

Kids

Asthma Basics #4

Be a

secret

Asthma Agent™





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.

Acknowledgments

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A special thank you to all the volunteers who made this project possible.

The **Asthma Society of Canada** will review and update this booklet in the future. Your feedback is welcome. Please email your comments to info@asthma.ca



Greetings from Dr. Eugene Airway



Greetings Asthma Agent Recruit _____ .

Allow me to introduce myself. I am Dr. Eugene Airway. I am head of a special organization called the Asthma Society of Canada. We at the Asthma Society have dedicated ourselves to studying everything about a mystery called asthma. What is it? Where does it come from? You might have wondered about the answers to these questions yourself. Well, we need your help!

Your mission, if you choose to accept it, is to help me, Dr. Eugene Airway, gather the clues that we need to understand this asthma mystery. As an Asthma Agent, you can help us to find the answers.

You will be given a file with a lot of different cases to solve, and the special information you need to solve them. As you solve these cases, you'll learn a lot of neat things about asthma.

- Case 1** Learn what asthma is, and how your doctor knows if you have asthma p.2
- Case 2** Find out what makes your asthma worsep.4
- Case 3** Find out about your medicine, and how it worksp.8
- Case 4** Find out how to use your inhalerp.16
- Case 5** Check to see if your asthma is controlledp.22
- Case 6** Find out what information your parents, coaches and teachers need about asthmap.26

Think you're ready for the challenge? Let's go!

Sincerely,

Dr. Eugene Airway

Asthma Society of Canada



CASE 1

Find out if you have asthma



Asthma is a disease of the airways that you can not catch from other people. If you have asthma, sometimes you will notice it, and sometimes you won't. But, it's always there.

Symptom [simp-tum]

A change or new feeling in your body that means you might have a condition, like asthma.

Asthma happens when something causes your airways – the tubes in your lungs that you breathe through – to get swollen. This makes it harder for you to breathe. Some common symptoms give your doctor clues to help figure out if you have asthma.

Check the symptoms you have:

- get short of breath
- cough a lot
- get wheezy (making a whistling sound when you breathe)
- get a tight or tickly feeling in your chest



So, if you feel these things, does it mean you have asthma? It might, but, it might not. Tricky, huh?

Sometimes, kids who don't have asthma feel all these things, but it's not asthma. Sometimes, someone might have asthma and hardly even feel any symptoms at all. Only your doctor can tell for sure if you have asthma by having you do some tests. Don't worry, they're not scary. They're easy. You may be asked to do a spirometry [spur-om-met-tree] test or a peak flow test.



Diagnosis [die-ag-no-sis]

When your doctor looks at all the clues to decide if you have a condition, like asthma.

Spirometry test

A spirometer measures how fast you can blow air out. It also checks to see how much air you can fit in your lungs.

Peak flow test

A tube called a peak flow meter measures how fast you can blow air out. You usually do this test a few times. Your doctor may even give you a peak flow meter to take home so you can check how your asthma is doing.



Spirometer

These tests will help the doctor make a diagnosis. This means that your doctor will decide if you have asthma.

Check (✓) which tests you had, and write down the results.

File:

Spirometry: _____

Peak flow: _____



Find out what your asthma triggers are



Trigger [Trig-ger]

Something that makes your asthma symptoms start.

So, you don't know what triggers your asthma?!? Sounds like you have another case to solve. Lots of things can trigger, or start, asthma symptoms. Everyone reacts to different things and it is possible that some of these things do not trigger your asthma.

Allergic triggers

It's important to find out what things trigger your asthma symptoms so that you can stay away from them. Allergies can trigger asthma symptoms. Your doctor will find out if you are allergic to anything. This may mean another test.

Allergy testing

Your doctor will put a drop of allergen on your skin and then gently prick the skin to see if there is a reaction. If the skin swells up and gets itchy, it means you are allergic to something.

Check (✓) off your triggers and write down how you can stay away from them

Animal dander (pets)

is my trigger _____

Grass, tree and ragweed pollen

is my trigger _____



House dust mite

is my trigger _____

Mould

is my trigger _____

Cockroach

is my trigger _____

Other

is my trigger _____



Find out what your asthma triggers are



Non-allergic triggers

You need to stay away from cigarette smoke. This might be hard if you live with someone who smokes. Smoke makes asthma symptoms worse, so ask smokers to smoke outside.

