

Asthma Facts and Statistics FAQs

What is Asthma?

Asthma is a disease of the lungs in which the airways become blocked or narrowed causing breathing difficulty. This chronic disease affects more than 3 million people in Canada¹. Asthma is commonly divided into two types: allergic (extrinsic) asthma and non-allergic (intrinsic) asthma. There is still much research that needs to be done to fully understand how to prevent, treat and cure asthma. Even though most asthmatics do not die as a result of the disease, they may spend part of their daily lives coping with the symptoms. But, with proper management, people can live healthy and active lives.

Who is affected by asthma?

Asthma affects people all over the world and of all ages. In Canada, asthma accounts for approximately 80% of chronic disease cases², making asthma the third-most common chronic disease in Canada³. Those most affected in Canada are children and asthma continues to be a major cause of hospitalization for children in Canada⁴.

- It is estimated that over 3 million people in Canada currently suffer from asthma;⁵ approximately 600,000 of those are children under the age of 12⁶
- Asthma is the most common chronic disease among children⁷.
- 12 Canadians are diagnosed with asthma every hour⁸
- Severe Asthma (SA), a greater threat to health, impacts between 150,000 and 250,000 Canadians⁹
 - ◆ Severe Asthma is defined as continued asthma symptoms, frequent worsening of asthma symptoms, and attacks among patients who take multiple asthma medicines with a high degree of compliance and good trigger management¹⁰

Is asthma fatal? Are people dying from it?

- Unlike many other diseases, asthma is considered chronic which means that most people with asthma live a long time with their disease, coping with their symptoms. Despite advances in understanding the disease, and the availability of more efficacious medications, asthma is still a major cause of morbidity. This is often a result of under-diagnosis, under-treatment, lack of public understanding and knowledge about the disease, and inadequate asthma supervision.¹¹
- In Canada, approximately 250 people die each year from asthma.¹²
- It is estimated that more than 80 per cent of asthma deaths could be prevented with proper asthma education.¹³

1 Severe Asthma: The Canadian Patient Journey – A study of the personal, social, medical and economic burden of Severe Asthma in Canada, Asthma Society of Canada, 2014, pg. 6.

2 Public Health Agency of Canada (2007). Life and breath: Respiratory disease in Canada. Ottawa ON

3 Severe Asthma: The Canadian Patient Journey – A study of the personal, social, medical and economic burden of Severe Asthma in Canada, Asthma Society of Canada, 2014, pg. 6.

4 Public Health Agency of Canada (2007). Life and breath: Respiratory disease in Canada. Ottawa ON

5 Conference Board of Canada (2012), Cost Risk Analysis for Chronic Lung Disease in Canada

6 Severe Asthma: The Canadian Patient Journey – A study of the personal, social, medical and economic burden of Severe Asthma in Canada, Asthma Society of Canada, 2014, pg. 6.

7 <http://www.who.int/mediacentre/factsheets/fs307/en/index.html>

8 Extrapolated numbers based off findings in Severe Asthma Study (2014) and the steady increase in the diagnosis of Asthma each year in the Canadian Community Health Survey (2014), Asthma, Statistics Canada

9 Severe Asthma: The Canadian Patient Journey – A study of the personal, social, medical and economic burden of Severe Asthma in Canada, Asthma Society of Canada, 2014, pg. 6.

10 Severe Asthma: The Canadian Patient Journey – A study of the personal, social, medical and economic burden of Severe Asthma in Canada, Asthma Society of Canada, 2014, pg. 6, 8, 11

11 Statistics Canada. Millar, Wayne J. and Gerry B Hill. Childhood Asthma, Health Reports, Vol. 10, No. 3 (Winter 1998); P. 12

12 Conference Board of Canada (2012), Cost Risk Analysis for Chronic Lung Disease in Canada

13 Institute for Clinical Evaluative Services in Ontario (ICES) 196. ICES Practice Atlas (second edition), June 1996

Economic Impact

- Asthma often affects quality of life, as it results in time away from school, work, or other activities. Asthma is the leading cause of absenteeism from school and the third leading cause of work loss through both absenteeism and presenteeism¹⁴
- The direct costs of asthma, including hospitalization, healthcare professional services and medication and indirect costs, including decreased productivity, are estimated at \$2.1 billion annually^{15, 16, 17}
- In 2015, asthma attacks resulted in over 70,000 emergency room visits¹⁸. Approximately 250 Canadians die each year from asthma¹⁹
- Many asthma patients cannot afford the cost of their medication. 33.7% of respondents from the Severe Asthma Study reported to have, at some point, skipped filling a prescribed medication because they could not afford it. 21.1% of respondents indicated they missed a dosage because they could not afford it²⁰
- Many insurance carriers do not provide complete coverage to asthma patients. In a study conducted by the Asthma Society of Canada, most respondents (74.4%) with Severe Asthma have been denied coverage for recommended treatment options by insurance programs²¹

Environmental Impact

- It is estimated that coal-based electricity will lead to 120,000 asthma episodes in Canada from the years 2015 to 2035. 104,000 of those incidents are projected to occur in the Prairies, where most coal-based power is produced²²
- In 2014 alone, emissions from coal power has led to 20,871 Asthma episodes and has costed the Canadian economy \$816 million in health outcomes²³
- An accelerated phase-out of coal power between now and 2030 will translate in the avoidance of approximately 80,000 asthma episodes and two millions days of breathing difficulty and reduced activity²⁴
- Switching from coal based powers to more renewable options has already yielded many benefits in provinces like Ontario, where the total number of smog days have been reduced from 53 in 2005 to zero in 2015²⁵

14 Harrison, B.W.D. and M.G. Pearson. "Audit in acute severe asthma – Who benefits?" Journal of Royal College of Physicians of London, 1992, 27: 387-90.

15 Lung disease imposes major costs on Canada's Economy. The Conference Board of Canada, New Release. March 15, 2012. http://www.conferenceboard.ca/press/newsrelease/12-03-15/lung_disease_imposes_major_costs_on_canada_s_economy.aspx

16 Severe Asthma: The Canadian Patient Journey – A study of the personal, social, medical and economic burden of Severe Asthma in Canada, Asthma Society of Canada, 2014, pg.9

17 Cost Risk Analysis for Chronic Lung Disease in Canada, The Conference Board of Canada, Louis Theriault, Gregory Hermus, Danielle Goldfarb, Carole Stonebridge, Fares Bounajm, March 15 2012 <http://www.conferenceboard.ca/e-library/abstract.aspx?did=4585>

18 Canadian Institute for Health Information: Asthma Emergency Department Visits: Volume and Median Length of Stay, 2014-2015, <http://indicatorlibrary.cihi.ca/display/HSPIL/Asthma+Emergency+Department+Visits%3A+Volume+and+Median+Length+of+Stay>

19 Ibid.,

20 Ibid.,

21 Severe Asthma: The Canadian Patient Journey – A study of the personal, social, medical and economic burden of Severe Asthma in Canada, Asthma Society of Canada, 2014, pg. 21.

22 Regulatory Impact Analysis Statement (RIAS), Environment Canada, 2012, Table 18

23 Out with the coal, in with the new: National benefits of an accelerated phase-out of coal-fired power, Pembina Institute, November 2016, pg. 32.

24 Ibid.,

25 Clean Air Ontario: Recognizing Nuclear's Role in Supporting Coal Phase-Out to Achieve Long-term Climate Change Goals, Asthma Society of Canada & Bruce Power, October 2016, http://14083-presscdn-0-0.pagely.netdna-cdn.com/wp-content/uploads/2016/12/140411_CleanAirOntario_R003.pdf