



# Peak Medical Specialty Centres

## Peak Pulmonary Function Laboratories

Local & Toll Free Telephone and Fax:  
1-855-738-PEAK (7325)



PEAK MEDICAL  
SPECIALTY CENTRES

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## ASTHMA

Asthma is a non-contagious, chronic inflammatory disease of the airways that can vary over time in its occurrence, frequency and intensity and causes the following symptoms:

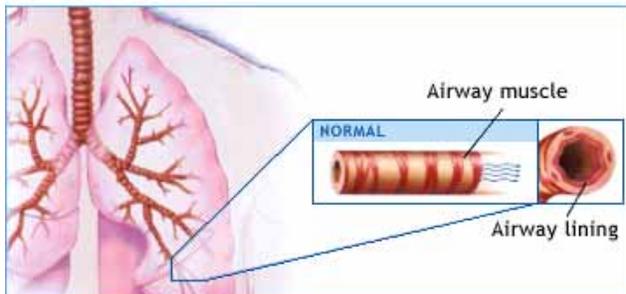
- Shortness of breath
- Tightness in the chest
- Coughing
- Wheezing

People with asthma have airways that are sensitive and overreact to stimuli such as aero-allergens and irritants. These symptoms are associated with:

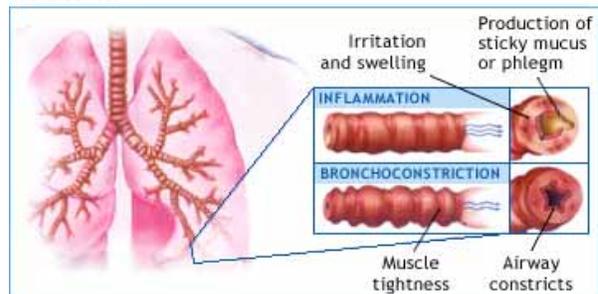
- Inflammation: the inner lining of the bronchial tubes becomes inflamed and swollen (narrowing)
- Bronchospasm: the muscles on the outside of the bronchi go into spasm and tighten
- Excessive mucus: is produced inside the airways

Researchers have determined that asthma can be caused by both hereditary (inherited) and environmental factors.

### Normal



### Asthmatic



### Allergic triggers:

Mold  
Animal dander  
Pollen  
Cockroaches  
Dust mites

### Non-allergic triggers:

Certain drugs (ASA, beta blockers)  
Chemicals, fumes and odors (perfumes)  
Respiratory viral infections  
Weather (cold air, thunderstorms)  
Exercise

Certain food additives  
Tobacco smoke  
Air pollution (smog)  
Intense emotions





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It is estimated that currently over 3 million Canadians have asthma. Approximately 400 Canadians die each year from poorly controlled asthma and it is estimated that more than 80% of these deaths could have been prevented with proper asthma management. Six out of ten people with asthma do not have control of their disease. While there is no cure, most people with asthma can live full, active lives with little or no symptoms, doing the things they like to do, including playing sports, and not missing school or work, when their asthma is under control. This is done by:

**Awareness:** Obtain a professional diagnosis, including an allergy assessment. Seek on-going care from a knowledgeable Physician or Certified Asthma Educator

**Avoidance:** Avoid triggers as much as possible

**Action:** Use preventative medications as prescribed. Ask your physician for a written Action Plan

### Two Kinds of Medication

Most people with asthma take two kinds of medication, as each type treats only one aspect of the condition:

- Controllers, also called "preventers," reduce inflammation in the airways. Controllers should be taken every day. You will know that the controller medication is working because you will, over time, have fewer and fewer symptoms. When your asthma is totally controlled and you have no symptoms, do not stop taking them. If you do, the airway inflammation may return.
- Relievers are very good at helping to alleviate symptoms immediately. If you are coughing or wheezing, use a reliever medication to reduce symptoms. However, reliever medications do nothing for the underlying problem of inflammation. Relievers are only a short-term solution to breathing problems and indicate that there is underlying inflammation present that requires a controller medication. Monitor how often you use your reliever. Increased use over time is telling you the asthma is worsening.

