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Foreword

The Australian Health Ministers declared asthma as the sixth National Health Priority Area in 1999. A positive outcome of that initiative was the establishment of the Australian System for Monitoring Asthma. The system has enabled placement in the public domain of a range of reliable, up-to-date and useful information about asthma, including this report.

The first baseline *Asthma in Australia* report, released by the Australian Institute of Health and Welfare in 2003, was the most authoritative national report of its kind. It not only presented the most recent statistics available; it also pointed to the strengths and weaknesses of our existing asthma programs, while highlighting potentially fruitful areas of intervention.

The challenge in 2005 was not only to update the vast amount of information contained in the preceding report, but also to make new information and statistics available with a considered perspective of the underlying trends in Australia.

In that vein, the headline numbers in this second report not only indicate a degree of stability in the prevalence of asthma in Australia, but also a continuing decline in mortality. This is undoubtedly good news, but areas of continuing concern remain. In particular, there is evidence that inhaled corticosteroids, which have the potential to do much good for people with asthma, are not well targeted. In particular, many people with asthma who would benefit from using inhaled corticosteroids are not using them and some people are using them at higher doses than is necessary. For more information you will of course have to read the report.

Asthma in Australia 2005 was prepared by the Australian Centre for Asthma Monitoring, a collaborating unit of the Australian Institute of Health and Welfare based at the Woolcock Institute of Medical Research in Sydney. The authors have accessed a wide range of administrative and research data collections held by federal and state and territory agencies, as well as other published data. In the process, several difficult asthma-related data issues, some highly controversial, have been addressed.

The preparation of the report was overseen by a management committee headed by Professor Peter Gibson of the University of Newcastle. The input of committee members in the preparation of the report is gratefully acknowledged.

We also acknowledge the support of the Australian Government Department of Health and Ageing for funding the Australian System for Monitoring Asthma, which includes the preparation and production of this report.

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Highlights

This report brings together data from a wide range of sources to describe the status of asthma in Australia in 2005. It provides information about the number of people who have asthma, who receive various treatments for asthma, who visit their GP or hospitals, or who die due to asthma. It also contains information about the impact of asthma on quality of life, the relationship of asthma to smoking, and how much expenditure there is on health care for asthma in Australia.

The findings of this report confirm that asthma continues to be a common chronic condition among Australians, particularly children. However, over the past five to 10 years, there has been a substantial decline in deaths and hospitalisations for asthma and also in rates of GP consultation for asthma. This has been accompanied by changes in the nature of drug treatment for asthma, and by an increase in expenditure on asthma, particularly for pharmaceuticals.

There is scope for improvement. Many children with asthma have been placed at risk by exposure to environmental tobacco smoke in their homes. There is variation between sections of the community in the outcomes of asthma. Aboriginal and Torres Strait Islander Australians, people from non-English-speaking backgrounds and those living in rural or remote areas and in areas of relative socioeconomic disadvantage fare worse in some aspects of asthma care and outcomes. Overall, inhaled corticosteroid therapy, the cornerstone of drug therapy for asthma, is not optimally targeted. Some people who would benefit from using this treatment regularly are not doing so and others are receiving doses that are higher than they need, with a consequent risk of long-term side effects. Only 3.9% of all people with asthma have used the Asthma 3+ Visit Plan, which was introduced to improve structured care for people with moderate or severe asthma in the general practice setting.

Key findings of the report are as follows.

Who is affected by asthma?

- A significant proportion of the Australian population has asthma. Asthma affects 14–16% of children and 10–12% of adults. These rates are high by international standards.

- The prevalence of asthma in Australia increased through the 1980s and 1990s, but evidence suggests there has been no further increase in recent years.
- In primary school-aged children, asthma is more common among boys than among girls. After teenage years, more women have asthma than men.
- Asthma is more common among Indigenous Australians, particularly adults, than among other Australians.
- Asthma is less common among Australians who were born in non-English-speaking countries than among other Australians.

Deaths due to asthma

- The number of deaths due to asthma has continued to decline. In 2003, 314 people died from asthma, representing 0.3% of all deaths. Asthma deaths have decreased in Australia since the early 1980s, but the rate of asthma deaths in Australia is still high in comparison to other countries.
- The risk of dying from asthma is highest in the elderly; however, asthma deaths occur in all age groups.
- Asthma deaths are also more common among people living in less well-off localities in Australia.

Use of health care facilities and services by people with asthma

- Children aged 0 to 4 years are the group that most commonly visits general practitioners or emergency departments or is hospitalised for asthma.
- Since the 1990s, there has been a decline in the rate of general practice visits and hospitalisations for asthma in all age groups. The fall has been most pronounced in children.
- The Asthma 3+ Visit Plan is an incentive scheme designed to promote structured asthma care in general practice. It targets people with moderate or severe asthma. Since its introduction in 2001,

it is estimated that 3.9% of all people with asthma, or 12.9% of people with moderate or severe asthma, have utilised this service.

- Children more frequently attend emergency departments for asthma in the few weeks after the beginning of each school term. On some occasions the rate increases by over 50% at this time. This may be due to increased spread of respiratory infections when children go back to school.
- Aboriginal and Torres Strait Islander Australians have higher rates of hospitalisation for asthma than other Australians. Rates are also higher in people living in remote areas and people living in less well-off localities.
- Hospitalisations for asthma in children are usually very brief (typically one day).
- Very few people admitted to hospital with asthma require treatment with a life support machine.
- Approximately 8% of people who are treated for asthma at an emergency department or in hospital re-attended within 28 days. Re-attendance rates are lower in children and in those aged over 65 years, than in other adults.

Medical care for people with asthma

- Written asthma action plans have been shown to greatly improve the outcomes of asthma and reduce attacks. Despite this, very few children or adults with asthma have these plans.
- Regular use of inhaled corticosteroids can reduce asthma symptoms and prevent severe episodes of worsening of asthma, yet many people who would benefit from using them regularly are not doing so.
- Among those who do use inhaled corticosteroids, some may be taking a higher dose than needed to control their asthma.
- Formulations of inhaled medication which combine inhaled corticosteroids with a long-acting bronchodilator have been available in Australia since 2000. By 2004, 64% of prescribed inhaled corticosteroids were in these combined formulations.

Smoking and asthma

- Despite the known additional health risks, just as many people with asthma smoke as people without asthma. Rates of smoking among people with asthma are highest in young adults and those who live in less well-off localities.
- Overall, around 40% of children who have asthma live with smokers and are likely to be exposed to passive smoke. In less well-off localities, more children with asthma than children without asthma live with smokers.

Impact of asthma on quality of life

- People with asthma report poorer general health and quality of life than people without asthma.
- More people with asthma suffer with anxiety and depression than people without asthma.
- Disturbed sleep is a common problem among both adults and children with asthma.

Expenditure on asthma

- In the 2000–01 financial year, direct health expenditure on asthma was \$693 million, which represented 1.4% of total allocated health expenditure.
- The proportion of total health expenditure on asthma is highest among children, particularly boys aged 5 to 14 years, where it was 5.5% of annual health expenditure for that age group in 2000–01.
- More than half of expenditure on asthma is attributable to pharmaceuticals.
- Per capita health expenditure on asthma increased by 21% between 1993–94 and 2000–01 (adjusted for inflation). This was less than the 26% increase in overall health care expenditure over the same period.

