

Overview of Asthma

HIGHLIGHTS

- In Canada, an estimated 10% of children and 5% of adults have active asthma, making it one of the most common chronic illnesses.
 - Asthma is responsible for approximately 43,000 hospitalizations and 500 deaths in Canada each year.
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INTRODUCTION

Asthma is a condition that results in chronic inflammation of the airways. When the bronchial tubes in the lungs become inflamed and swollen, airflow to the lungs becomes blocked. This blockage causes symptoms such as wheezing, coughing, tightness in the chest, shortness of breath and an increased production of mucus. The severity of asthma symptoms can range from mild to life-threatening. Asthma is not always easy to diagnose because its symptoms can be similar to other respiratory conditions.

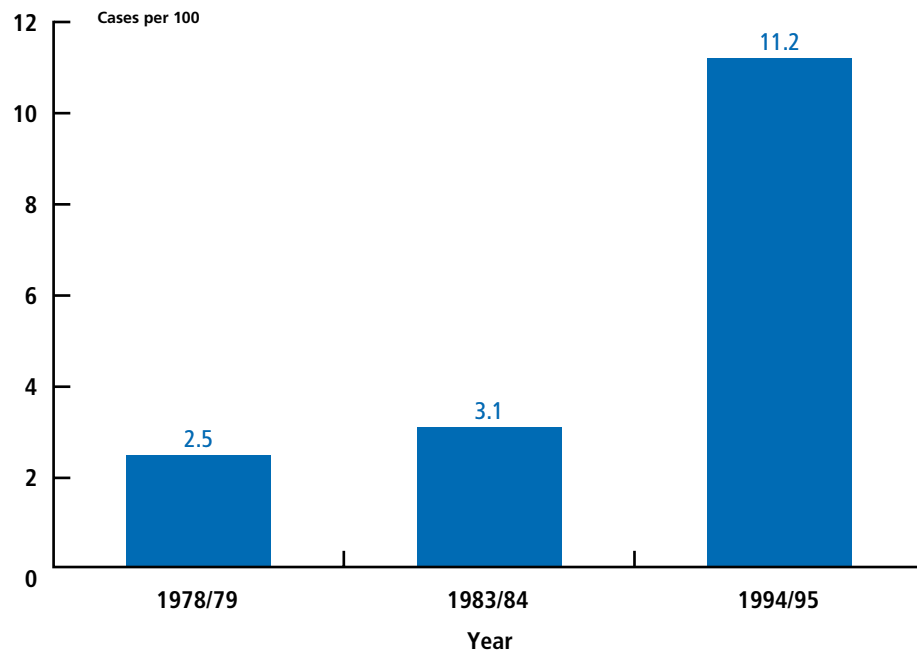
ASTHMA IN ONTARIO AND CANADA

Currently, asthma is one of the most prevalent chronic conditions in Canada. In 1997, over 2.2 million Canadians were diagnosed with asthma by a physician.¹ In the 1996/97 *National Population Health Survey* it was estimated that 10% of Canadian children and 5% of adults had “active” asthma.² Canadians were defined as having active asthma if they had asthma diagnosed by a physician, and were either on medication for asthma or had experienced asthma symptoms or attacks in the past 12 months. Over the past two decades, the percentage of children with self-reported asthma appears to have increased from 2.5% in 1978/79 to 11.2% in 1994/95 (see *Figure 1 on the following page*).³ Changes in awareness and diagnosis of asthma may have contributed to this increase.

Asthma is responsible for approximately 43,000 hospital admissions and approximately 500 deaths in Canada every year.^{4,5} These morbidity and mortality statistics measure only the most severe impacts of asthma. In order to determine the full burden of illness related to asthma, data would also need to be obtained on family doctor, clinic and emergency department visits, as well as on symptoms that do not lead to the use of health services.

Between 1995 and 1996, a national study on childhood asthma was conducted in sentinel health units across Canada. The study reported that 13% of children between the ages of five and 19 years had been diagnosed with “current” asthma. Children were described as having current asthma if they had been diagnosed with asthma by a physician and had one or more

Figure 1: Prevalence of Asthma Among Children Aged 0–14 Years, Canada, 1978–1995



Sources: 1978/79 Canada Health Survey; 1983/84 Canadian Health and Disability Survey; 1994/95 National Longitudinal Survey of Children and Youth (for ages 0 to 11); 1994/95 National Population Health Survey (for ages 12 to 14). Adapted from Millar WJ, Hill GB. Childhood asthma. Health Reports 1998, 10(3):9-21.

of the following characteristics in the past 12 months: wheezing or whistling in the chest, an asthma attack or had taken asthma medication. Two Ontario cities in the study (Kingston and Guelph) had reported asthma rates in children aged five to 19 years of 16% and 11% respectively.⁶

Of the Canadian children who had current asthma:

- 69% had an asthma attack in the past 12 months and 4% had one or more asthma attacks per week,
- 90% had taken medication for asthma in the past 12 months,
- 64% had sleep disturbances and 7% experienced these disturbances more than once a week on average,
- 19% had visited an emergency department in the past 12 months,
- 4% had spent the night in hospital, and
- 16% had missed more than a week of school.

In the 1998/99 *National Population Health Survey*, 10% of Ontario children aged four to 19 and 7% of Ontario adults reported having been diagnosed with asthma by a physician. In the 1996/97 *National Population Health Survey*, nearly 49,000 Ontarians with asthma reported that their activities at home, school or work were limited by their asthma.

In the same survey, 18 per cent of asthma sufferers reported they had visited an emergency room in the past year for asthma-related symptoms. In 1996, 192 deaths were directly attributed to asthma in Ontario.¹