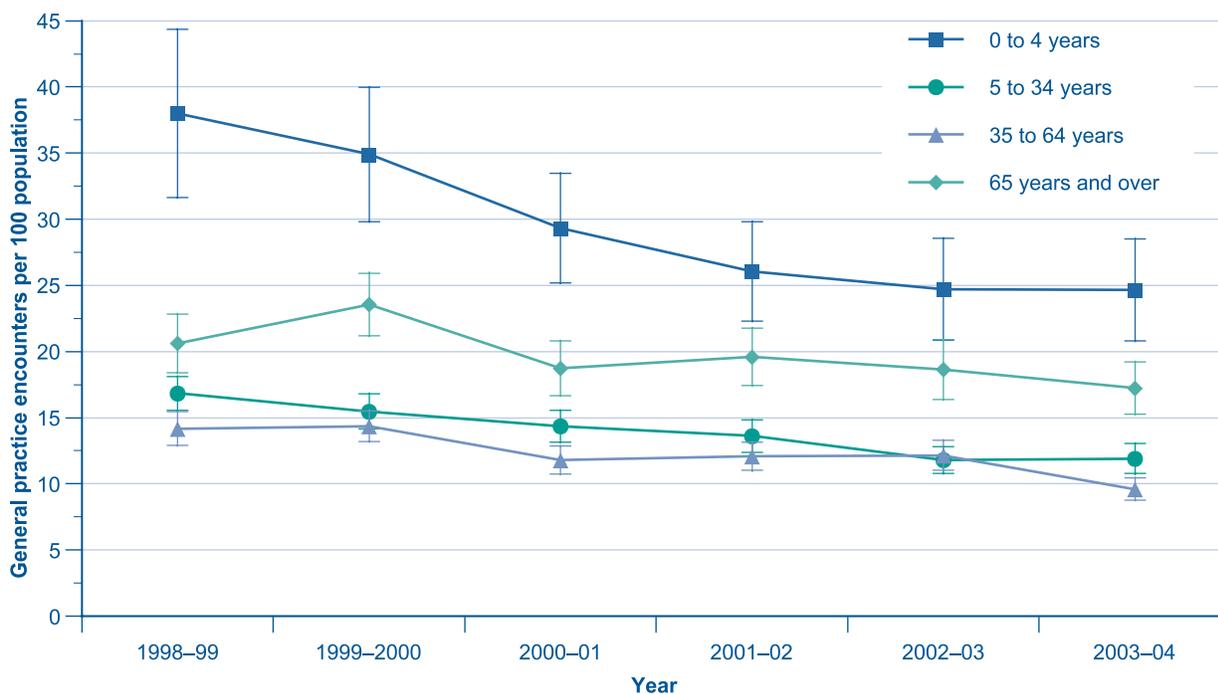
## Time trends in general practice encounters for asthma

During the period 1998–99 to 2003–04, the rate of general practice encounters for asthma decreased both in absolute terms, from 17 per 100 population per year in 1998–99 to 12 per 100 population per year in 2003–04 (Figure 5.2) and in relative terms, from 3.1% of all general practice encounters in 1998–99 to 2.5% of all general practice encounters in 2003–04 (Figure 5.3). The largest decrease was in the 0 to 4 year age group. The rate of GP encounters for asthma in this age group was higher than in other age groups but it fell by over 30% between 1998–99 and 2003–04 (Figure 5.2).

The interpretation of this reduction in GP visits for asthma may reflect improvements in asthma, including decreased prevalence, decreased severity, improved asthma control and/or improved self-management of asthma exacerbations. As well as these, there are other plausible explanations. It is also possible that the diagnosis of asthma may have changed over time so that some individuals previously labelled with asthma are now diagnosed with a different disease. Finally, the decrease in general practice encounters could possibly be interpreted as reflecting a reduction in accessibility of general practice encounters for people with asthma. The last of these seems less likely since there is a relative reduction in asthma encounters, as well as an absolute reduction. Furthermore, the reduction in GP encounters for asthma is paralleled by reductions in emergency department visits and hospital admissions for asthma, as described in the next section.

