



# **HOW TO CARE FOR YOUR CHILD WITH ASTHMA**

## **Information for Parents**

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**Index # 10.41.01**

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## INTRODUCTION

This booklet is for parents who have children with asthma. You will have a better understanding of how to care for your child with asthma after reading the booklet. This includes an understanding:

- What is Asthma pg. 3
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- Symptoms of Asthma pg. 6
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- Relaxation and Breathing Exercises pg. 12

You will probably still have questions about asthma after reading this booklet. Talk to your doctor or nurse about your questions or concerns. There are also additional pamphlets available for you to read.

Remember, it takes time to learn how to best care for your child's asthma. Do not become discouraged as it is possible for you and your child to become *asthma experts!*

**Instructions for Home Use of a Compressor** - Insert in booklet if required



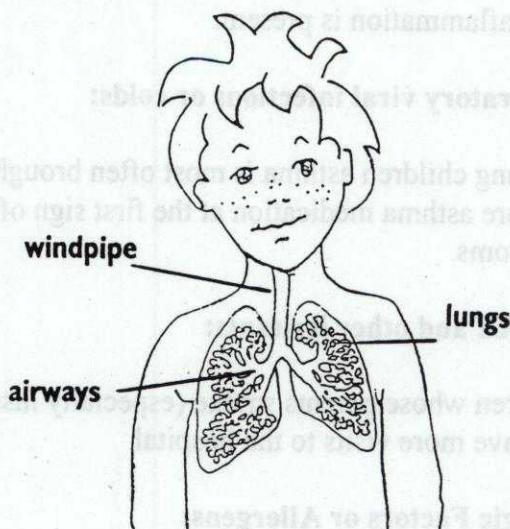
## WHAT IS ASTHMA?

Asthma is a chronic breathing disorder that affects 10% of people. It varies in severity from child to child. In a child with asthma the airways are extra sensitive. They react to certain factors, called **triggers** which causes changes in the airways.

### The Breathing System

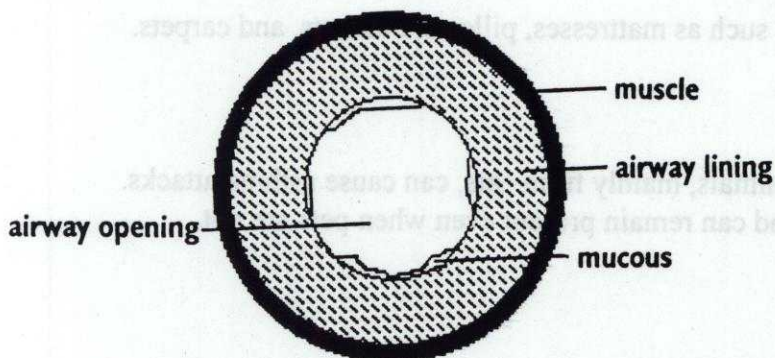
The breathing system is made up of the:

- windpipe
- airways
- lungs



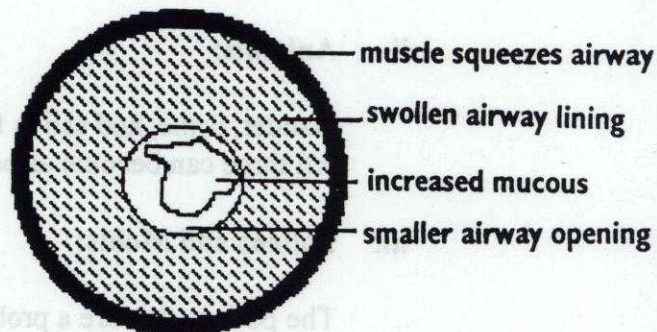
### The Normal Airway

The airways in the lungs allow oxygen into the body and carbon dioxide out.



### The Airway during an Asthma Attack

During an asthma attack the airways become inflamed, swollen, and produce more mucous. The muscles wrapped around the airways may tighten and squeeze.



