

Breathe Easy®

TRIGGERS

Manage Your Environment



Asthma.ca
Asthma Canada



The **Breathe Easy® Series** was developed to provide Canadians with 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/Respiratory Educators. The authors and reviewers encourage you to discuss this information with your doctor, pharmacist, asthma educator, and other healthcare providers.

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

Acknowledgements

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We are proud to have the endorsement of the **Family Physician Airways Group of Canada**.



FPAGC

FAMILY PHYSICIAN AIRWAYS GROUP OF CANADA
Regroupement canadien des médecins de famille en santé respiratoire

Asthma Canada will continue to update this booklet in the future. Your feedback is welcome. Please email your comments to info@asthma.ca.

Questions? We have answers

Our vision at Asthma Canada is to empower every child and adult in Canada with asthma to live an active and symptom-free life.

Asthma is a lung condition that can lead to emergency room visits, hospitalizations, and sometimes death, but death from well-controlled asthma is rare and preventable. Most people with asthma can have good asthma control. It is just a matter of paying attention to your asthma. Your healthcare practitioners can provide you with medications to help you control your asthma, but you can also do a lot of things on your own. Making changes to your lifestyle to reduce your exposure to things that trigger your asthma symptoms is a large part of taking control.

This booklet is **Step 2** in the **Breathe Easy® Steps**. It will help you identify things in your environment that might trigger your asthma and ways you can avoid them.

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

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Turn the page for the Breathe Easy® Steps

Breathe Easy® Steps

We developed the Breathe Easy® Steps to help you learn about optimal asthma control. Use these steps to guide your discussions with your doctor, pharmacist, asthma educator, and other healthcare providers.

Step 1 Diagnosis

- Talk to your doctor about your breathing difficulty
- Your doctor conducts tests to confirm whether you have asthma
- Find out about asthma, what it is, and how it can be controlled
- This step is discussed in the *Diagnosis* booklet

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, learn how to avoid them
- This step is discussed in the *Triggers* booklet
- Additional information about allergies and their treatment are discussed in the *Allergies* booklet

Step 3 Medications

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



Step 4 Education

- Learn as much as possible. Ask your healthcare providers any questions you have
- Read informational materials and visit www.asthma.ca to learn more
- Call the Asthma Canada to speak to a Certified Asthma/Respiratory Educator at 1-866-787-4050, or email info@asthma.ca

Step 5 Asthma Action Plan

- When your asthma is well controlled, talk to your healthcare providers about your medication needs and any changes in your environment
- Work with your healthcare providers to get a written Asthma Action Plan that you can use for asthma management at home
- Visit www.asthma.ca for a sample Asthma Action Plan to take to your healthcare provider

Step 6 Ongoing Management

- Discuss your asthma with your healthcare provider every six months (or every twelve months if your asthma is well-controlled)
- Your healthcare provider will decide how often to perform lung function tests, based on the intensity of your symptoms and how well controlled your asthma is — these can vary over time
- Ask your healthcare provider about getting vaccinated against infections like the flu and pneumonia that can affect your lungs and make asthma symptoms worse
- Tell other healthcare professionals that you have asthma

Follow the Breathe Easy® Steps to achieve optimal asthma control.

What is Well-Controlled Asthma?



Good asthma control

Asthma Canada is committed to helping Canadians with asthma gain control of their disease. Your asthma is under control when you:

- Do not have any breathing difficulties most days
- Do not use your blue puffer (reliever) medication four times or more in a week
- Are able to exercise without coughing, wheezing, or chest tightness
- Can sleep through the night without coughing, wheezing, or chest tightness
- Do not miss work or school because of asthma
- Have a normal spirometry test (determined by your healthcare provider)

Take the interactive quiz on asthma control at www.howmuchistoomuch.ca. It can help you figure out if your asthma is well controlled.

Control your asthma

If your asthma is not under control, it could be because:

- You are exposed to something in your environment that is triggering your asthma
- You are not using the right controller medication for you
- You are not using your controller medication as prescribed

See the *Medications* booklet

- You are not using the right inhaler technique

See the *Medications* booklet and visit www.asthma.ca

- Something other than asthma is causing your symptoms

See the *Diagnosis* booklet and talk to your healthcare provider

In this booklet, you will learn how you can change your environment to reduce your exposure to things that make your asthma symptoms worse.



You can control your asthma

Control your asthma

You can control your asthma in two ways:

1. Avoid your triggers
2. Take asthma controller medication. This is discussed in the *Medications* booklet

Triggers are things in your environment that cause worsening of asthma symptoms or asthma attacks. Triggers are everywhere. Avoiding triggers that are under your control will help you be better prepared to deal with the triggers that are more difficult to avoid, like pollen, smog, and viruses.



