Do you have asthma?
Get the answers

For more information from the Asthma Society of Canada:

Asthma.ca
AirSquare.ca
Asthma-KiDS.ca
1 866 787 4050
info@asthma.ca

Endorsed by the Family Physician Airways Group of Canada

Asthma Basics #1
The Asthma Basics Booklet Series was developed to provide Canadians with asthma, current and accurate information about asthma management. This booklet has been developed and reviewed by experts in the field of asthma care and certified asthma educators. The author, reviewers and sponsors encourage you to discuss this information with your doctor, pharmacist and asthma educator.

The information in this booklet is not intended to substitute for expert medical advice or treatment; it is designed to help you make informed choices. Because each individual is unique, a physician must diagnose conditions and supervise treatments for each individual health problem.

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A NAPA membership puts you in touch with other Canadians who are working to increase awareness about asthma, improve asthma care, and build a volunteer network to support others affected by the disease. NAPA members also receive important updates and a monthly e-newsletter.”

You deserve an active life!
Take control

1 866 787 4050
www.Asthma.ca

To join the National Asthma Patient Alliance or for more information:
Online: www.asthma.ca/napa
E-mail: napainfo@asthma.ca
Phone: 1-866-787-4050
We are the Asthma Society of Canada and we care about your lung health. We provide answers to Canadians so they can breathe easier.

Asthma is a lung condition that can lead to emergency room visits, hospitalizations and sometimes death. In the past 15 years, science has made great progress in understanding asthma so that, with proper care, visits to the hospital can be reduced. Over 500 Canadians die from asthma every year, but death from well-controlled asthma is rare and preventable. Most people with asthma can have good asthma control.

We developed the Asthma Basics Steps (next page) to help you learn about good asthma control.
Diagnosis: Asthma Basics Booklet

We developed the Asthma Basics Steps to help you learn about good asthma control. Use these steps to guide your discussions with your doctor, pharmacist and asthma educator.

Step 1 Diagnosis

- Talk to your doctor about your breathing difficulty
- Your doctor confirms you have asthma and may do tests
- Find out about asthma, what it is and how it can be controlled
- This step is discussed in this booklet called Diagnosis

Step 2 Triggers

- Find out what makes your asthma worse by keeping a diary and getting allergy tests
- Once you know what your allergic and non-allergic triggers are, you learn how to avoid them
- This step is discussed in the booklet called Triggers

Step 3 Medication

- Your doctor may prescribe Asthma controller medication
- Learn what your medication does and how to take it properly
- Learn how a written action plan can help you manage your asthma
- This step is discussed in the booklet called Medications

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Step 4
Education
- Learn as much as possible. Ask your pharmacist and doctor lots of questions.
- Call the Asthma Society if you need help locating an asthma educator 1-866-787-4050.

Step 5
Asthma action plan
- When your asthma is well-controlled, talk to your doctor about your medication needs and any changes in your environment.
- Work with your doctor to get a written asthma action plan that you can use for asthma management at home.
- Visit www.Asthma.ca for a sample action plan to take to your doctor.

Step 6
Ongoing management
- Discuss your asthma every six months with your doctor, even if you are well.
- Take lung function tests every year to make sure your asthma is well controlled.
- Tell other health care professionals that you have asthma.

Follow the Asthma Basics Steps to achieve good asthma control.
Diagnosis: Asthma Basics Booklet

What this booklet will tell you

This booklet is Step 1 in the Asthma Basics Steps. It will assist you in understanding how doctors make the diagnosis, and will help you ask the right questions so you can get the best care possible.

This booklet is designed for adults with asthma or parents who have a child with asthma who are searching for answers to the following questions:

1. What is asthma? ............................................p.5
2. How is asthma diagnosed? .................................p.8
3. What is well-controlled asthma? ........................p.14
4. Will my asthma get worse? ...............................p.16
5. Who can help me manage my asthma? ........p.18
6. What should I tell my doctor? .........................p.20

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What is Asthma?

