

Pediatric Asthma

Backgrounder

Definition of asthma

- Asthma is a chronic lung condition caused by inflammation of the respiratory tract. Asthma may develop at any age.
- Some of the triggers that cause or aggravate asthma are colds, respiratory tract infections, exercise, pollen (grass, trees, weeds), tobacco smoke, dust, cold air, strong odours, pets, molds and pollution.
- Asthma symptoms include frequent bouts of shortness of breath with wheezing, coughing and feelings of pressure in the chest.
- Asthma patients may have reactions ranging from slight to severe.

Prevalence of asthma in children

- Cases of asthma in children have increased in the last 15 years: close to ten per cent of Canadian children under four years old have asthma.¹
- Asthma is the most common chronic respiratory ailment in children.
- In 50 per cent of all asthma cases, the age of onset is 2, while 80 per cent of all asthmatics will have their first symptoms by age 5.²
- In Canada, nearly 500,000 children and teens ranging in age from 0 to 19 have asthma.³

Impact on quality of life

- Asthma symptoms are more frequent in children, causing a great deal of concern to parents.
- Poorly controlled asthma is the major cause of hospitalization, emergency room visits, emergency treatment, absenteeism and of limitation of activity related to the illness.

Economic impact

- Asthma is responsible for 25 per cent of school absences.⁴
- Asthma is the leading cause of hospitalization in children. More than 60 per cent of all hospitalizations linked to asthma in children and adolescents under the age of 20 occur in children aged 0 to 4.⁵

Treatment

- Asthma cannot be cured but it can be controlled with appropriate treatment.
- Treatments for controlling asthma are divided into two major families of drugs: anti-inflammatories and bronchodilators.
- Anti-inflammatories prevent and reduce inflammation and swelling of the airways and the production of mucus caused by the asthma triggers. They must be taken on a regular basis.
- Anti-inflammatories are divided into three treatment classes: steroids that include corticosteroids, non-steroidal drugs and leukotriene receptor antagonists, a newer class of treatment.
- Singulair® (montelukast sodium), a leukotriene receptor antagonist, is the first once-a-day chewable tablet approved for toddlers with asthma as young as two years old.
- Bronchodilators are emergency medications used to treat rapid bronchoconstriction caused by asthma triggers. This medication should only be used as needed and is rarely indicated on a regular basis.

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References:

- ¹ National Population Health Survey, 1996-1997.
- ² American Thoracic Society
- ³ Asthma Society of Canada
- ⁴ Canadian Lung Association
- ⁵ *Asthma Hospitalizations*, Health Canada, Laboratory Centre for Disease Control, 1995-1996