There are two types of triggers:

1. **Allergic triggers** set off an allergic reaction. Common allergens include pollen, pets, and dust mites. Identification of allergic triggers is best confirmed by an allergist's assessment.
2. **Non-allergic triggers** are usually irritants. Common non-allergic triggers include cigarette smoke, cold air, and certain air pollutants.

It is important to find out both your allergic and non-allergic triggers so you can take steps to reduce your exposure to the things that make your asthma worse. Take the time to find out what your triggers are.

Finding out what your non-allergic triggers are may take some effort and time. Keeping an asthma diary can help you figure out what non-allergic things you are sensitive to. There is a sample diary on page 28.

Determine your allergic and non-allergic triggers so you can take steps to avoid them



More Triggers = More Medication



Less Triggers = Less Medication

What is the relationship between allergies and asthma?

Asthma and allergies are related, but they are not the same thing. An allergy is a reaction to a substance that is usually harmless. These substances (“allergens”) can be inhaled, injected, swallowed, or touched. Being exposed to an allergen may cause irritation and swelling in specific areas of the body, such as the nose, eyes, lungs, and skin. Allergens like pollen, animal dander, dust mites, and mould can make asthma symptoms worse by increasing the inflammation in the airways, making them more sensitive and causing them to narrow. The best way to find out if you are allergic to something is to have an allergy assessment done by an allergist. Discuss this with your healthcare provider.



**Allergens can make
asthma symptoms worse**

What are the different types of allergic reactions?

Anaphylaxis

Anaphylaxis is a severe, sometimes life-threatening event that requires immediate medical attention. Symptoms of anaphylaxis occur suddenly and can include a combination of the following: difficulty breathing, hives, tightness or swelling of the throat, hoarse voice, nausea and/or vomiting, abdominal pain, diarrhea, dizziness, fainting, low blood pressure, “feeling of doom,” and cardiac arrest. For more on anaphylaxis, please see the *Allergies* booklet.

Atopic dermatitis (eczema related to allergic reaction)

Atopic dermatitis, which appears as dry, itchy, red patches of the skin, is often the first atopic (allergy-related) disease to appear in infancy. Many young children with atopic dermatitis will develop asthma months or years later.



A typical case of atopic dermatitis

Rhinitis

Rhinitis is inflammation (swelling) of the lining in the nose. It could be caused by exposure to allergens such as trees, grass or ragweed pollen, animal dander, dust mites, or mould spores. Common symptoms of allergic rhinitis are itchy nose and throat, runny or stuffy nose, sneezing, and ear blockage. “Allergic conjunctivitis” is the term for watery, itchy, and red eyes due to allergen exposure in the environment. Allergies can be seasonal or may occur throughout the year.

Asthma

Breathing an allergen into the lungs leads to swelling of the lining of the airways. This causes coughing, wheezing, and shortness of breath. Although allergens are common asthma triggers, many people get asthma symptoms from non-allergic triggers such as smoke, cold air, viral infection, and exercise.

Common questions and answers about allergies

Who gets allergies?

No one is born with an allergy, but you can have a genetic tendency to become allergic. If both your parents have allergies, you have a 75% chance of also developing them, but not necessarily to the same allergens. People with no family history can also develop allergies.

What are the common symptoms of an allergy?

Many people confuse their allergies with having a cold. Colds generally last 7 to 10 days and can be passed on to others. Allergies are reactions to things that are generally harmless and not contagious. Frequent ear or sinus infections, dark circles under the eyes, constant runny nose, sneezing, and itchy, watery eyes may be signs of an underlying allergy.

How can I tell if I have allergies?

Testing for allergies can help identify what you are allergic to. Ask your healthcare provider about being tested for allergies.

How does one get tested for allergy?

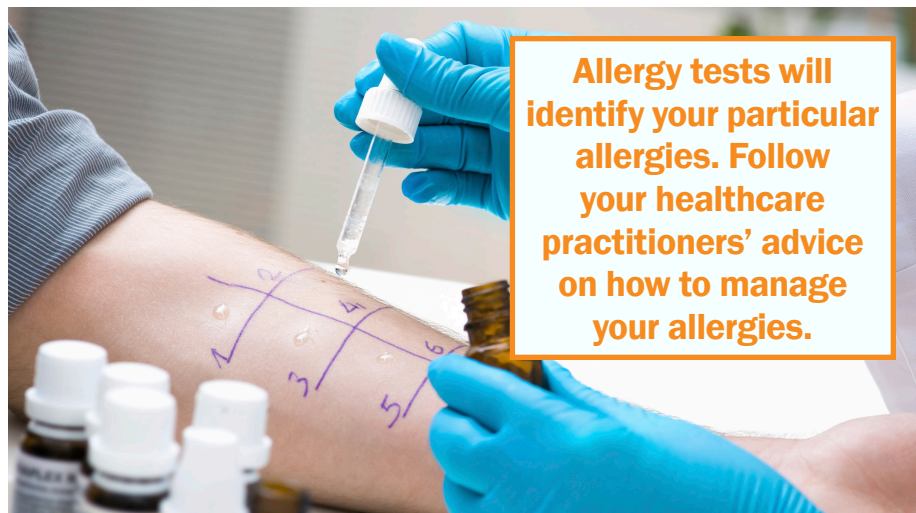
The skin test is the most common test for diagnosing allergy. Skin tests are used to identify common allergens like dust mites, pet dander, pollen, moulds, and foods. It is a simple test where the doctor or nurse places a small amount of allergen on, or just under, your skin. If you are allergic to a particular allergen, this small area of skin will get become raised, red, and itchy. Other types of allergy tests look at the levels of immune system proteins, called “IgE antibodies” in your blood. For more on allergy testing, please see the *Allergies* booklet.