Kids will get six to ten colds a year. That is a lot of colds! If colds make your asthma bad, ask your doctor what you should do when you are getting a cold.

Check (✓) off your triggers and write down how you can stay away from them

Cigarette smoke

is my trigger _____

Cold or Flu

is my trigger _____

Strong smells

is my trigger _____



Pollution

is my trigger _____

Cold air

is my trigger _____

Weather changes

is my trigger _____

Go to

Asthma-KiDS.ca

to play the Airway Invaders game



This is a big case, with a big word like medication

Medication [med-ick-kay-shun]

Something that you take to help your symptoms and make you feel better.

Why do I need an inhaler? You're on a new case.

Asthma Agents need to know how to use the very special, high-tech Asthma Agent tool: the inhaler. Your inhaler contains the medication that keeps your airways clear. If you have asthma, you'll probably need two types of medicine:

- Controller medicine
- Reliever medicine

Your goal is to find out why you need your inhaler (sometimes it's called a puffer), and how to use it properly.

You need your inhaler for one simple reason: your inhaler lets you get the medication into your airways. When you take a puff from your inhaler, you're breathing in medicine that helps to keep your airways from getting swollen.

That's why the inhaler is the Asthma Agent's secret weapon: your inhaler lets you take control of your asthma so your asthma doesn't take control of you!



Hey There!

Inhalers get asthma medication into your airways to help you breathe.

www.Asthma-Kids.ca

Most Asthma Agents will need to know how to use the very special, high-tech Asthma Agent tool...

...the inhaler,





What kinds of inhalers are there?

Most Asthma Agents use two different inhalers:

- A controller inhaler (sometimes called a preventer puffer). This is usually used every day to reduce the inflammation in your airways
- A reliever inhaler (sometimes called a rescue puffer). Use this only when you feel your airways tighten and it is hard to breathe

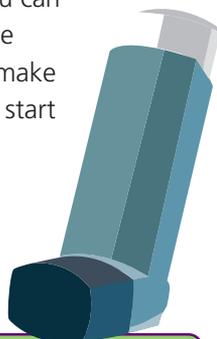
These inhalers work just like they sound. The controller inhaler helps to control your asthma, so that your asthma doesn't act up. The reliever inhaler helps when you are having breathing problems.

Controller medicine

Your controller inhaler can come in many colours (orange, brown, purple or red). Using your controller medicine will keep your airways clear and keep symptoms from coming back. This means taking your controller medicine even when you feel good. If you stop it, your asthma symptoms may come back.

Reliever medicine

Your reliever medicine comes in a blue inhaler. You can take your reliever inhaler when you start to feel the symptoms of asthma. Your reliever inhaler helps make your asthma symptoms go away fast so you can start to breathe better again.



Reliever



Hey There!

You think your nose
is up for the challenge?



Inhalers are an important Asthma Agent tool. Learning how to use them is important.
www.Asthma-Kids.ca

Word search

e	r	s	l	b	r	p	n	c	v	a	y	i
h	p	u	f	f	e	r	w	i	j	t	n	t
a	d	h	v	j	s	p	c	m	r	f	q	k
l	s	m	b	d	w	h	t	o	l	n	s	r
l	r	t	v	i	b	v	c	a	u	e	k	a
e	f	y	h	a	q	z	m	c	n	g	x	m
r	g	a	k	m	s	m	s	e	g	c	h	t
g	p	x	g	i	a	o	t	z	s	f	l	r
y	f	l	n	t	v	p	l	r	b	u	j	k
p	w	a	i	r	w	a	y	s	w	k	t	w
x	t	o	f	i	d	h	n	l	y	j	o	o
m	n	k	l	b	e	r	e	g	g	i	r	t

airway

asthma

inflammation

puffer

allergy

cough

lungs

trigger



Controller puffer



When do I use my controller medicine?