When the airways become narrow it becomes harder to breathe. Asthma symptoms then occur. This is called an **asthma attack**. The inflammation can last for months after an asthma attack. During this time, the airways are even more sensitive than usual and this may cause your child to cough more than usual.

## CAUSES OF ASTHMA

### **What causes asthma?**

The exact cause of asthma is unclear. It is believed that people with asthma have airways that are sensitive to certain triggers. When your child is exposed to these triggers, asthma symptoms develop. These triggers are different for each child and may change over time. The first three listed below cause inflammation in the airways. The other triggers can make asthma symptoms worse if inflammation is present.

#### **1. Respiratory viral infections or colds:**

In young children asthma is most often brought on by colds. The doctor may start your child on more asthma medication at the first sign of a cold to help prevent or reduce asthma symptoms.

#### **2. SMOKE and other irritants:**

Children whose parents smoke (especially inside the house) often suffer more asthma attacks and have more visits to the hospital.

#### **3. Allergic Factors or Allergens:**

An allergen is a factor that causes an allergy. An allergy to a certain substance may take months or years to develop. Some children with asthma may have other problems such as eczema or a runny nose (allergic rhinitis).

##### **i. House Dust Mites**

Mites can be found in soft things such as mattresses, pillows, blankets, and carpets.

##### **ii. Animals:**

Dander, urine, and saliva from animals, mainly from cats, can cause asthma attacks. All three can become airborne and can remain present even when pets are not.

##### **iii. Pollens and Molds:**

The pollens that are a problem come from trees, grasses, and weeds. In our area trees are most often a problem in April and May. The grasses are a problem in June and July, and the weeds in August and September.

Molds can be found indoors and outdoors in damp places. Outdoor molds are mainly a problem in spring and fall. Indoor mold is often found in humidifiers and damp areas such as basements and showers.



#### iv. Foods:

Foods rarely cause asthma attacks. But they may cause severe allergy shock called anaphylaxis. In this case wheezing is a symptom of anaphylaxis rather than normal asthma. This happens most often within minutes to a half hour after eating a certain food.

#### 4. Exercise

Some children with asthma get asthma symptoms, during or a few minutes after exercise or exertion. This is called exercise-induced asthma. In spite of this, children should not avoid exercise. With proper treatment your child should be able to keep up with his or her peers. Before an activity, giving medications *before*, can allow children with asthma to take part in any activity they chose. A proper warm-up and cool down can help to lessen symptoms.

#### 5. Weather Changes

Certain types of weather, or sudden changes in temperature or humidity, can worsen your child's asthma. But since asthma occurs in all climates, moving may not solve the problem.

#### 6. Emotional Factors

Emotional factors on their own do not cause asthma. If your child becomes stressed, anxious, excited or tense, this can make asthma worse. This is most often true if the asthma is poorly controlled. You should discipline your child with asthma as you would any other child. A consistent approach is needed.

#### 7. Other irritants

Other triggers include smoke from a wood burning stove, fireplace, or fumes from a gas cooker. As well, air pollution (e.g., inhaled fumes and chemicals), perfumes and deodorants can worsen asthma.

#### 8. Medicine and Ingested Chemicals

Aspirin can worsen asthma symptoms. You should treat your child's fever with Tempra or Tylenol. Children also may be sensitive to other drugs or chemicals. For instance, Metabisulfite, found in some restaurant foods, or Monosodium Glutamate (MSG), in Chinese food, can worsen asthma symptoms.