Doctors define asthma as “a chronic inflammatory disease of the airway”. This means that there is swelling and mucus inside the breathing tubes in your lungs. The word “chronic” means that this swelling is there, to some degree, all the time. The more inflammation in the airway, the more difficult it is to move air in and out of the lungs.

Inflammation is the major part of the problem, but it is not the whole story. As the swelling in the airway increases, the lining of the airway becomes very sensitive and small muscles around it start to twitch and tighten. Doctors call this “bronchoconstriction”. Bronchoconstriction can happen without swelling, but inflammation usually occurs first. If left unchecked, the swelling increases and causes blockage or tightening of the airway.

Inflammation can slowly increase over time, so slowly that you might not notice it. If nothing is done to stop the swelling, it will lead to blockage or bronchoconstriction and, potentially, life-threatening breathing problems. Fortunately, there are ways to avoid asthma triggers, and safe medications that prevent this situation.
What is asthma?

As the swelling in the airway increases, the lining of the airway becomes very sensitive and small muscles around it start to twitch and tighten.

1. Normal airway = normal function

2. Something starts inflammation
3 Inflammation of airway and mucous

4 If inflammation is not treated

5 Muscles around airway tighten

6 Emergency room visit
How is asthma diagnosed?

The reasons are not fully known why some people get asthma and others do not. Asthma may worsen after contact with something in the environment that causes the airways to swell. There are a number of possible causes, such as:

- Contact with things that you are allergic or sensitive to
- Contact with certain chemicals at work that cause ‘occupational asthma’
- A bad lung infection that makes the airway very sensitive

Medical and family history

You are more likely to have asthma if you have a parent or close relative with allergies and/or asthma. Your chance of having asthma is also increased if you have a history of:

- Wheezing, even though you did not have a cold
- Inflammation in the nose, called allergic rhinitis
- Eczema, an allergic skin condition
Signs and symptoms

The common signs and symptoms of poorly controlled asthma are:

- Coughing
- Wheezing
- Chest tightness
- Shortness of breath
- Trouble sleeping because of breathing difficulty
- Being unable to take part in physical activities

You may have all of these signs and symptoms, or only a few. Not everyone wheezes and many just cough. These signs and symptoms come and go and are usually triggered by something in the environment. Visit www.Asthma.ca and read the Asthma Society’s booklet called Triggers to find out more about what makes asthma worse.
How is asthma diagnosed?

Your doctor may be able to confirm if you have asthma by looking at the results of breathing tests. Tell your doctor about your signs and symptoms, medical and family history and environment. All this will help your doctor make the diagnosis.

Your doctor can confirm that you have asthma with a simple breathing test called spirometry (see page 12). Spirometry measures how much air you have in your lungs and how fast you can blow it all out.

Conditions like chronic obstructive pulmonary disease, pneumonia, heart disease, cystic fibrosis, gastroesophageal reflux disease and accidental inhalation of foreign substances have to be ruled out before your doctor can be certain that you have asthma.

It is important to talk to your doctor about all of your concerns and to ask lots of questions. Something you think is not important may be useful in pinpointing the problem. Use the checklist at the end of this booklet to help you prepare for a discussion with your doctor.
Only your doctor can diagnose asthma
Breathing tests help your doctor diagnose asthma

How is a spirometry test performed?

You will:

1. Take a deep breath in and then blow out as hard and fast as you can until you can’t blow out any more
2. Do the test several times, then the best result is recorded
3. Take a couple of puffs of a bronchodilator medication like salbutamol
4. After 15 minutes, do the test again to see if the medication helps you breathe out faster

If your results are much better after taking the medication, you most likely have asthma. Your doctor will tell you what your results mean.

Infants and small children under 5 to 6 years old cannot do the spirometry test, so their asthma is diagnosed based on signs and symptoms, family history, history of allergies and their response to asthma medications.
Some people who have asthma will have a normal spirometry test. The airways may not have been inflamed at the time of the test. If this is the case, you may be asked to take another test to confirm your diagnosis of asthma, like the methacholine or exercise challenge test.