### Asthma Action Plan

An Asthma Action Plan is written pharmacologic and non-pharmacologic instructions that are guided by action points, developed collaboratively between the patient (family) and their health professionals. It is used by the patient to maintain optimal asthma control and to respond appropriately to loss of control indicators (Alberta Asthma Action Plan Task Force 2007). Action plan templates can be found online in various formats and languages (English, Punjabi, Chinese and French).

### The best asthma control is...

- No daytime or nighttime asthma symptoms
- No need for reliever medication
- No limitations to daily activities
- No missing school or work due to asthma
- Normal lung function (breathing tests)

If you have any of these symptoms, your asthma is not controlled.



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The Asthma Society of Canada and McMaster University are pleased to provide you with an interactive e-Learning module. The module consists of animations and illustrations that help you understand how to 'Take Control of Your Asthma': <http://pubmodules.machealth.ca/asthma/management/player.html>

### EXAMPLE

**Asthma Action Plan**

Action plan of: \_\_\_\_\_ Date: \_\_\_\_\_

Personal goals: \_\_\_\_\_

Possible Triggers (circle):

- smoke
- colds
- animals
- pollens
- mold
- dust
- strong smells
- weather changes
- strong emotions

Other \_\_\_\_\_ Exercise \_\_\_\_\_

**Asthma under control?**

**Yes** (Green light) Normal life, regular activities

**No** (Yellow light) Cough, wheeze, short of breath, tight chest, colds, allergies

**Not at all** (Red light) Very short of breath, trouble speaking, blue/grey lips / fingernails

	Yes	No	Not at all
1. Daytime symptoms	3 times or less/week	More than 3 times/week	Continuous & worsening
2. Nighttime symptoms	None	Some nights	Continuous & worsening
3. Reliever	3 times or less/week	More than 3 times/week	Relief less than 3-4 hours
4. Physical activity	Normal	Limited	Very limited
5. Able to go to school or work	Yes	Maybe	No
6. Peak expiratory flow Best value (optional): _____	85 to 100 % to _____	60 to 85 % to _____	Less than 60 % Less than _____

### What to do:

	Stay controlled & avoid triggers	Adjust	Call for help
<b>Preventer/Controller:</b> Use DAILY to control airway swelling & other symptoms. Rinse mouth after each use.			<b>EMERGENCY (911)</b>
1 _____ (name / strength) (colour)	Take _____ (amount) <input type="checkbox"/> AM <input type="checkbox"/> PM	Take _____ (amount) <input type="checkbox"/> AM <input type="checkbox"/> PM	Take all asthma medications at the highest dose recommended by your doctor until help arrives. (This may include prednisone)
2 _____ (name / strength) (colour)	Take _____ (amount) <input type="checkbox"/> AM <input type="checkbox"/> PM	Take _____ (amount) <input type="checkbox"/> AM <input type="checkbox"/> PM	
<b>Reliever/Rescue:</b> Quickly relieves symptoms by relaxing muscles around airways.			
1 _____ (name / strength) (colour)	Take _____ (# of puffs) as needed Before exercise? <input type="checkbox"/> Yes <input type="checkbox"/> No	Take _____ (# of puffs) as needed If no improvement in _____ days, call your doctor.	

Clinician: \_\_\_\_\_ Health Link Alberta: \_\_\_\_\_



Adapted from the Peak Medical Asthma Action Plan, Version 1.0, 2011



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### For more information visit:

**Allergy/Asthma Information Association**  
<http://www.aaia.ca/en/aboutAsthma.htm>

**Allergy Asthma and Immunology Society of Ontario**  
<http://allergyasthma.on.ca/patient/>

**Asthma Society of Canada**  
<http://www.asthma.ca/>

**The Lung Association**  
<http://www.lung.ca>