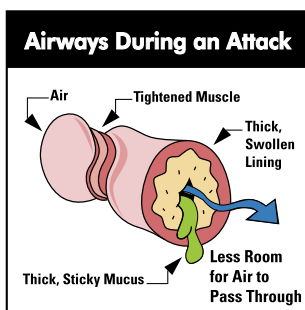
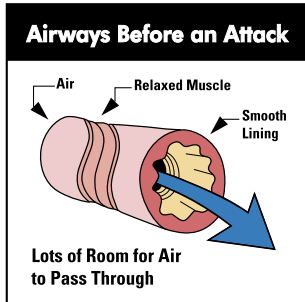


# Asthma Basics

Asthma is chronic, which means it can last a lifetime. Many children's asthma problems get better as they get older. Although there is no cure for asthma, it can be controlled.



## WHAT IS ASTHMA?

- Asthma is a very common lung condition. Most of the time, children who have asthma feel OK. But during an asthma attack (also known as an asthma episode), it becomes harder to breathe.
- Three things happen in the airways of the lungs during an asthma attack:
  1. The airways get swollen. Doctors call this inflammation. People with asthma always have a little inflammation, even when they're not having an attack.
  2. Thick, sticky mucus fills up the airways.
  3. The muscles that wrap around the airways squeeze tight.
- These three things may cause coughing, a tight feeling in the chest, shortness of breath and/or wheezing. Wheezing is the sound caused by trying to breathe through narrowed airways.

## EARLY WARNING SIGNS

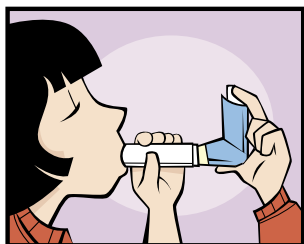
- Most asthma attacks start slowly, and you may notice small changes in your child beforehand. These changes are called early warning signs. You can often stop an attack or make it less severe if you start treatment when you see early warning signs. Talk with your doctor about what you should do when your child has early warning signs. Some common early warning signs are:
- Mild coughing
  - Itchy or sore throat
  - Runny or stuffy nose
  - Itchy or watery eyes
  - Headache
  - Tiredness or irritability
  - Peak flow meter reading in the yellow zone

## WHAT CAUSES ASTHMA ATTACKS?

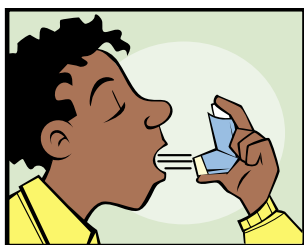
- Asthma attacks usually start when the airways are bothered by something. These things are called **triggers**. Every child's triggers are different. Some common triggers and tips for avoiding them are:
- **Smoke** from cigarettes, pipes, cigars, grills, fireplaces and burning wood. Don't allow anyone to smoke near your child, in your house or in your car.
  - **Colds, flu, and sinus and ear infections.** Make sure your child gets a yearly flu shot. Good handwashing is also helpful to prevent colds and infections.
  - **Strong odors** from sprays, perfumes, cleaning products and other things. Do not spray these when your child is in the room.
  - **Air pollution.** Spend less time outside when the smog level is high.
  - **Exercise or sports.** Your child may need to take asthma medicine before being active. Because physical activity is important, talk to your doctor about how to help your child be active while avoiding asthma attacks.
  - **Allergens** such as dust, pollen, mold, insect droppings and animals with fur or feathers. Keep your home clean and free of pests. Your child may or may not have allergies. Talk to your doctor about this.
  - **Strong emotions**, like anger or excitement. Your child can't avoid these emotions, but be aware that they can trigger an asthma attack.
  - **Weather**, like rain, wind, cold temperatures or sudden changes. Have your child wear a scarf over his mouth and nose on cold, dry days.