Should I try allergy desensitization to help my asthma?

Allergy desensitization, or immunotherapy, may be an option for some people, but it is not for those with severe or poorly controlled asthma. Your allergist will weigh the risks and benefits of allergy desensitization on a case-by-case basis. Allergy desensitization is most effective for allergic rhinitis that is triggered by seasonal allergens, such as trees, grass, ragweed, and *Alternaria* mould, and some non-seasonal allergens such as dust mites. The best way to reduce your risk of allergy-related asthma symptoms is to avoid your particular allergic triggers. However, your allergist may also recommend allergy desensitization treatments to treat your allergies, especially if a particular allergen is unavoidable. If this treatment is recommended for you, it can be administered subcutaneously (with a needle under the skin) or sublingually (with a droplet or a tablet under the tongue). For more on allergy desensitization and other methods for treating allergic rhinitis, please see the *Allergies* booklet.

Can allergy medications help my asthma?

Allergy medications are not generally used to treat asthma, but they may help some people with asthma who have seasonal allergies. If allergens either cause or trigger asthma, treatment of allergy with medications may be helpful.



Skin prick test

What are my allergic triggers?

After your allergy test results (see page 10) are confirmed by your allergist, refer to the following chart to learn more about your specific allergic triggers. Exposure to your allergic triggers may cause inflammation in your airways, making your asthma worse.

Dust mites

Positive test result: ☐

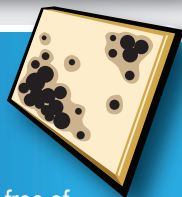
Important Information: Dust mites are tiny insects that live in carpet fibres, plush furniture, curtains, mattresses, pillows, and bedding. They eat flakes of skin and reproduce in warm and humid environments. Their presence can be reduced by following the dust mite avoidance strategies on pages 24 to 27.



Mould

Positive test result: ☐

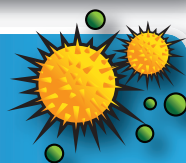
Important Information: Mould is a type of fungus that produces spores that float in the air. It thrives in humid environments and lives off decaying plants. The air is never free of mould, but you can prevent growth by keeping your house clean and dry all year.



Pollen

Positive test result: ☐

Important Information: Pollen is carried by the wind on hot, windy days. The exact timing of high-allergen seasons will vary depending on the local climate and weather patterns, but in most regions of Canada it follows this general trend: tree allergens are most common in the spring, grass pollens in the summer, and ragweed pollens in the fall. Find out pollen counts in your region by visiting the Weather Network either on television or online at www.weather.ca or visit www.asthma.ca for more information.



Food

Positive test result:



Important Information: A food allergy may cause skin problems like itching, rashes, or hives, or intestinal troubles like abdominal pain, diarrhea, or vomiting. Food allergies can also cause anaphylaxis, the dangerous swelling of the airways that can cause shortness of breath or fainting. See page 9 for more information on anaphylaxis. Get tested for food allergies and ask your healthcare provider how to avoid foods you are allergic to.

Animal dander (pets)

Positive test result:



Important Information: Patients with pet allergy are mainly allergic to the animal's dander (flakes of shed skin), saliva, and urine. These pet allergens are very small particles and are in the air even if the animal is not present. Even after you get rid of a pet, the allergen can remain for months on furniture and in carpets. Animals can also carry pollen and mould into the house from outside on their fur.

If you have asthma and a pet allergy, reducing your exposure to pet allergens is the most effective way to help your asthma symptoms. If you don't already have a pet, don't get one if you have asthma and a known pet allergy. If you have a pet and a pet allergy, consider finding a new home for your pet. If you decide to keep the pet even though you are allergic, you will be increasing the severity of your asthma over time. There is no such thing as an allergy-free dog or cat. All furred animals shed dander.

What are my non-allergic triggers?

Not all things that trigger asthma symptoms are allergens. Non-allergic triggers tend to cause irritation that may increase symptoms, especially if the airway is already inflamed (swollen) and sensitive. Common non-allergic triggers are exercise, tobacco smoke (first-, second-, or third-hand), viral infections, cold air, smog and fumes, and odours. For some patients with asthma, certain emotions (e.g., fear, excitement) and stress might also trigger symptoms.

