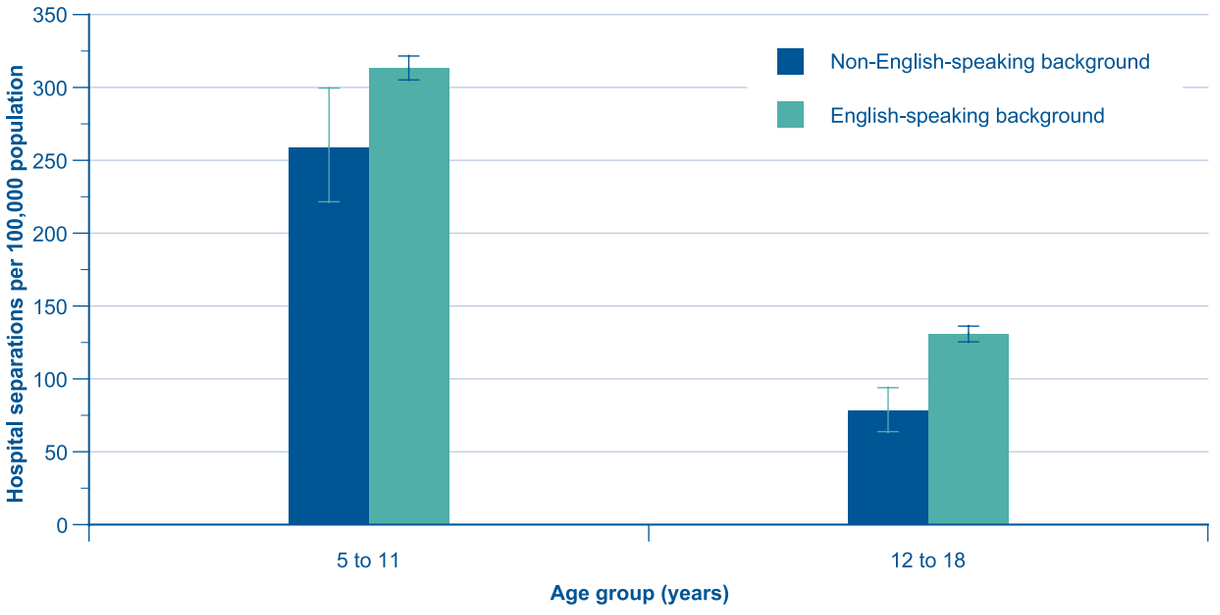
Figure 2.20
Hospital separations for asthma per 100,000 population, by age group and English-speaking versus non-English-speaking background, children aged 5 to 18 years, Australia, 2002–03



Note: Asthma classified according to ICD-10-AM codes J45 & J46. For definition of non-English-speaking background and English-speaking background see Glossary.

Sources: AIHW National Hospital Morbidity Database; Australian Bureau of Statistics.

2.3 Management of asthma in children

In this section, data from the Australian Bureau of Statistics 2001 National Health Survey have been analysed to investigate two aspects of the management of asthma in children: the possession of written asthma action plans and the use of asthma medications.