How is a methacholine challenge test performed?
This test is called a ‘challenge test’ because, if you have asthma, a very low dose of methacholine will cause your airways to tighten. You will be asked several times to:

- Do the spirometry test (see page 12)
- Breathe in a small amount of methacholine
- Do the spirometry test again

If you cannot blow very fast after the methacholine test, your doctor will give you a medication to reverse the tightening in your airways. The lower the dose of methacholine that makes it difficult to breathe out, the more sensitive your airways are and the more severe your asthma is.

How is the exercise challenge test performed?
If you have breathing problems only when you exercise, your doctor may ask you to take an exercise challenge test. You will be asked to:

- Run on a treadmill or pedal on a bike for 6–8 minutes
- You will do the spirometry test before and after the exercise

If you have exercise-induced asthma (EIA), your spirometry test result will be lower after exercise.
What is well-controlled asthma?

Good asthma control

After your doctor has confirmed that you have asthma, you will need to learn how to control it. Good asthma control means you:

- Are able to exercise without coughing, wheezing or chest tightness
- Do not have any breathing difficulties most days
- Are sleeping through the night without coughing, wheezing or chest tightness
- Are not missing work or school because of asthma
- Have a normal spirometry test

Good asthma control means you are able to go to work and exercise
Reasons for poor asthma control
If your asthma is poorly controlled, it might be because you are:

- Not using the right asthma medication for you. See the Medications booklet
- Not using the right inhaler technique. See the Medications booklet
- Exposed to a trigger that is causing breathing problems. See the Triggers booklet

Good asthma control means *sleeping without coughing or wheezing*

Talk to your doctor if your asthma is not well controlled
I have a persistent cough. Could it be asthma?
Persistent cough is a common sign of lung disease. Coughing is a major feature of asthma, especially in children. If your infant or child coughs to the point of vomiting, discuss the possibility of asthma with your doctor. There are reasons other than asthma for a long-term cough, like whooping cough and postnasal drip.

Will my asthma get worse?
Poorly controlled asthma can cause permanent damage to your airways that happens over time and cannot be reversed. This is called ‘airway remodeling’. It is important to get an accurate diagnosis and start proper asthma treatment as soon as possible. It is a good idea to discuss your asthma with your doctor on a regular basis.

Why is my asthma worse at night?
At night, natural hormones in our bodies are normally at lower levels, making asthma symptoms more likely. Allergies or poor asthma control could cause your asthma symptoms to be worse at night. See the Triggers booklet for more information about allergens, and discuss nighttime symptoms with your doctor.

Why do I get asthma symptoms when I laugh or cry?
If laughter or crying causes symptoms, your asthma is probably not well controlled. When your asthma is controlled properly, you should not have symptoms when you laugh or cry.
Should I avoid exercise because of my asthma?

Having asthma does not mean that you cannot exercise. If you have any limitations in your ability to exercise because of your asthma, your asthma is probably not being controlled properly. See your doctor about getting your asthma under control. If you have asthma symptoms, check with your doctor or asthma educator before starting a new exercise program.

What is exercise-induced asthma (EIA)?

Many people with asthma have difficulty breathing when they exercise. It doesn’t have to be this way. Getting your asthma under control before you exercise will help you perform at your best. If your asthma is under control, but you have symptoms 5–10 minutes after you start exercising, you may have exercise-induced asthma (EIA). Take an exercise challenge test to find out (see page 13). Asthma should not limit your activities. If it does, talk to your doctor about it.
Who can help me manage my asthma?

Your family doctor will diagnose and manage your asthma. Talk honestly with your doctor about your asthma control and any problems or concerns you have. Your doctor may refer you to an allergist to find out what you are allergic to.

Should I see a lung specialist or allergist?

Your doctor may send you to a specialist if:

- You are still having problems with your asthma even though you are taking your medications as directed
- You are taking asthma medications but you are not getting better
- Your asthma may be caused by your work environment (occupational asthma)
- You have been admitted to the hospital for your asthma
- You are experiencing side-effects from your asthma medications

Talk to your doctor about a referral to a specialist, especially if your breathing problems are not getting better.