What is the effect of second- and third-hand smoke on lung health?

Second-hand smoke is an irritant that can worsen asthma symptoms, so more medication may be needed to control the asthma. Second-hand smoke is especially harmful for children with asthma because their lungs are still developing. It is also critical that pregnant women avoid smoking and second-hand smoke, as exposure during pregnancy increases the likelihood of children developing asthma.



Third-hand smoke (i.e., smoke lingering in clothes or car seats) can also irritate the airways and worsen asthma symptoms.

Identify your non-allergic asthma triggers. Use the chart on pages 24–27 to learn how to avoid them.

What is a smog alert?

Smog is a combination of vapours, gases, and particles that react to sunlight to produce ozone near the ground.

The particles in the air, along with the ozone, can cause lung damage and breathing problems in people with asthma.

The Air Quality Health Index (AQHI) is a rating system developed by Environment Canada and Health Canada to give Canadians information about air quality and how it might affect their health. Based on the amount of smog and other pollutants in the air on that day, the AQHI provides risk ratings and activity recommendations for both at-risk people (including people with asthma) and the general population. For people with asthma, the AQHI ranges and recommendations are:

- 1 to 3: Low Risk — Enjoy your usual outdoor activities
- 4 to 6: Moderate Risk — Consider reducing or rescheduling strenuous activities outdoors if you are experiencing symptoms
- 7 to 10: High Risk — Reduce or reschedule strenuous activities outdoors. Children and the elderly should also take it easy
- Over 10: Very High Risk — Avoid strenuous activities outdoors. Children and the elderly should also avoid outdoor physical exertion

You can check the AQHI online at www.airhealth.ca. Learn to assess the effect of AQHI on your breathing — note if you often experience flare ups at certain AQHI levels so you can avoid outdoor activities on days with poor air quality.

Although most air pollution comes from sources that are out of your control — like motor vehicles or factories — using gas-powered machines such as lawn mowers can also harm the air quality in your immediate area and trigger an asthma attack, especially on days when the overall pollution is already high.

How can I help to reduce smog?

To reduce smog, you can:

- Take public transit or carpool to reduce car emissions
- Avoid idling your car
- Consider fuel efficiency when you buy a car
- Avoid using gas-powered machinery like lawn mowers, leaf blowers, or electricity generators

Should I avoid exercise because of my asthma?

Having asthma doesn't mean that you have to limit your physical activity. If you have any limitations in your ability to exercise because of your asthma, your asthma is probably not being controlled properly. See your healthcare practitioners to find out more.

What are my non-allergic triggers?

Infections

(e.g., Common Cold)

Cold and flu viruses are common asthma triggers and are difficult to avoid. Antibiotics will not help asthma attacks caused by colds, but they might help if you have a bacterial infection. Frequent hand washing is your best defense against getting a cold. Get a flu shot in the fall. Use your controller medication regularly to help reduce asthma symptoms when you get a cold. Talk to your physician about an action plan to increase medications during times of increased asthma symptoms.

Weather Changes

Weather can affect your asthma. After thunderstorms, there are more airborne allergens in the air, which may trigger asthma. Cold, dry winter air can make breathing difficult. Breathing through your nose on cold days helps warm and humidify the air before it reaches your lungs.

Outdoor Air Pollution

Outdoor air pollution, or smog, can cause irritation in the nose and airways that can worsen asthma symptoms. Stay indoors on high smog days, and don't exercise outdoors. If you have to be outside on high smog days, breathe through your nose. See page 15 for more information.

Forest Fires

Forest fires are most common during hot, dry summer months but can occur at any time of year. Smoke from forest fires can travel long distances and affect people far away from the fire source. Even for people without asthma, smoke and airborne particles from burning trees can irritate the eyes and airways. In people with asthma, these can trigger attacks or worsen asthma symptoms. If forest fires are common where you live, it's important to talk to your healthcare practitioner before fire season starts and make any necessary changes to your Asthma Action Plan. You might also want to put together an emergency kit that includes extra medications, in case of evacuation.

Exercise

Asthma symptoms are often triggered by exercise, especially if asthma is not under control. When exercising, there is a tendency to breathe through the mouth instead of the nose. This allows unhumidified and unfiltered air into the lungs, which can trigger asthma symptoms.

Emotions/Stress

Intense emotions like fear, excitement, anger, and stress can provoke symptoms in some people with asthma. If emotional changes are enough to bring on an asthma attack, it could be a sign that your asthma needs to be better controlled — talk to your healthcare practitioners.

Medications

Beta blockers, acetylsalicylic acid (ASA, or Aspirin®), NSAIDs (anti-inflammatory drugs), and certain eye drops and blood pressure medications can cause a severe and sudden asthma attack. Make sure your doctor and pharmacist know that you have asthma so they can decide on the best medications for you. If you have asthma symptoms when you start a new medication, tell your doctor or pharmacist right away.