**Figure 5.2**

**General practice encounters for asthma per 100 population, by age group, Australia, 1998–2004**

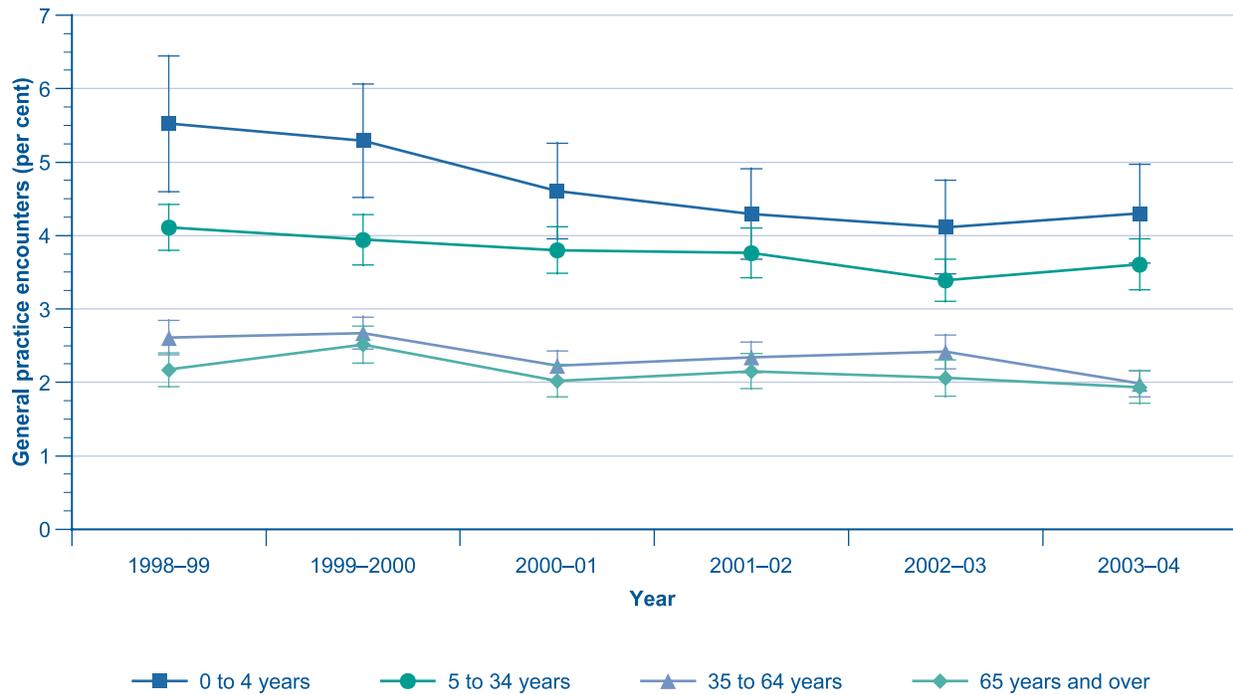


Note: Asthma classified according to ICPC-2 PLUS codes: R96001–R96005, R96007, R96008. BEACH data year is April to March.

Source: BEACH Survey of General Practice.

Figure 5.3

Proportion of general practice encounters for asthma, by age group, Australia, 1998–2004



Note: Asthma classified according to ICD-10 codes: R96001–R96005, R96007, R96008. BEACH data year is April to March.

Source: BEACH Survey of General Practice.

Longer-term time trend data are not available for Australia. Data from the USA show that the rate of visits to office-based physicians (which includes primary care physicians and allergy, pulmonary and internal medicine specialists) for asthma increased from 4 per 100 population in 1980, to 7 per 100 population in 1990 and has since stabilised at 6 per 100 (Stafford et al. 2003).

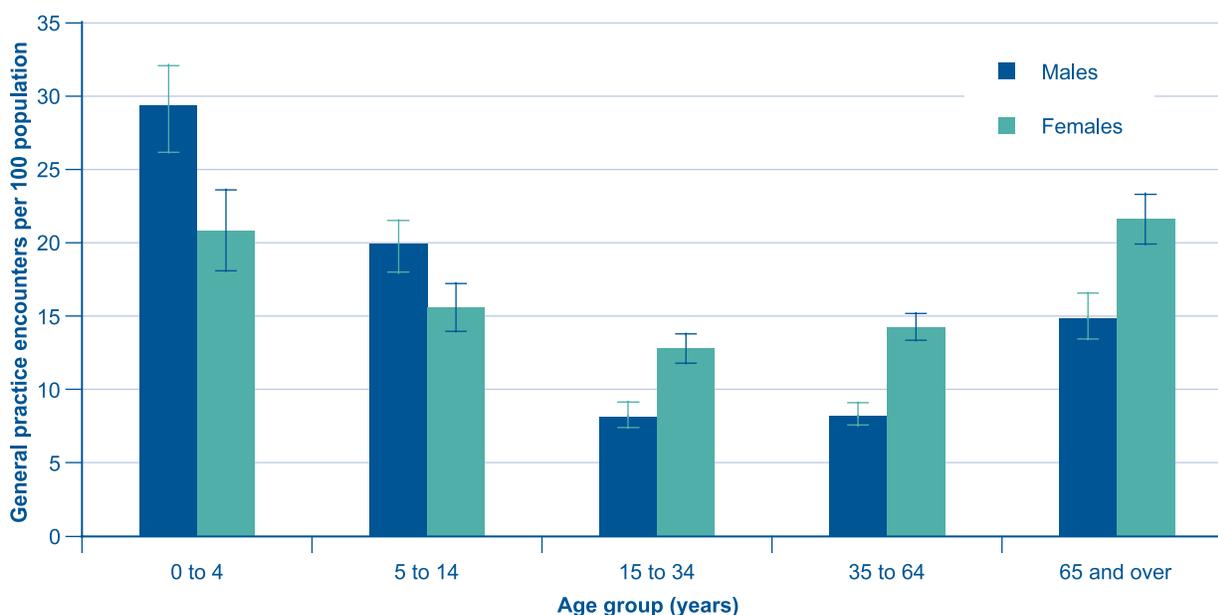
## Differentials in general practice encounters for asthma