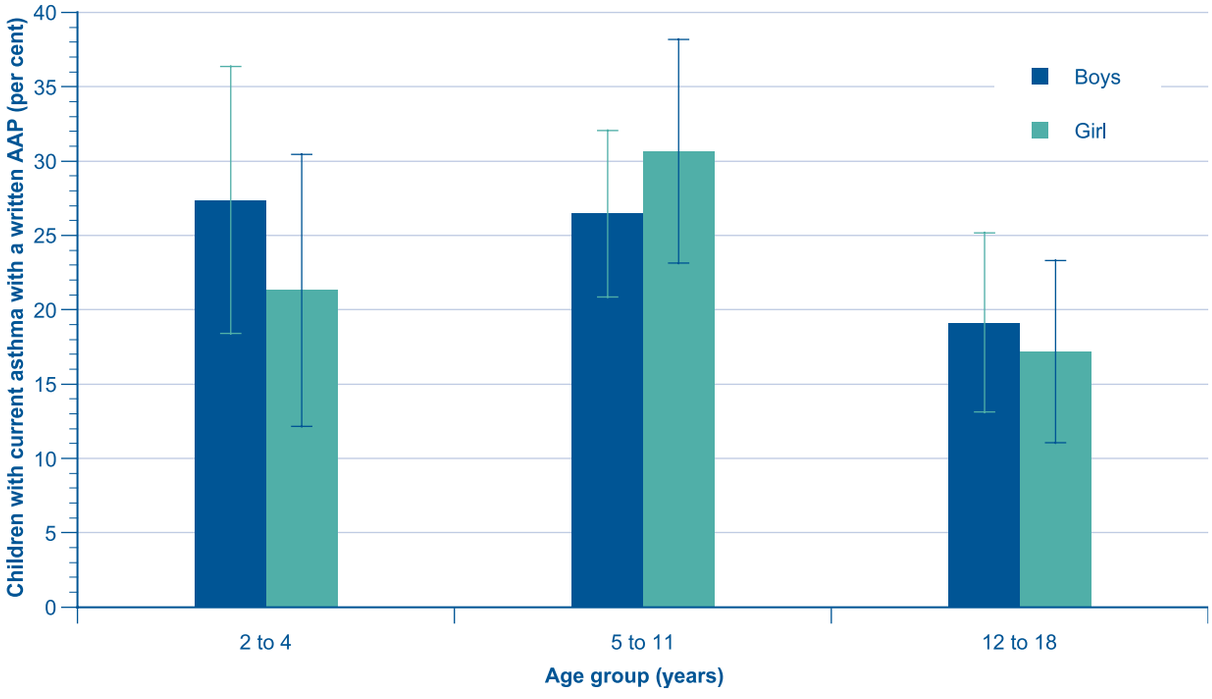
Written asthma action plans

Evidence from randomised controlled trials suggests that possession of written asthma action plans improves asthma outcomes, particularly if they have key components such as 2 to 4 action points and incorporate the use of inhaled and oral corticosteroid medication (Gibson & Powell 2004). A study conducted in Perth, Western Australia, found that the possession of a written asthma action plan was associated with a reduction in the number of ED visits or hospital admissions due to wheezing or asthma in schoolchildren aged 6 to 7 years (Palmer et al. 2004). Despite this, health survey data suggest that possession of written asthma action plans, while higher among children than adults, is quite low. According to data from the ABS 2001 National Health Survey, 23.6% (95% CI 20.8–26.4%) of children aged 0 to 18 years with current asthma possessed a written asthma action plan (National Health Survey 2001 (CURF)). In the Australian Capital Territory, 23.2% of new entrant primary school children aged 4 to 6 years with asthma reported that they had written asthma action plans (Glasgow et al. 2003). Rates from the New South Wales Health survey were higher, with 43.6% (95% CI 40.1–47.2%) of children aged 2 to 12 years with asthma reporting that they had written asthma action plans (Centre for Epidemiology and Research 2002).

Girls aged 5 to 11 years reported the highest rate of possession of written asthma action plans. However, this was only 30% of girls with asthma in that age group. Less than 1 in 5 of young people aged 12 to 18 years reported possession of a written asthma action plan (Figure 2.21).

Figure 2.21

Proportion with current asthma with a written asthma action plan (AAP), by age group and sex, children aged 2 to 18 years, Australia, 2001



Source: ABS National Health Survey 2001.

Medication use

In New South Wales, 59.4% of children aged 2 to 12 years with current asthma reported using a preventer medication (such as inhaled corticosteroids and cromones) in the last month. However, only 47.9% had used this medication every day or most days (Centre for Epidemiology and Research 2002). Among 6 to 7 year old children living in Melbourne in 2002, 14.1% of those with any recent wheeze and 40.9% of those with frequent wheeze were using inhaled corticosteroid as regular treatment (Robertson et al. 2004). These proportions had not changed significantly since a similar survey was conducted in 1993.

It is difficult to assess the importance of these findings without further information on the relation between treatment and the nature of asthma in individuals. Only a minority of children with asthma should be taking inhaled corticosteroids. Regular therapy with inhaled corticosteroids, leukotriene receptor antagonist or cromones is recommended for children with mild persistent asthma and children with frequent episodic asthma. Those with moderate or severe persistent asthma should be treated with inhaled corticosteroids.

Summary

Asthma is a common health complaint among Australian children. There is a substantial burden of health care utilisation attributable to asthma, especially in younger children. Fortunately, there is some evidence that this burden is decreasing slightly and, when hospital admission does occur, it is predominantly of pre-school-aged children and is almost always very brief. The marked week-to-week variation in rates of emergency department visits for asthma implies an important role for variable environmental triggers in causing disease exacerbations. High rates in winter and 2–4 weeks after return to school may be attributable to transmission of viral infections, which are the predominant cause of exacerbations of asthma in children. Potential strategies to prevent or control exacerbations, such as written asthma action plans and use of preventer medications, seem to be utilised by a minority of children with asthma. The potential benefit to be gained by optimising usage of these management strategies cannot be ascertained from the available data.