Indoor Air Pollution

Second- and third-hand cigarette smoke can trigger asthma in infants and children. Cigarette smoke increases the number and severity of asthma episodes. Declare your home and car smoke-free zones. Smoking in another part of the house is not enough, because toxic chemicals will circulate through the ventilation system to other areas in the house.

Personal products such as perfume and hairspray can irritate the airways. Encourage a scent-free home, school, or workplace. The odours from cleaning products and arts and crafts supplies can also trigger asthma symptoms in some people.

Occupational Irritants



“Occupational asthma” is the term for asthma caused by something in the work environment. If asthma symptoms are worse during the work week and improve on days off, that might be a hint that the trigger is something in the workplace. Particular professions at risk include mill workers and carpenters (wood dust, especially red cedar dust), industrial workers (metal fumes), pharmaceutical workers (drug particles), bakers and farmers (flour and grain), textile workers (cotton dust), hairdressers (hair dyes, perm solutions), veterinarians (animals), electricians, and sheet metal workers.

Hormones

Some women find that their asthma gets worse before their periods, during pregnancy, or during menopause. During pregnancy, uncontrolled asthma can reduce oxygen to the developing baby; therefore, it is more important than ever to ensure adequate asthma control. Visit www.asthma.ca for more information about asthma and pregnancy.





What can I do to avoid my triggers?

Find out what your triggers are:

-  Have an allergy test done. Write down what you are allergic to and learn how to avoid or reduce your allergen exposure.
-  Use an asthma diary to keep track of your asthma symptoms. Review your diary with your healthcare practitioners to determine your asthma triggers. A sample diary can be found on pages 29–33.

Once you have a clear idea of the things that make your asthma worse, make plans to control these things. Some triggers will be difficult to stay away from (e.g., pollen, air pollution, thunderstorms), but many triggers are avoidable. Start with your own home, because you spend a lot of time there and its environment is under your immediate control.

To control your home environment:

-  Make your home smoke-free.
-  Monitor the humidity in your home with a hygrometer, and keep the level below 50%. Living in a damp home is likely to make asthma symptoms worse.
-  Keep your home very clean, especially the floor.
-  Consider using asthma & allergy friendly™ certified products in your home and workplace

Refer to the checklist on pages 24–27 to make changes in your home.

While you are making changes at home, monitor your asthma daily and take your controller medication. If you have any concerns or questions, talk to your healthcare practitioners.

Should I move to a different part of the country to avoid my triggers?

Asthma occurs everywhere, so moving will generally not help. Usually your home, not your geographic area, is the most important consideration for people with asthma. A home can contain triggers like mould or old carpets full of pet allergens and dust mites. But if there is one particular asthma trigger that is a big problem in your area, moving somewhere where it is low or absent may help.



Canadians spend 90% of their time indoors. Keeping your home clean (as free of dust and mould as possible) will help keep you well.

Indoor air: Questions & Answers

What is indoor air particulate?

“Indoor air particulate” refers to small pieces of material that float in your home’s air. It can be made up of many different things, including animal dander, pollen, dust mites, chemical substances, mould spores, and, importantly, outdoor air particulate matter from traffic and other sources. Some of these particles are small enough to be inhaled into the lungs and can be irritating or toxic. Given the amount of time we spend indoors, our exposure to these airborne particles may have a more important impact on our lung health than our exposure to outdoor air.

Research has shown that when we walk in our homes, tiny particles are stirred up from the floor and become suspended in the air. Within an hour, the larger and heavier particles will settle back down to the floor, while the smaller particles that are invisible to the eye remain in the air. When these floating particles are inhaled deep into your lungs, they can cause asthma symptoms.

Removing these tiny airborne particles has been shown to help reduce asthma symptoms. One way to reduce the number of particles in the air is to stop them from entering your home in the first place. You can do this by keeping your home smoke-free and taking off your boots and shoes and leaving them at the door. Another effective way to reduce the number of airborne particles is to keep the surfaces in your home clean, especially the floor. Most airborne particles will eventually settle onto the floor or carpet until they are stirred up again. In terms of flooring types, hardwood or other smooth flooring is the easiest to keep clean, while getting all the allergens out of carpets is more difficult. However, if carpets are properly cleaned you can still reduce the amount of allergens and your exposure to them.

What advantages do asthma & allergy friendly™ certified products provide?

Products with the asthma & allergy friendly™ label have been designed, tested, and certified to help people with allergies and asthma reduce their exposure to allergens and other triggers. The certification mark can be found on various brands of air filtration products, home appliances, and home-improvement products such as paint and flooring. For more details please see www.asthmaandallergyfriendly.ca.

Why use asthma & allergy friendly™ vacuum cleaners?