### Age and sex

Among children, boys were more likely than girls to have an asthma-related general practice encounter. This trend was reversed after the age of 15 years, with females having more asthma-related general practice encounters (Figure 5.4), reflecting the change in asthma prevalence at this age. During 2001–04, males aged 0 to 4 years had the highest rate of asthma-related general practice encounters (29.3 per 100 population), followed by females aged 65 years and over (21.6 per 100 population) and 0 to 4 years (20.8 per 100 population), while males aged 15 to 34 years and 35 to 64 years had the lowest rates.

**Figure 5.4**

**General practice encounters for asthma per 100 population, by age group and sex, Australia, April 2001 to March 2004**

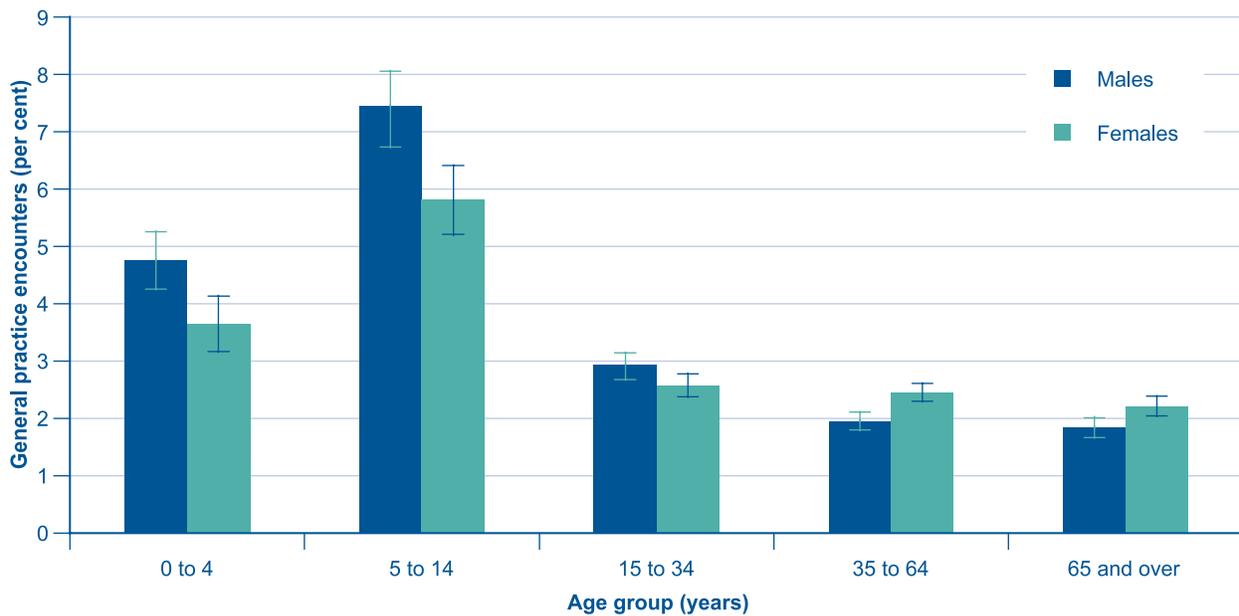


Note: Asthma classified according to ICP-2 PLUS codes: R96001–R96005, R96007, R96008.

Source: BEACH Survey of General Practice.

Asthma represented the largest proportion of general practice encounters among children aged 5 to 14 years (6.6%) and the smallest proportion among adults aged 65 years and over (2.1%) (Figure 5.5). Although the absolute rates of attendance for asthma were higher in children aged 0 to 4 years and adults aged 65 years and over, people in these age groups visited general practices relatively more commonly for reasons other than asthma.

**Figure 5.5**  
**Proportion of general practice encounters for asthma, by age group and sex, Australia, April 2001 to March 2004**