Where can I learn more about asthma?

- Read all the Asthma Basics Booklets
- Ask your doctor, pharmacist and asthma educator questions
- If you need help locating an asthma educator, call the Asthma Society at 1 866 787 4050
- Go to the Asthma Society’s websites to learn more
www.Asthma.ca

www.4seasonsofasthma.ca


www.AsthmaMeds.ca
Plan for your doctor’s visit

Being able to communicate well with your doctor will help you receive the best care possible. Doctors see many patients every day and have limited time with each patient. They can better care for someone who is prepared.

Your doctor may tell you to do several things, but they might not work in your daily life. Remember that your doctor will not know the challenges of your day unless you tell them. Be straightforward and honest when you talk with your doctor so he can help you figure out the steps you should take.

Plan ahead for your doctor’s appointment

1. Talk to your doctor. Give yourself time to go through all your questions so you don’t feel rushed. Schedule 15 minutes with your doctor to ensure that you have enough time to discuss your concerns

2. Prepare what you will say. It is not easy to remember everything, so write it down

3. If you are uneasy, bring someone you trust with you for confidence

4. Don’t be afraid to ask questions
If a doctor has already told you that you have asthma, **always** tell your doctor if you:

- Have missed school or work because of your asthma
- Are waking at night with asthma symptoms
- Needed to use your blue inhaler (reliever) medication more than 3 times a week
- Are not able to exercise

**Ask lots of questions**

Some questions you might ask are:

- What tests do I need?
- What things make my asthma worse?
- Is it okay to keep playing a sport?
- How can I tell when my asthma is getting worse?
- What should I do if I have an asthma attack?
- Is there an asthma educator in my community that I can go to?
- Do I need to see a specialist?
# Diagnosing Asthma

## What should I tell my doctor? Checklist

Fill in this checklist and show it to your doctor. It will help your doctor evaluate your breathing difficulties.

### Past medical history

- [ ] Lung disease
- [ ] Eczema
- [ ] Anaphylaxis
- [ ] Food allergies

### Family history (mother, father, sister, brother)

- [ ] Asthma
- [ ] Allergies

### Signs and symptoms

- [ ] Cough or wheeze, or have shortness of breath or chest tightness? If so, when?
  - [ ] Day
  - [ ] Night
  - [ ] Exercise or play

- [ ] Are there times of the year when your breathing is worse?
  - [ ] Yes
  - [ ] No
  - [ ] When

- [ ] Have your breathing difficulties caused you to miss work or school?
  - [ ] Yes
  - [ ] No

- [ ] Have you ever been admitted to the hospital for breathing difficulty?
  - [ ] Yes
  - [ ] No

- [ ] Have you ever been to the emergency department for breathing difficulty?
  - [ ] Yes
  - [ ] No
What should I tell my doctor? Checklist

Environment
Do you have a pet?
☐ Yes ☐ No

Do you or did you smoke cigarettes?
☐ Yes ☐ No

If so, how much?________________________________________________________

For how long?_________________________________________________________ (years)

If you have quit, how long ago?__________________________________________ (years)

If you have not quit smoking, do you want to quit?
☐ Yes ☐ No

Does someone who lives with you smoke?
☐ Yes ☐ No

Do you cough or wheeze, or have shortness of breath or chest tightness during the week, but not on weekends when away from work or school?
☐ Yes ☐ No

What is your job (occupation)?___________________________________________

What activities do you avoid doing because of breathing difficulty?
__________________________________________________________

Do you ever have breathing difficulty when in cold air or during exercise?
☐ Yes ☐ No
When did your breathing difficulties start?

Do you get frequent colds that last longer than other people you know?
☐ Yes  ☐ No

Does physical activity lead to breathing difficulty?
☐ Yes  ☐ No

What concerns or questions do you have?

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
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