You have already learned that asthma is when your airways get inflamed (see page 2). Once you have asthma, it means your airways are always swollen a little bit. The more your asthma is bothered by triggers, the more inflamed your airways get. The more inflamed your airways get, the bigger the chance that you'll feel symptoms, and the harder it is to breathe. So, one thing leads to another.

What if you could control how swollen your airways get in the first place? If you keep the swelling from getting worse, you will not have any asthma symptoms.

Your controller inhaler helps to reduce the inflammation in your airways. **To feel your best, you need to use your controller inhaler every day.** Even on days when you feel good!

It's your controller medication that's helping you to feel so good. When you forget to take your controller medication, your asthma symptoms may get worse. And that's not what an Asthma Agent wants, is it?

Your controller puffer can be lots of different colours and shapes. Lots of times it's orange or brown. Sometimes, it might even be purple or red. You might have two controller medications to take every day. And sometimes you might take a pill to control your asthma.

NO INFLAMMATION

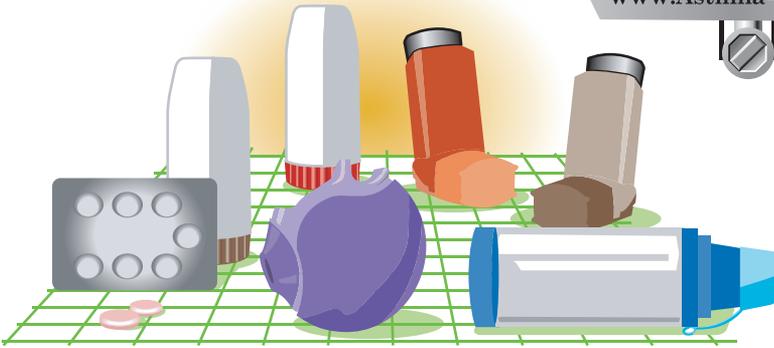


Hey There!

Use your controller
puffer every day to
help keep asthma
symptoms away!

www.Asthma-Kids.ca

Controller medicine



What is my controller
medicine?

File:

My controller inhaler is the colour _____

My controller inhaler is called _____

I take my controller inhaler _____

Sometimes the doctor will give you a pill to control
your asthma. If you are taking a pill, write down the
name here: _____



Reliever puffer



When do I use my reliever inhaler?

Your Asthma Agent file has already told you that asthma symptoms are when you cough, wheeze, get short of breath, or get a tight feeling in your chest (see page 2). They're not much fun. And sometimes they can be a little scary.

When you have asthma, you have to watch for these clues, because they're telling you that your asthma is getting worse...

When you notice that you're starting to have trouble breathing, you can take a puff from your reliever inhaler to make yourself feel better fast. That's why an Asthma Agent always knows where their reliever inhaler is. After all, you won't always know when something's going to trigger your asthma.

If being active makes you have trouble breathing, your doctor might tell you to use your reliever inhaler even before you start doing things like running or riding your bike.





Hey There!

I need to tell an adult when
I use my reliever puffer.

Take your reliever
only when you have
trouble breathing.

www.Asthma-Kids.ca



What is my reliever?

File:

My reliever inhaler is the colour _____

My reliever inhaler is called _____

I take my reliever inhaler when I feel _____



CASE 4

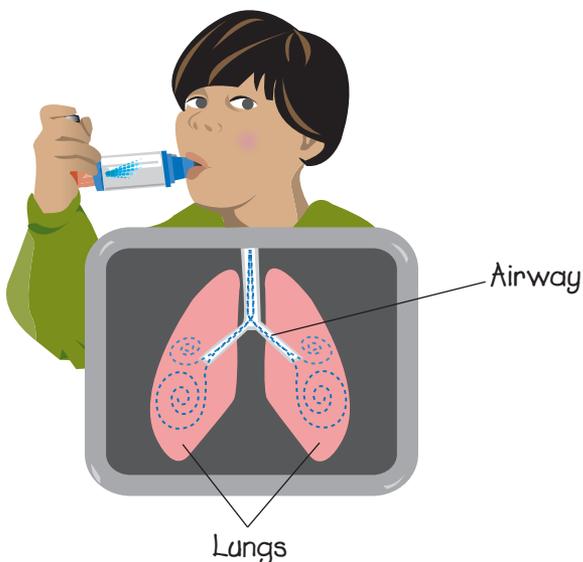
How do I use my inhaler?