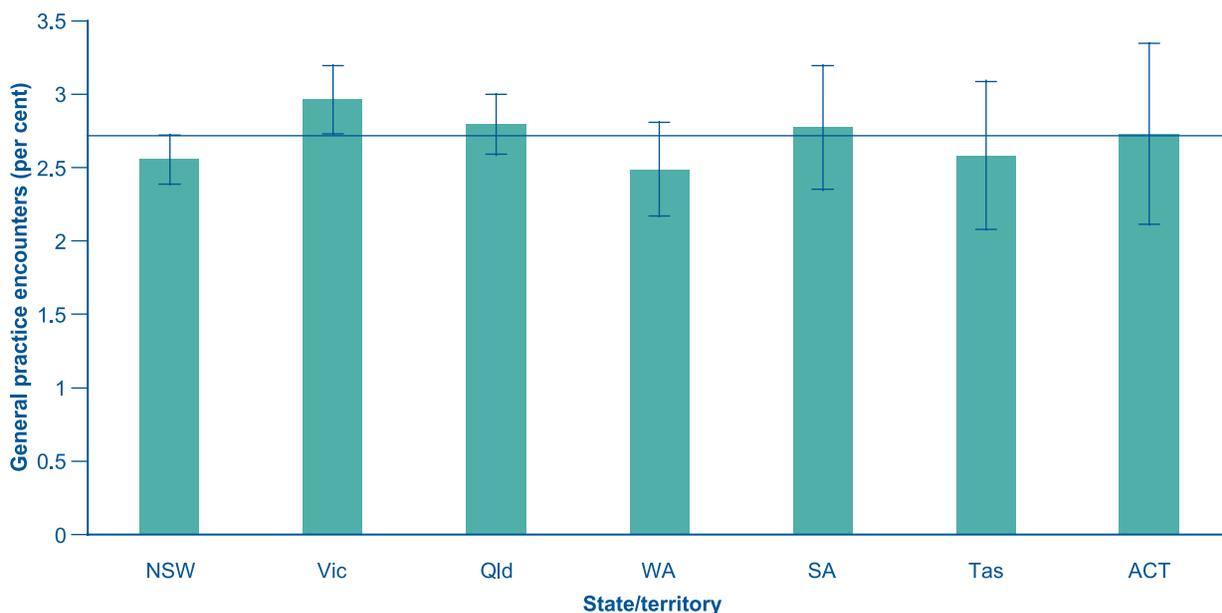
Note: Asthma classified according to ICPC-2 PLUS codes: R96001–R96005, R96007, R96008.

Source: BEACH Survey of General Practice.

### States and territories

There was little variation among the states and territories in the proportion of general practice encounters for asthma (Figure 5.6).

**Figure 5.6**  
**Proportion of general practice encounters for asthma, by state and territory, Australia, April 2001 to March 2004**



Note: Asthma classified according to ICPC-2 PLUS codes: R96001–R96005, R96007, R96008. Horizontal line represents the national average annual proportion of general practice encounters for asthma (2.7 per 100 general practice encounters). Data for Northern Territory excluded as the numbers are too small to produce reliable estimates.

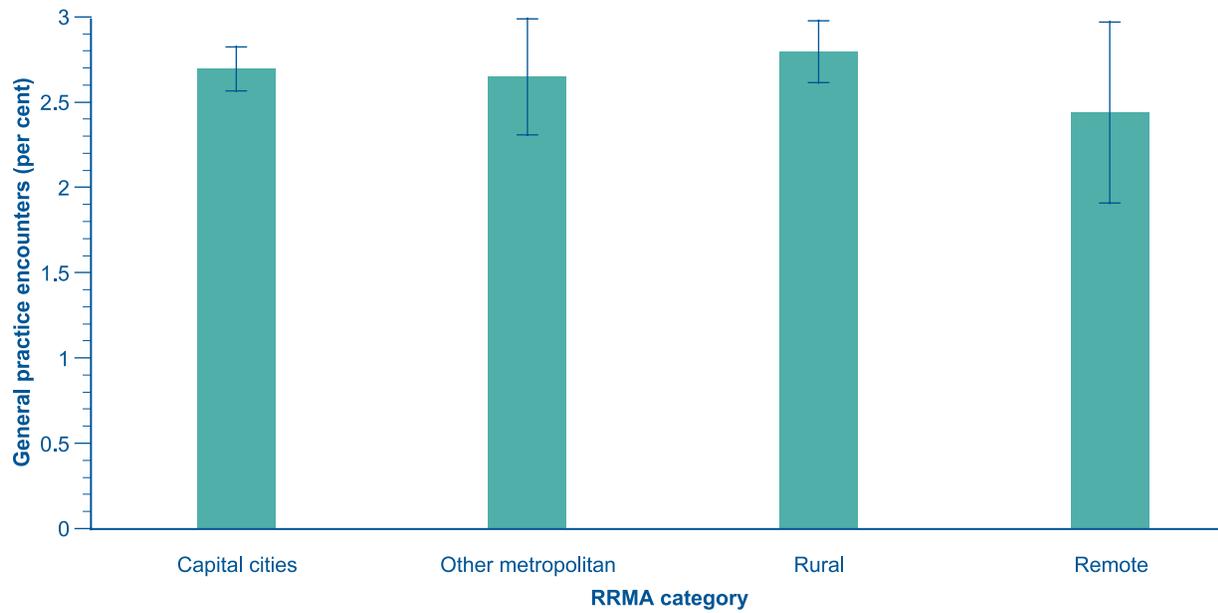
Source: BEACH Survey of General Practice.