**NOTE: It is important to know that asthma is not "catching" or infectious.  
Your child cannot give asthma to another child.**

## SYMPTOMS OF ASTHMA

### **What are the most common symptoms or signs of asthma?**

- cough
- chest tightness
- shortness of breath
- wheeze

### **How will I know when my child's asthma is getting worse?**

Your child may show *early warning signs* such as:

- need more asthma "reliever" medications, also called inhaled bronchodilators
- be less active
- show more signs of asthma during the night and early morning
- have a decrease in PEAK FLOW readings (if used by your child)

### **How will I know when my child needs to be taken to the doctor immediately or be seen in Emergency?**

Your child may:

- have a hard time breathing (e.g., flaring nostrils, fast breathing, hunching over to breathe, "sucking in" of the chest or windpipe)
- have blue or grey lips or fingernails
- have a hard time talking or walking
- does not improve 10 minutes after use of relievers



## CARE DURING AN ASTHMA ATTACK

### **What should I do when my child is having an asthma attack?**

You should:

- Have your child take his or her reliever
- Get your child to take slow, deep breaths
- Support and comfort your child, and provide a calm setting

The goal of treatment for your child during an acute attack is to relieve asthma symptoms within ten minutes.

If your child's symptoms are not relieved, then your child should be seen by his or her doctor and/or taken to the Emergency Room of a hospital. In Emergency your child will first be assessed and treated. Most often your child will be given relievers. If this does not improve asthma symptoms, he or she could be admitted for care.

## LONG TERM CARE OF ASTHMA

### **Can my child's asthma be cured?**

Asthma cannot be cured. However, asthma symptoms can be controlled through proper treatment. Also, most children's asthma improves over time.

The goal of treatment is to attain and maintain *good control* of symptoms on a daily basis. *Good control* means that your child will:

- have no acute asthma attacks that require a visit to the hospital
- achieve symptom control with the least amount of medications
- take part in normal activities (e.g., sports, school)
- sleep well
- have a healthy outlook towards asthma and a sense of control over it

### **How can I and my child achieve good control?**

You and your child can achieve good control in five ways:

- **education**
- **recognize symptoms**
- **environmental control**
- **self-care**
- **medications**

### Education

Knowing about asthma is key for you and your child to achieve a sense of control. You can learn about asthma in a few ways. Ask questions of your child's doctor(s), nurses, pharmacists, and other health care workers. The Children's Hospital Family Information Library has books and pamphlets. You can also contact the Manitoba Lung Association about its education programs (call 774-5501).



## Recognize Symptoms

You and your child should be aware of the early warning signs that asthma is getting worse, as outlined in the section on symptoms of asthma. You will then be able to start treatment sooner to prevent asthma from getting out of control.

Having a written **Action Plan** that outlines how you can deal with the early warning signs is also important. You can develop an action plan with your child and your child's doctor.

## Environmental Control

Knowing what triggers make your child's asthma worse is a very important part of asthma care. From here, you and your child can look at ways to avoid or control coming in contact with them. This may help to decrease the amount of medications that might be required. Although triggers vary for every child, here are some common tips that will help:

- Prevent smoking in your house and car. The smell of smoke on clothes can also be a trigger.
- Consult your action plan or call your child's doctor at the first signs of a cold as your child may require extra medicine to control the asthma
- Decrease contact with house dust mites by wrapping your child's mattress and box spring in plastic or covers. Wash all bed sheets in hot water once a week and dry in a hot dryer.
- Keep your child's room tidy to reduce the amount of dust. Keep only items and furniture that are absolutely necessary in the child's room.
- Use a damp cloth or mop when dusting.
- If pollen makes your child's asthma worse, keep your windows and doors closed when pollen counts are high.
- Avoid use of humidifiers or vaporizers, as they tend to collect molds and dust.
- Avoid contact with animals if they are a problem. They should be kept out of the home, but **must** be kept out of the child's bedroom. There are **no** non-allergy breeds.
- Avoid using cleaning solutions with strong odours, hairsprays, perfumes, and oil based-paints in your child's presence.

**Note:** Keeping a daily diary of your child's asthma for a couple of months may help you find out what triggers makes your child's asthma worse. It can also help you to know your child's early warning signs.

## Self-Care

Encouraging your child to learn about his or her asthma and how to control it is an important way to manage asthma. Knowing how to help control asthma will also make your child feel good about him or herself.