Pay close attention... This is an important case. Your puffer is your secret weapon against your asthma. For any secret weapon to work, you need to know how to use it, right?

Practice does make perfect

Your Asthma Agent training means learning how to take of your inhaler. Your inhaler is the tool that delivers the medicine you need to keep your airways healthy. The medicine is a mist that you breathe deep down into your lungs. That's where it works the best to keep the asthma symptoms away.



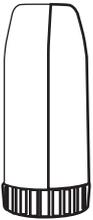


Hey There!

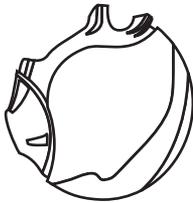
Asthma medication works best when it's in your airways.

www.Asthma-Kids.ca

Look at the different types of inhalers below and circle and colour the one(s) you use.



Turbuhaler®



DISKUS®



pMDI or puffer



Spacer

Using my inhaler correctly

File:

Take your inhaler to your pharmacist, doctor or asthma educator and show them how you are using it.



Metered Dosed Inhaler and spacer

Metered Dose Inhaler [me-turd-dose-in-hay-ler]

An inhaler (sometimes called a puffer) with medication that you breathe in to help your asthma.

If you use a pressurized metered-dose inhaler (pMDI), your doctor will want you to use a spacer so you can get more medicine into your airways. You can get a spacer from your pharmacist.

To use your pMDI (puffer) with a spacer:

- 1 Shake the puffer well before you use it
- 2 Take off the cap from your puffer and your spacer too, if it has one.
- 3 Put the puffer into the spacer
- 4 Breathe out **away** from the spacer
- 5 Put the mouthpiece in your mouth. Press the top of your puffer once
- 6 Breathe in **slowly through your mouth** until you've taken a full breath
- 7 Hold your breath for about ten seconds, then breathe out slowly

If you need a second puff, wait 30 seconds and repeat all the steps. Keep the puffer at room temperature, **not** in the fridge.

Spacer [spay-er]

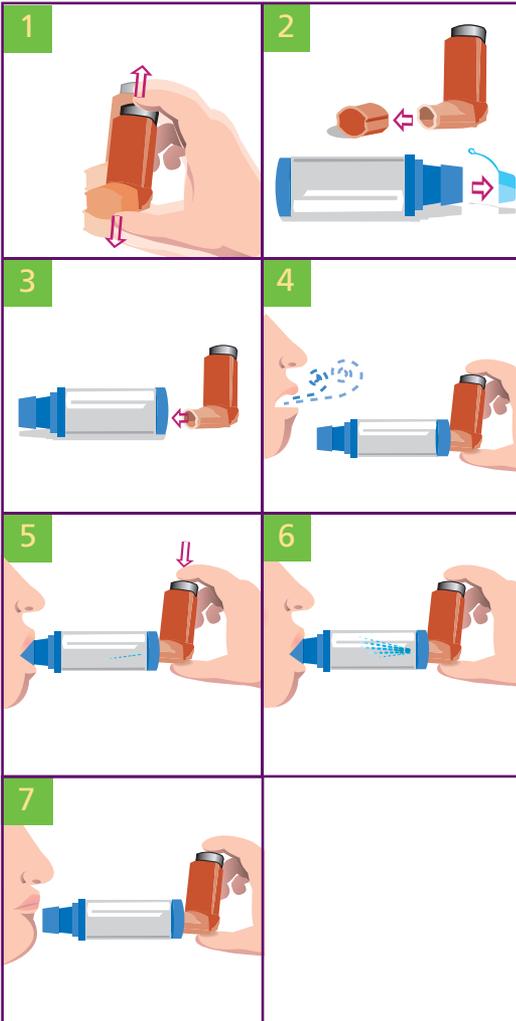
A tube that you put onto your pMDI (puffer) to help asthma medication get into your airways better.



Hey There!