### Urban, rural and remote areas

The rates for asthma-related general practice encounters did not differ across metropolitan, rural and remote regions in Australia for the period April 2001 to March 2004 (Figure 5.7).

**Figure 5.7**

**Proportion of general practice encounters for asthma, by remoteness, Australia, April 2001 to March 2004**



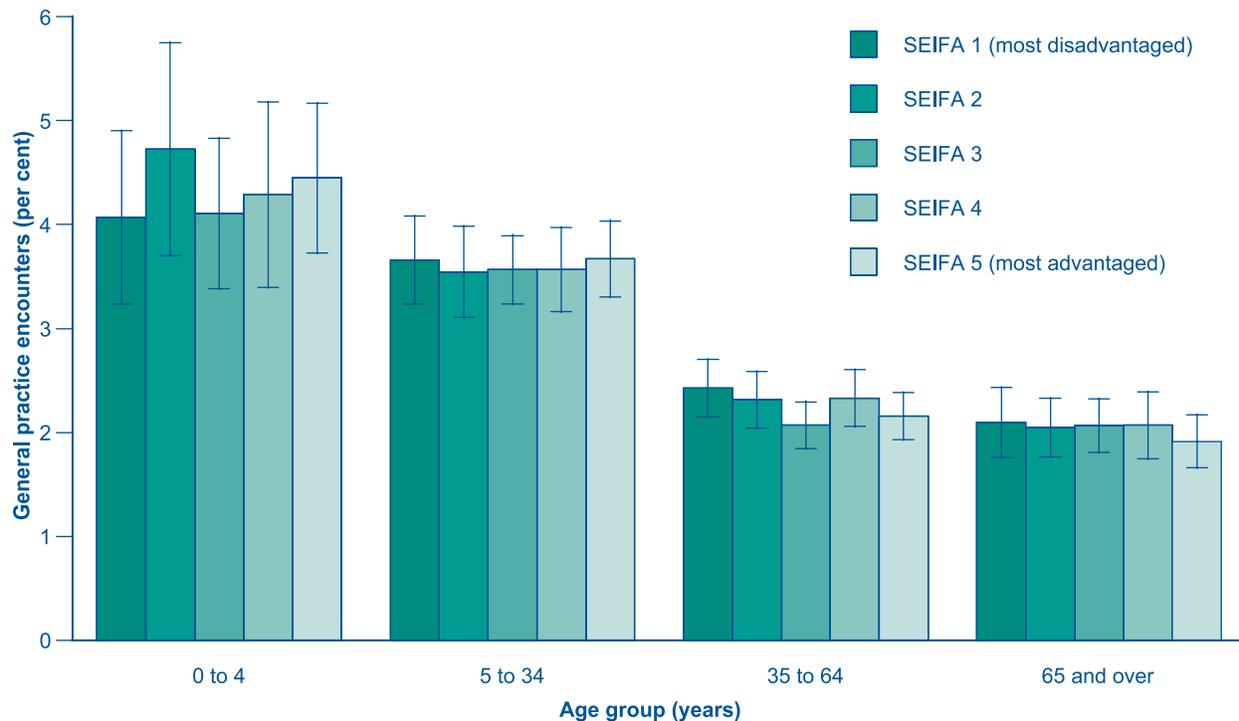
*Note:* Asthma classified according to ICP-2 PLUS codes: R96001–R96005, R96007, R96008. Remoteness is classified according to the rural, remote and metropolitan areas (RRMA) classification (see Appendix 1, Section A1.2).

*Source:* BEACH Survey of General Practice.

### Socioeconomic disadvantage

The proportion of all general practice encounters that were for asthma, in all age groups, was unrelated to levels of socioeconomic disadvantage in individuals' locality of residence during the period 2001–04 (Figure 5.8).

**Figure 5.8**  
**Proportion of general practice encounters for asthma, by age group and socioeconomic status, Australia, April 2001 to March 2004**



Note: Asthma classified according to ICPC-2 PLUS codes: R96001–R96005, R96007, R96008. Socioeconomic status is classified using the Socio-Economic Index For Areas (SEIFA), in which SEIFA 1 represents the most disadvantaged socioeconomic quintile and SEIFA 5 the most advantaged.

Source: BEACH Survey of General Practice.