Vacuums that carry the asthma & allergy friendly™ certification are an important tool for reducing the amount of allergens in your home. Most of these vacuums contain a HEPA (high-efficiency particulate air) filter, which is designed to catch very tiny particles (such as pollen and dust mite dander) and remove them from the air. Standard vacuums (without a HEPA-type filter) only catch larger particles and let the tiny particles pass through the vacuum and back into the air. This can stir up the dust, allergens, and mould spores in the air in your home for many hours. Using a well-designed vacuum cleaner with a HEPA-type filter will help remove the smaller allergen particles from your home's air. Another way to reduce the amount of allergens passing through the vacuum and back into the air is to use a vacuum that vents outside the home (e.g., a central vac system).

How effective are air cleaners?

Some air cleaners can remove tiny particles in the air. However, it is still not clear whether air cleaners are effective at reducing asthma and allergy symptoms. You should not count on air cleaners alone to solve indoor air-quality problems.

There are several types of air cleaners, ion and ozone generators, mechanical filters, and electronic filters. Don't use any air cleaner that produces ozone, a chemical that can worsen asthma symptoms. Electronic air cleaners must be installed and maintained properly, or they will make ozone.

Can I claim air filters and cleaners as a medical expense?

You can deduct the cost of certain household equipment such as air filters and cleaners as medical expenses on your personal income tax. You will need a prescription from your doctor. However, there are some restrictions. Contact the Canada Revenue Agency at 1-800-959-8281 or www.cra-arc.gc.ca for more information.

Indoor air: Questions & Answers

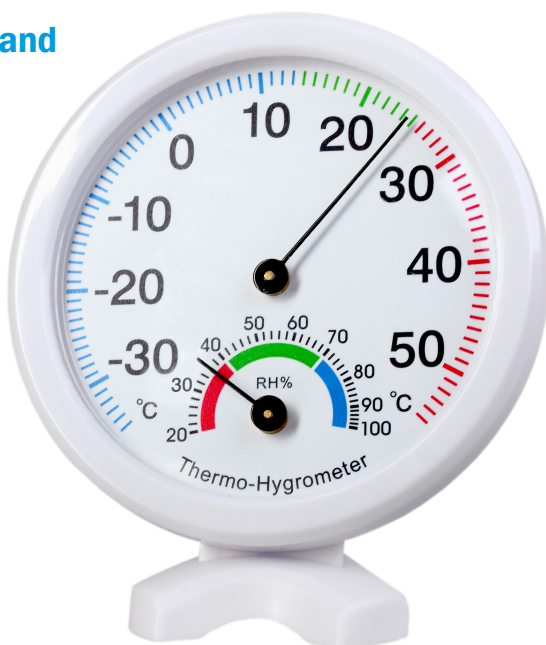
What do I need to know about humidifiers?

Damp homes, which may foster growth of mould, mites, and other irritants, are bad for lung health, so humidifiers are not generally recommended for people with asthma. The air in your home may be very dry during the winter months. Before using a humidifier, measure the level of humidity using a hygrometer that is properly calibrated. You might want to consider using a humidifier if the humidity is below 30% and you notice signs of very dry air, such as discharges of static electricity in your home, very dry skin, and/or frequent nosebleeds. If you use a humidifier, it is important that you continue to monitor the humidity level and shut the unit off when it reaches 40% to 50%. Remember, too much humidity is not good for your lung health.

If you choose to use a humidifier, it is important to keep the unit very clean. When humidifiers and vaporizers are left with water in them, mould and bacteria can grow. It is very important that these units be cleaned on a daily basis.

What is a hygrometer and where can I buy one?

A hygrometer is a gauge that measures the humidity in your home. You can buy one from most hardware stores. Use the hygrometer to see if the indoor humidity in your home is between 40% and 50%.



How can I avoid triggers away from home?

What do I need to consider before doing activities away from home?

Outside your home, you may run into asthma triggers that you can't control. While some of these may catch you by surprise, for others you can think ahead and prepare yourself to reduce your exposure. For example:

- Try to find out ahead of time if a home or other place you are visiting will put you in contact with any of your triggers (e.g., animals, cigarette smoke), and look for ways to reduce your exposure (e.g., asking people not to smoke while you are in the room). Make sure that you have used your controller medication as prescribed and have your reliever medication handy.
- If cold weather is a trigger and you have to go outside, plan activities for the warmest part of the day, if possible use a scarf or face mask to protect yourself from cold air.
- If humidity or hot weather is a trigger, try to plan activities in the cooler part of the day.

I'm planning a vacation abroad. What do I need to consider?

There are many things to consider when planning a trip. For example, you should research air quality, humidity, what plants are in bloom, local pollen count, smog, pollution, smoking, and other potential triggers in the country you are planning to visit.