Always write down
the number of puffs
of pMDI you've taken.

www.Asthma-Kids.ca





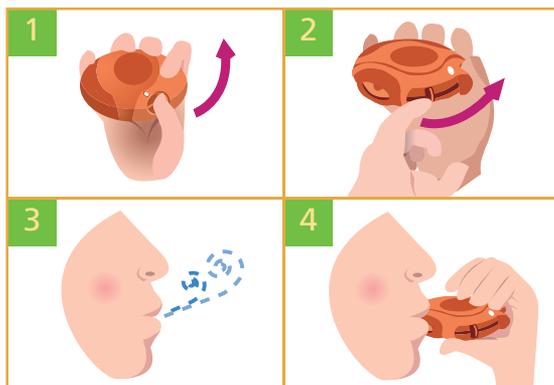
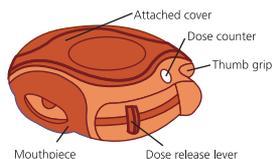
DISKUS® & Turbuhaler®



To use your DISKUS® (dis-kuss):

- 1 Open your diskus: hold it in the palm of your hand, put the thumb of your other hand on the thumb grip and push the thumb grip until it clicks into place
- 2 Slide the lever away from you as far as it will go
- 3 Breathe out **away** from the diskus
- 4 Put the mouthpiece in your mouth and close your lips around it
- 5 Breathe in deeply until you've taken a full breath
- 6 Hold your breath for about ten seconds, then breathe out slowly

Always check the number in the dose counter window to see how many doses are left.



DISKUS® [dis-kuss]

A inhaler with medication that you breathe in to help your asthma.

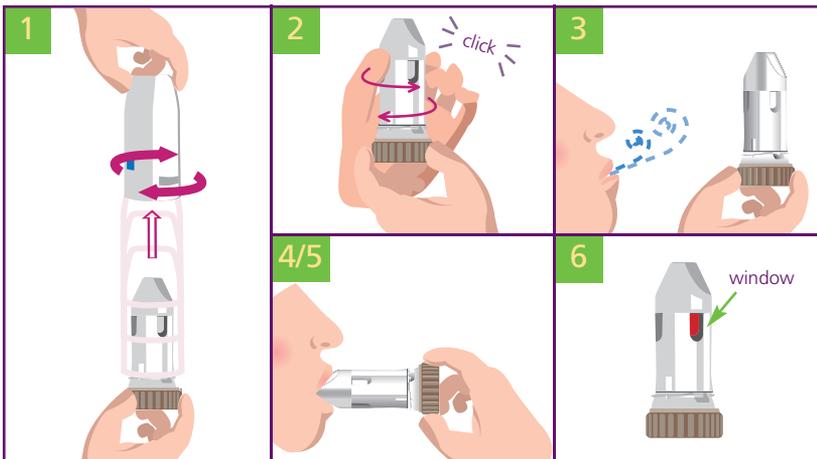


Turbuhaler® (ter-buh-hay-ler)

A plastic tube with a powder in it that you breathe in to help your asthma.

To use your Turbuhaler® (ter-buh-hay-ler):

- 1 Unscrew the cap and take it off
- 2 Twist the bottom of your turbuhaler as far as you can, then twist it all the way until you hear a "click"
- 3 Breathe out. Do not breathe out through the mouthpiece
- 4 Put the mouthpiece between your teeth, and close your lips around it
- 5 Breathe in forcefully and deeply until you've taken a full breath
- 6 Always check the window under the mouthpiece. If you see a red colour, tell a grown-up that your medication is running out



Learn how to use your DISKUS® or Turbuhaler® properly.



Quiz Time!



Okay, it's quiz time! Nervous? Don't be. This quiz is easy, because it's all about you, so you already know the answers!

THE 30 SECOND ASTHMA QUIZ FOR KIDS™

Asthma Assessment Tool

"My asthma doesn't bother me. Does yours?"