### Asthma 3+ Visit Plan Practice Incentive Program claims

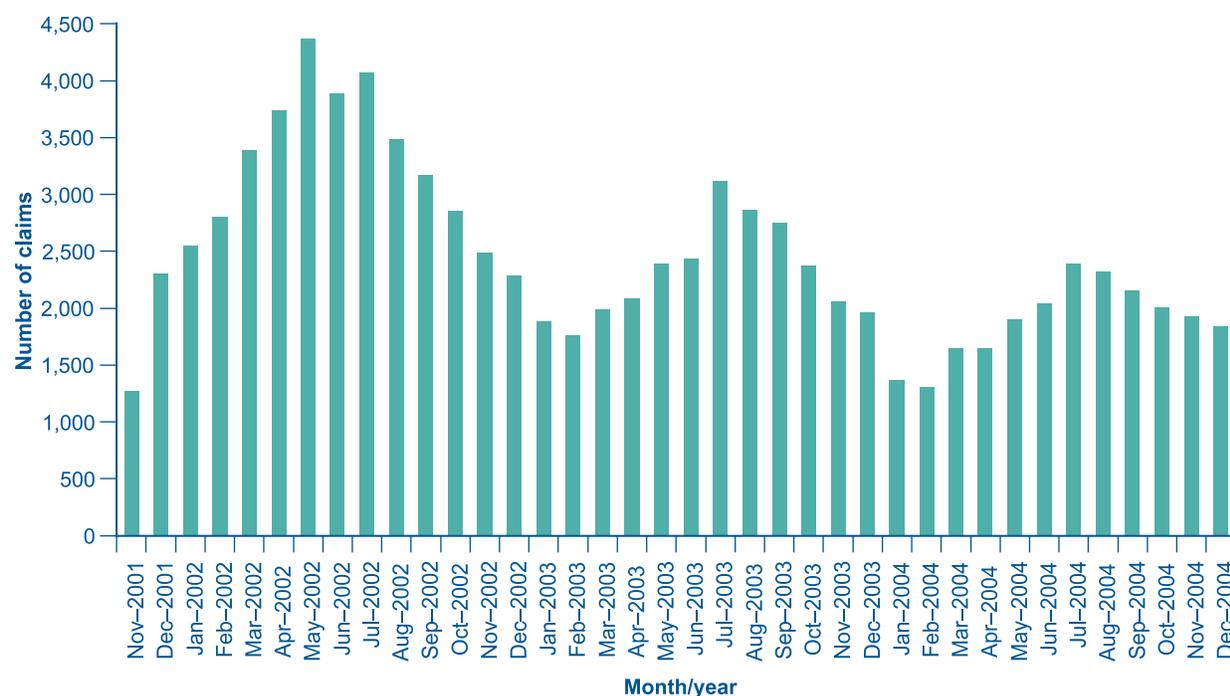
The Asthma 3+ Visit Plan Practice Incentive Program (PIP) is funded by the Australian Government. It is aimed at patients with moderate or severe asthma and entails the development and ongoing review of an asthma management plan over at least three general practice visits (DoHA 2002).

The program began in late 2001 and by the end of March 2005 96,903 Asthma 3+ Visit Plan claims had been lodged for 84,914 individuals. Overall, the number of people for whom at least one claim for an Asthma 3+ Visit Plan PIP payment had been made since November 2001 represents 3.9% of the estimated number of people with current asthma in Australia. Assuming that 32% of adults with current asthma have moderate or severe disease and 23% of children with asthma have frequent episodic or persistent disease (see Chapter 8, Table 8.6), it is estimated that 12.9% of people with asthma who are eligible for the scheme have had a least one claim for it. The number of claims for Asthma 3+ Visit Plan payments has steadily declined since 2002.

The rate of claims for payments under the scheme peaked in May and July 2002 (Figure 5.9). Seasonal fluctuations are observed in the number of claims made for Asthma 3+ Visit Plan payments, with higher rates in the winter months and lower rates in January and February. This is consistent with the overall rate of general practice consultations for asthma during these times.

**Figure 5.9**

**Number of Asthma 3+ Visit Plan PIP claims, all ages, Australia, November 2001 to December 2004**



Note: Claims are for asthma review visit classified codes 2546, 2547, 2552, 2553, 2558, 2559, 2664, 2666, 2668, 2673, 2675 & 2677.

Source: MBS statistics.