Prepare for potential asthma triggers on an airplane, such as strong perfume, animals, or foods (e.g., peanuts) by using your controller medication as prescribed and having your rescue medication on hand. Make sure to contact the airline to let them know about any significant allergies that might affect your asthma. Make sure you have enough medications to last the duration of your trip. Keep the medication on your person or in your carry-on luggage in case your checked luggage is lost. It is also very important to research hospitals or other healthcare centres and note their address and contact information beforehand. Bring your Asthma Action Plan with you and make sure you have proper travel and health insurance in case of an asthma attack requiring emergency care.

For more information on safe travel with asthma and allergies, visit www.asthma.ca.

How can I reduce the triggers in my home?

Avoiding triggers: Bedrooms

Possible Trigger Source	Dust mites	Dander	Pollen	Moulds	Non-allergic triggers	Action	Done
Carpets	✗	✗		✗		Replace carpets with wood, tile, or linoleum. Use small area rugs; these are easier to clean.	
Stuffed toys	✗	✗				Remove stuffed toys, or purchase toys that are certified asthma & allergy friendly™. Wash stuffed toys in hot water.	
Dust on surfaces	✗					Use a damp mop or rag to dust.	
Upholstered furniture	✗	✗				Replace all upholstered furniture with items that can be wiped clean.	
Window blinds	✗					Use a pull-down blind instead of horizontal blinds — it will collect less dust.	
Beds and mattresses	✗					Enclose your bed mattress, box spring, and pillows in zippered, dust mite-proof asthma & allergy friendly™ covers. Put tape over the zipper.	
Bedding	✗					Wash all bedding and blankets in hot water (60°C) once a week.	
Humid air	✗			✗		Use a dehumidifier or air conditioner to maintain relative humidity between 40% and 50%. Avoid excessive humidity in the bedroom.	
Dust raised when vacuuming	✗	✗				Use an asthma & allergy friendly™ vacuum cleaner or a central vacuum system that vents outside.	
Pets		✗				Do not get a pet. If you have a pet, find a new home for it. At a minimum, keep all pets out of the house or at least out of the bedroom. Keep them in areas without upholstered furniture or carpets.	



Avoiding triggers: Living room



Possible Trigger Source	Dust mites	Dander	Pollen	Moulds	Non-allergic triggers	Action	Done
Pets		✗				Do not get a pet. If you have a pet, find a new home for it. At a minimum, keep them outside or in areas without upholstered furniture or carpets.	
Cigarette smoke					✗	Don't smoke in the home and car. Smokers can smoke outside.	
Outdoor air			✗	✗	✗	Keep windows closed in high-pollen, mould, and smog seasons. Use air conditioning.	
Cleaning products					✗	Avoid household sprays and polishes with strong scents.	
Carpets	✗	✗	✗	✗		Replace carpets with tile, wood, or linoleum.	
Carpets/floors		✗				Use an asthma & allergy friendly™ vacuum cleaner or a central vacuum system that vents outside.	
House plants				✗	✗	Minimize the number of house plants.	
Humid air	✗			✗		Use a hygrometer and keep humidity between 40% and 50%.	
Wood smoke					✗	Do not use a wood stove or fireplace.	
Old, mouldy paper				✗		Throw away old newspapers and magazines.	

Avoiding triggers: Kitchen and bathroom



Possible Trigger Source	Dust mites	Dander	Pollen	Moulds	Non-allergic triggers	Action	Done
Mould in refrigerator				✗		Clean out the fridge before mould grows on food and fridge surfaces.	
Mould in refrigerator				✗		Clean the fridge drainage tray monthly.	
Carpets				✗		Do not use carpeting in the bathroom.	
Mould on bathroom surfaces				✗		Keep bathroom tiles, tub, toilet, and shower curtain clean and mildew-free.	
Mould on bathroom surfaces				✗		Vent the bathroom fan to the outside and use it when the shower is in use.	
Personal care products					✗	Use unscented soaps and deodorants. Do not use perfumes or hair and body sprays. Use cleaning products that are unscented.	
Infections					✗	Wash hands frequently to avoid viral infections.	
All triggers					✗	Post your Asthma Action Plan on your fridge.	
Medications					✗	Make sure you avoid beta blockers, acetylsalicylic acid (ASA, or Aspirin®), Advil®, Motrin®, or Aleve® if they bother your asthma.	