Patient Name: _____ Date: _____

	Yeah	No Way
 1. Did you use your blue puffer 4 or more times in the last 7 days?	<input type="radio"/>	<input type="radio"/>
 2. Did you cough, wheeze or have a tight chest after playing sports or running around (4 or more times in the last 7 days)	<input type="radio"/>	<input type="radio"/>
 3. Did you wake up at night coughing or wheezing because of your asthma? (1 or more times in the last 7 days)	<input type="radio"/>	<input type="radio"/>
 4. Did you ever have to stop playing because you had trouble breathing? (1 or more times in the last 7 days)	<input type="radio"/>	<input type="radio"/>
 5. Did you miss school or regular activities because you felt sick from coughing or wheezing? (1 or more times in the last 30 days)	<input type="radio"/>	<input type="radio"/>

Comments: _____

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What do the results of the quiz mean?

- I had all **"no way"** answers, so my asthma is under control.
- I had some **"yeah"** answers, so my asthma is **not** under control.

File: **Getting control of my asthma**

I can do the following things to get my asthma under control:

- Take the asthma quiz and show my parents and my doctor my test results.
- Show my doctor, pharmacist or asthma educator how I use my inhaler.
- Ask my doctor what I am allergic to and plan to stay away from these things.
- Find ways to remind myself to take my controller medication, like posting a note on the bathroom mirror.

Wheeee [wee-ee]

Make a whistling sound when you breathe.



Learn to control your asthma!



Once you have asthma, you will always have it. But, as you grow, how your asthma affects you can change. It may stay the same, get better, or even get worse.

Your goal is to learn how to live with asthma and control it, so it doesn't control you. It means taking your medicine as the doctor tells you to and stay away from your triggers.

People who can help you stay well are your pharmacist, doctor, asthma educator, family and of course, the Asthma Society of Canada.



Go to

Asthma-KIDS.ca

to learn more about asthma



Questions
for my doctor

File:

Ask your doctor lots of questions. Here are some example questions to help you get started:

Am I allergic to something? If yes, what can I do to stay away from these things? _____

Can you watch me use my inhaler to see if I am using it properly? _____

What should I do when my asthma gets really bad?

Do I need to see an asthma educator? _____

Done

Things I need to do:

Ask my parents to talk to my teacher and my coaches about my asthma. Fill in the information sheet on pages 30–31 and take it to my teacher.

Make sure my reliever inhaler is full and easy to get to if I need it in a hurry.

Talk to my friends about how it feels to have asthma.

Let my parents read pages 26–29 in this book.

Other things to do: _____



Information for your parents

psssst!

Hey Asthma Agent... share this with your parents or guardian

If your child uses an inhaler:

- Make sure they keep their reliever inhaler (sometimes called a puffer) handy at all times, but away from other children. Children should never share inhalers or spacers.
- Keep inhalers at room temperature. Do not put them in the fridge or store them in the car. If your child walks to school on a cold day, they should warm the inhaler between their hands before using.
- Clean the inhalers and/or spacer regularly. Follow the manufacturer's instructions.
- Check the inhalers regularly to see how much medication is left and expiry dates.
- Regularly have your child show their asthma educator, doctor or pharmacist how they use their inhalers.

If any inhaler is too difficult for your child to manage, discuss other options with their doctor, asthma educator or pharmacist.

Information about inhaled corticosteroids

Doctors generally prescribe inhaled corticosteroids instead of oral (pill or liquid) corticosteroids, because the inhaled medication goes directly into the lungs where it's needed. Inhaled corticosteroids are less likely to cause side effects than oral corticosteroids.



If your child is using a pressurized metered-dose inhaler (pMDI), doctors recommend using a spacer device. A spacer slows the delivery of the inhaled corticosteroid, allowing better targeted delivery of the medication into the airways. Spacers should not be used with dry-powdered devices, like a DISKUS® or Turbuhaler®.

What are steroids?

Steroids are natural or man-made chemicals that make our bodies work in a certain way. The steroids that some athletes misuse are called anabolic steroids, and they are potentially dangerous. The steroids used to treat asthma are quite different: they are called corticosteroids and are very useful and quite safe when inhaled.



to learn more about asthma



Information for your parents



Will the corticosteroids used to treat asthma cause dangerous side effects?