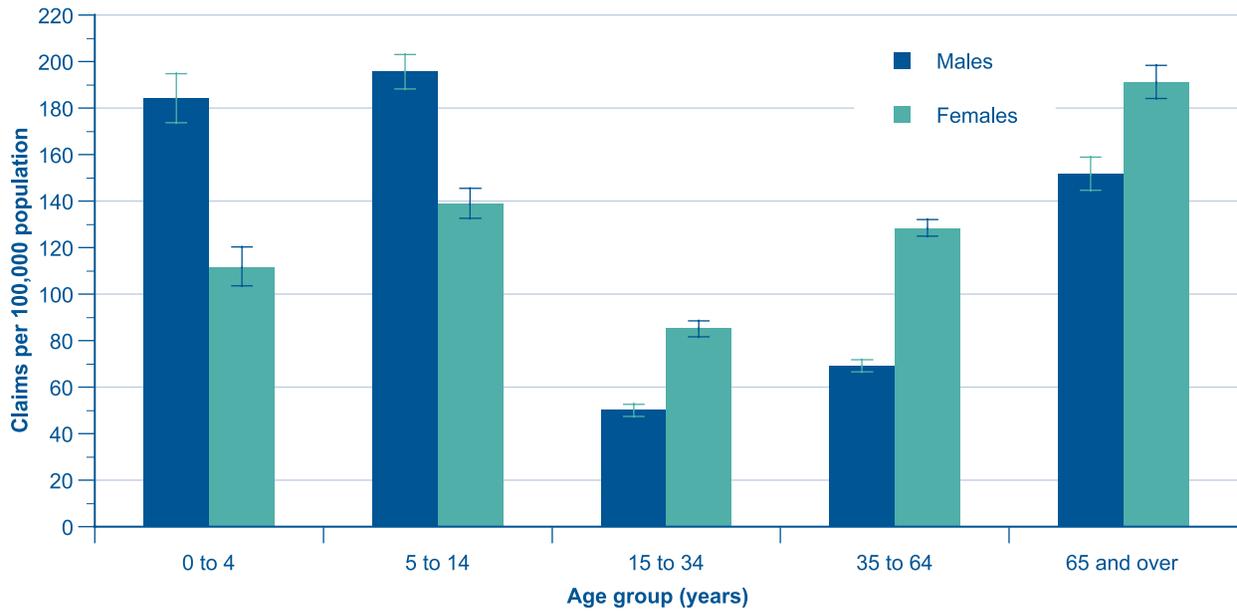
## Differentials in Asthma 3+ Visit Plan Practice Incentive Program claims

### Age and sex

Among children aged less than 15 years, Asthma 3+ Visit Plan PIP claims were higher for males than females in 2004 (Figure 5.10), consistent with the higher prevalence of asthma in males in this age group. The reverse differential was evident among persons aged 15 years and over. The rate of claims was highest in females aged 65 years and over and males aged 5 to 14 years. This age and gender pattern is similar to that observed for general practice consultations for asthma (Figure 5.4), except that the rate of Asthma 3+ Visit Plan claims among persons aged 65 years and over is relatively higher and the rate of claims for persons aged less than 5 years is relatively lower. Among people with asthma, young adults were least likely to have utilised the Asthma 3+Visit Plan (Figure 5.11).

**Figure 5.10**

**Asthma 3+ Visit Plan PIP claims per 100,000 population, by age group and sex, Australia, 2004**

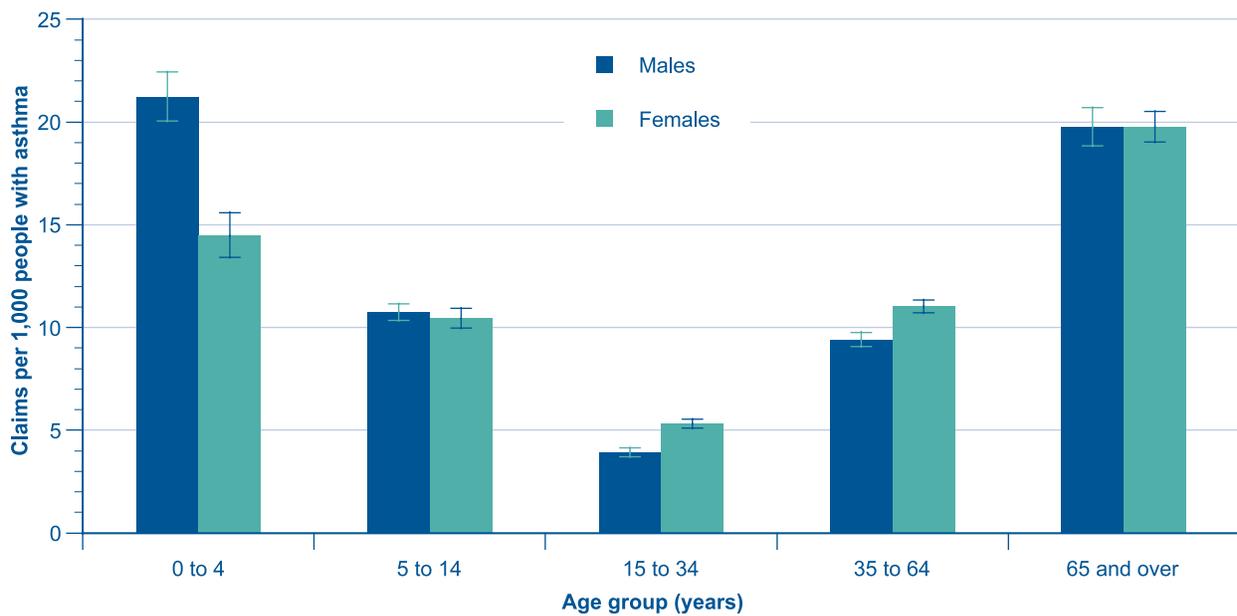


Note: Claims are for asthma review visit classified codes 2546, 2547, 2552, 2553, 2558, 2559, 2664, 2666, 2668, 2673, 2675 & 2677.