Avoiding triggers: Basement, garage and yard

Possible Trigger Source	Dust mites	Dander	Pollen	Moulds	Non-allergic triggers	Action	Done
Household chemicals					✗	Take all unused paints, chemicals, and cleaners to the toxic waste centre.	
Household chemicals					✗	Avoid oil-based paint, glue, and fumes; instead, use certified asthma & allergy friendly™ paint.	
Household chemicals					✗	Do not use insecticides or pesticides on your lawn.	
Mould in wet basements				✗		Do not sleep in the basement if it is mouldy.	
Plants			✗			Plant low-allergen garden plants and trees.	
Humid air	✗			✗		Keep relative humidity below 50%. Use a dehumidifier if needed. Only use a humidifier if necessary. If either is used, keep very clean.	
Furnace		✗	✗	✗		Change the furnace filter regularly.	
Clothes drying			✗	✗		Dry clothes in a dryer that is vented to the outside. Pollen collects on clothes that are hung outside to dry.	
Yard waste			✗	✗		Have someone else mow your lawn, rake your leaves, or turn the compost.	
Air pollution			✗		✗	Do not use your car on high-smog days; take public transit or carpool. If you must use your car, use the air conditioner and keep the windows closed.	
Air pollution					✗	Do not use gas-powered engines and barbecues, especially on high-smog days.	
Garbage cans				✗		Keep garbage cans clean.	
Indoor air	✗			✗		Clean and maintain air conditioner and air purifier.	
Pollen in outdoor air			✗			Avoid going outside between 5:00 am and 10:00 am and on hot, windy days. Pollen counts are highest at these times.	
Carpets in basement	✗			✗		Do not put carpeting directly on concrete floors in the basement.	



What is an asthma diary? How can it help me?

Finding out what your non-allergic triggers are may take some time and effort. Keeping a record of your asthma symptoms may help you and your healthcare practitioners find out what your triggers are. The following is a sample journal entry. If you wish, make photocopies of the attached diary to record your entries. Share your information with your doctor or asthma educator. Download an interactive asthma diary at www.asthma.ca.

Sample diary entry

January 1. I went to a New Year's Eve party and had problems breathing. People were smoking. I started coughing and had tightness in my chest. I left early.

January 2. I had to use my puffer when I was ice skating.

April 8. Last night there was a thunderstorm. I had to use my puffer twice during it.



Asthma diary

Date _____

Asthma symptoms

- ☐ Cough
- ☐ Wheezing
- ☐ Missed school or work
- ☐ Shortness of breath
- ☐ Chest tightness

If yes, when?

- ☐ With exercise
- ☐ At night
- ☐ With a cold or flu
- ☐ Other time _____

Observations

Date _____

Asthma symptoms

- ☐ Cough
- ☐ Wheezing
- ☐ Missed school or work
- ☐ Shortness of breath
- ☐ Chest tightness

If yes, when?

- ☐ With exercise
- ☐ At night
- ☐ With a cold or flu
- ☐ Other time _____

Observations

Notes:

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.



Asthma & Allergy HelpLine



1-866-787-4050

Whether you have lived with asthma all your life or you are newly diagnosed, whether you are a concerned caregiver or simply don't know where to find your answers, you can call our Asthma & Allergy HelpLine to get the help you need. Our free, bilingual call-back service will connect you with experienced and professional Certified Respiratory Educators (CREs) who can give you personalized and tailored advice and tips on managing asthma. Call our toll-free service today!

“I just want to say how much I appreciate your Asthma & Allergy HelpLine. When I found out my young son had asthma I felt so lost. We live in a small town where information is not easily available and the more I read on the Internet the more scared I became, but when I found your website and HelpLine, it meant so much to me. The CRE helped me understand more about triggers and controlling asthma without a lot of technical medical terms. Again, thanks so much for your help.”





You Deserve an Active Life

Take Control



To get involved with Asthma Canada or for more information:

1.866.787.4050

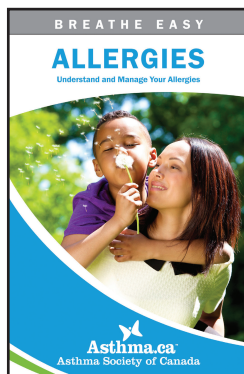
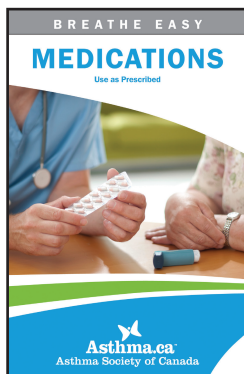
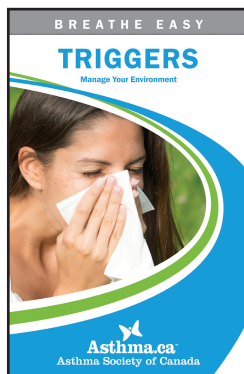
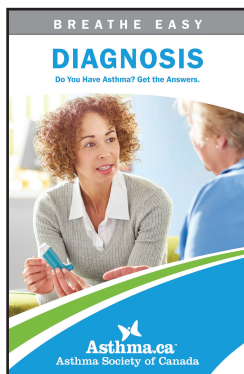
Online: www.asthma.ca | Email: info@asthma.ca

For more than 40 years, Asthma Canada has proudly served as the national voice for Canadians living with asthma and respiratory allergies; empowering patients with evidence-based information to improve their quality of life.

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Your Breathe Easy® series:



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