The corticosteroids that are inhaled to treat asthma are considered safe by Health Canada. This is because they are breathed in through an inhaler to go directly into the lungs. An oral corticosteroid has more side effects because a large amount goes into the bloodstream and is carried to other parts of the body. When inhaled corticosteroids are used properly, the side effects are minor and include cough, hoarseness or husky voice, sore throat or thrush (a yeast infection). These side effects can be minimized by using a spacer and rinsing the mouth out after inhaled corticosteroid use.

Are inhaled corticosteroids reserved for people with severe asthma?

No. Inhaled corticosteroids are used for even mild asthma, as well as for more severe cases, to reduce airway inflammation and get symptoms under control.

Will inhaled corticosteroids cause health problems in the long term?

As with any medication, doctors and patients must weigh the possible risks of taking the medication against the effects of not taking the medication. The low amounts of inhaled corticosteroids used to treat asthma are considered quite safe.



Hey There!

Inhaled corticosteroids are generally safe for children when used as directed.

www.Asthma-Kids.ca



I don't feel comfortable with my child taking inhaled corticosteroids every day.

Inhaled corticosteroids are generally considered the most effective medication for controlling asthma. They're generally considered safe if used as directed. In most cases, the benefits of taking inhaled corticosteroids everyday outweigh the risks. Talk to your doctor about the amount of medication that is necessary to control your child's asthma.

Are inhaled corticosteroids safe for children?

Available research on the long-term safety of inhaled corticosteroids in children shows that they are very safe. Most doctors recommend them for children because the benefits of long-term asthma control outweigh the risks of inhaled corticosteroid use.

Go to

Asthma.ca

for more information about corticosteroids



Record of asthma medication



It's a good idea to keep track of how often you use your reliever inhaler. If you need to use your blue reliever inhaler 4 or more times a week, it means your asthma is not under control. If this happens tell an adult. You will need to make a change in your controller medication: the one that you take at home. If you do not have a controller medicine, talk to your doctor.

Date _____ Time _____

Inhaler _____ Dose _____

Notes _____

Date _____ Time _____

Inhaler _____ Dose _____

Notes _____

Date _____ Time _____

Inhaler _____ Dose _____

Notes _____



My asthma information form

This form will help your teacher understand your asthma. Ask your parents to help you fill in this form. Then ask your parents to go over it with your teacher.

My name _____

My Birthday _____

My teacher's name _____

1. In an emergency contact

My Parents Name _____

Phone (H) _____ (W) _____

Name _____

Phone (H) _____ (W) _____

My Doctor Name _____

Phone _____

2. My asthma triggers are

cats dogs other pets _____

fumes dust mites getting a cold or flu

pollen smoke foods _____

chalk dust moulds other _____

3. My asthma symptoms are _____



Asthma form for my
teacher and coach

File:

4. My controller asthma medicine that I take at home is _____

5. My reliever inhaler that I take when I have asthma symptoms is _____

6. In case of 'big time' problems with my asthma, my teacher should _____

7. My inhalers are kept at school

by me (I have them with me at all times)

by my teacher

in the office

somewhere else (describe where): _____

My signature

Date

Signature of Mom or Dad

Date



Asthma & Kids: Asthma Basics Booklet

Date _____ Time _____

Inhaler _____ Dose _____

Notes _____

Date _____ Time _____

Inhaler _____ Dose _____

Notes _____

Date _____ Time _____

Inhaler _____ Dose _____

Notes _____



Asthma.ca™

Asthma Society of Canada™

www.Asthma.ca www.airsquare.ca www.Asthma-Kids.ca



Asthma.ca™

Asthma Society of Canada®
NATIONAL ASTHMA PATIENT ALLIANCE

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

Helping people breathe easier



Asthma.ca™

Asthma Society of Canada™



Your Asthma Basics series:

1 Diagnosis 2 Triggers 3 Medications 4 Kids

For more information from the Asthma Society of Canada:

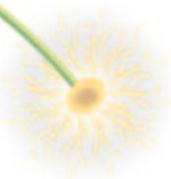
Asthma.ca

AirSquare.ca

Asthma-KIDS.ca

1 866 787 4050

info@asthma.ca



Endorsed by the Family Physician
Airways Group of Canada



Family Physician-Asthma Group of Canada