Sources: MBS statistics; Australian Bureau of Statistics.

**Figure 5.11**

**Asthma 3+ Visit Plan PIP claims per 1,000 people with asthma, Australia, 2004**



Note: Claims are for asthma review visit classified codes 2546, 2547, 2552, 2553, 2558, 2559, 2664, 2666, 2668, 2673, 2675 & 2677. Current asthma prevalence rates for each age group were estimated using the 2001 National Health Survey prevalence estimates and 2004 population estimates from the Australian Bureau of Statistics.

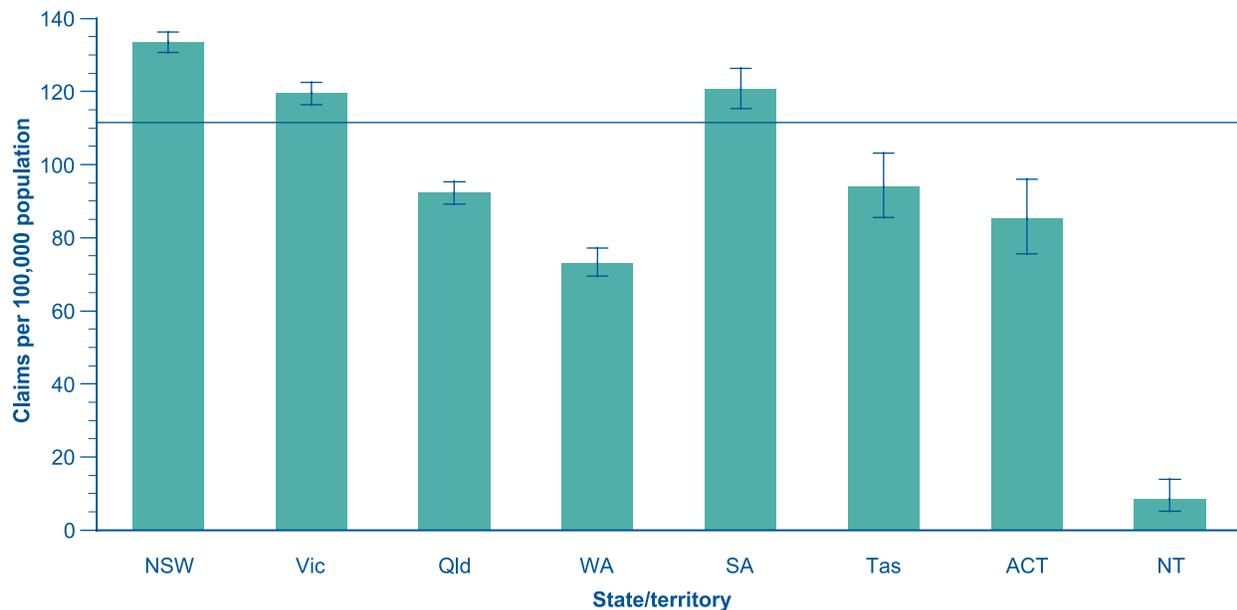
Sources: MBS statistics; ABS National Health Survey 2001; Australian Bureau of Statistics.

## States and territories

During 2004, the rate of claims for Asthma 3+ Visit Plan payments was highest in New South Wales and South Australia. In Queensland, Western Australia, Tasmania, the Australian Capital Territory and the Northern Territory, the rate was significantly lower than the national average (Figure 5.12). This variation in utilisation of the Asthma 3+ Visit Plan contrasts with the lack of variation among the states and territories in the overall rates of GP consultations for asthma (Figure 5.6).

**Figure 5.12**

**Asthma 3+ Visit Plan PIP claims per 100,000 population, by state and territory, Australia, 2004**



Note: Claims are for asthma review visits classified codes 2546, 2547, 2552, 2553, 2558, 2559, 2664, 2666, 2668, 2673, 2675 and 2677. Horizontal line represents the Australian rate of Asthma 3+ Visit Plan PIP claims (112 per 100,000 population).

Sources: MBS statistics; Australian Bureau of Statistics.

## Summary

The highest rate of asthma-related general practice encounters was seen in boys aged 0 to 4 years and the lowest rate was among males aged 15 to 64 years. Over the last 6 years, the rate of general practice encounters for asthma decreased from 17 per 100 population per year to 12 encounters per 100 population per year. This decline was most noticeable in the 0 to 4 year age group. There was no evidence of variation in the rate of general practice encounters for asthma according to remoteness or level of socioeconomic disadvantage. The age and gender distribution of claims for the Asthma 3+ Visit Plan followed a similar pattern, except that there were relatively more claims for people aged 65 years and over. Rates of Asthma 3+ Visit Plans claims have decreased since 2002 and have occurred in 3.9% of the estimated number of people with asthma since the introduction of the scheme.