Some tips that will promote self-care include:

- teaching your child to recognize symptoms and to know what triggers make the symptoms worse
- teaching your child about the asthma medications
- encouraging your child to use relaxation and breathing exercises
- encouraging your child to use a peak flow meter at home (if using one)

**Note:** It is also important to let your child's teacher know about your child's asthma (e.g., symptoms, triggers, medications). Giving the teacher an action plan for when your child has an asthma attack will help your child and teacher deal with the attack.

## Asthma Medications

Medications used to treat asthma are divided into two major groups

### **I. Preventers:**

Preventers are also called anti-inflammatory medications. They reduce the swelling or inflammation in the airways. Therefore asthma symptoms are less likely to begin. They are used for ongoing asthma care. If your child is put on preventers, he or she will be taking them on a daily basis. Preventers take longer to work but their effects are longer lasting. Your child should take them until by his or her doctor tells you to stop them.

There are two types of preventers: steroids and non-steroids. The steroids are not the same as the muscle-building ones that some athletes use. Choice of medication again depends on your child's asthma.



## 2. Relievers:

Relievers are also called bronchodilators. They relax the muscles around the airways, but do not reduce inflammation. Relievers provide rapid relief of acute asthma symptoms. Your child will likely use them only when needed. If you find your child needs a reliever every four hours, you should call your child's doctor. ***Using a reliever too often can be dangerous. Instead, contact the doctor.***

The medication(s) that your child's doctor selects will depend on several factors, such as how often your child has symptoms, your child's age, and triggers of his or her asthma. Although the choice will differ for each child, here are some tips that will help you manage the asthma:

- Your child should take the medications as prescribed. If you feel there is a change in the asthma, you should contact your child's doctor. He or she can then assess the medications used.
- Asthma medications can be taken in a variety of ways. It is important that your child uses the proper technique when taking them. Make sure you ask your child's doctor or nurses to assess your child's technique on a regular basis.

This is a list of the medications your child is on and when they should be taken:

### Preventers:

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_

### Relievers:

4. \_\_\_\_\_
5. \_\_\_\_\_
6. \_\_\_\_\_

\*Handouts on how to give the medications will be given to you and your child.

## **RELAXATION AND BREATHING EXERCISES**

Relaxation and breathing exercises may help your child relax and breathe better during an asthma attack. They will help your child to stop gasping for air and gain control of breathing. Have your child practice these techniques daily to help achieve better success during an attack.

**For pre-school children, ask your child to:**

1. Close the eyes.
2. Take 3 slow breaths. Breathe in through the nose and out through the mouth.
3. Tighten the arms and legs for 5 seconds. Then relax or let go until feeling limp, like a floppy rag doll.
4. Remind your child to try to stay calm and quiet.
5. Repeat these steps about 5 times until your child feels like stopping.
6. During these steps, encourage your child to think of something pleasant, such as sitting on a warm beach or floating on a cloud.

**Pre-school children may also be taught rhythmic breathing patterns** (e.g., "ha who" breathing pattern). Ask your child to:

1. Breathe in slowly. Then while breathing out, encourage your child to say "ha".
2. Have your child breathe in again, and say "who" on breathing out.
3. Repeat the above steps about 5 times until your child feels like stopping.

**School-age children can be taught "pursed-lip" breathing.** Ask your child to:

1. Sit in a chair, relax, and let the neck and shoulders drop.
2. Breathe in slowly through the nose.
3. Purse the lips as in whistling and blow out through the mouth, slowly and evenly. Try to take twice as long blowing out as it took to breathe in.
4. Continue these steps until your child feels in control of breathing.



**Children can also learn to relax and tighten their muscles** during the breathing exercises.

Ask your child to:

1. Tighten and release every muscle, starting at the top of the head and working down to the toes.
2. Take time to notice the small differences in how muscles feel when they are relaxed and when they are tight.
3. Once completed, your child should breathe slowly and easily and enjoy the feeling of relaxation. A mini version of this can be done at school.

\* Other methods include visualizing a calm, peaceful place. Seek out information in the Children's Hospital Family Information Library for other relaxation techniques.