## Using a Metered Dose Inhaler (MDI)

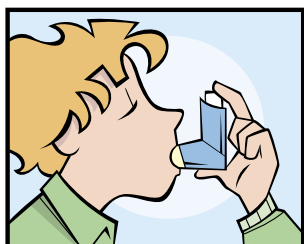
- A child **always** needs fast, easy access to quick-relief medicine because no one knows when an asthma attack will happen. It can happen at home, at school, on a school bus, during field trips, at sports practice, etc.
- Make sure the inhaler has medicine. Even if the MDI puffs when pressed or you shake it and feel something inside after all doses have been used, it may be out of medicine and have just the propellant left. Know how many puffs (doses) are in the inhaler. Ask your child daily if the medicine was used. Count puffs used and keep a log. Get a new inhaler when doses left are low. Check expiration dates and replace when needed.



A. Spacer/Holding Chamber



B. Open Mouth



C. In the Mouth

## HOW TO USE THE MDI

1. Stand up or sit up straight.
2. Take off cap and shake the inhaler.
3. Hold the inhaler as instructed by your doctor in one of these ways:
  - A. **Spacer/Holding Chamber.** This is the **preferred** way. It helps more medicine reach the airways where it is needed to work.
  - B. **Open Mouth.** Inhaler is held 1 to 2 inches in front of the mouth (about the width of two fingers).
  - C. **In the Mouth.** A and B are best. If your child is unable to use these, your doctor may have your child use this method.
4. Breathe out all the way.
5. Slowly start to breathe in, and press down on the inhaler at the same time. Breathe in slowly and deeply to fill the lungs.
6. Hold breath for five to 10 seconds.
7. If the child is to take more than one puff, allow one minute between puffs and shake the MDI before each puff.
8. Rinse the mouth after using any inhaled steroid medicine.

## TAKE AWAY TIPS

- **Ask your child's doctor** for a written asthma management/emergency plan.
- **Share the plan** with your child's school, childcare center and others who may care for your child.
- **Try to reduce your child's exposure** to asthma triggers.
- **Don't panic** during an asthma attack. Remain calm, reassure your child and follow the asthma plan.
- **Take a class** to learn more about asthma management.
- Ensure that your child always has fast, **easy access to his quick-relief medicine** at home, at school and at all times. Make sure the inhaler has medicine in it. Replace as needed.
- Learning how to help prevent and treat asthma attacks can help your child:
  - Think of himself as healthy rather than sick
  - Take part in school, play and physical activities

A Children's Healthcare of Atlanta pediatric advice nurse is available 24 hours a day at 404-250-KIDS. In case of an urgent concern or emergency, call 911 or go to the nearest Emergency Department right away.

This general information is not intended to serve as medical advice. Always consult with a doctor or other appropriate healthcare provider regarding the diagnosis and treatment of your child.

\*Children's Healthcare of Atlanta is not responsible for the accuracy or content of these Web sites.

## HOW DO I TELL WHEN MY CHILD IS HAVING TROUBLE BREATHING?

If your child has one or more of these symptoms, prompt action is needed:

- Coughing or wheezing
  - Chest tightness
  - Less playful or hard to wake up
  - Trouble catching his breath—An older child may sit hunched over or be unable to speak a full sentence without stopping to take a breath. A baby may have a softer cry than usual and may not be able to suck on a pacifier or bottle well.
  - The skin between his ribs and around his collarbones pulls in every time he breathes
  - Breathing at a faster rate than normal—To find out if your child has a normal breathing rate, count when he is calm or sleeping.
    - **Birth to 1 year:** 30 to 40 breaths per minute
    - **1 to 8 years:** 24 to 30 breaths per minute
    - **9 years and older:** 16 to 24 breaths per minute
  - Peak flow meter reading is in the red zone—Your doctor may want your child to use this device. If so, he will teach you and your child how to use it.
  - A blue or pale gray color to the lips, gums or fingernails—**This is a danger sign. Get emergency help at once.**
- If you notice any of the above symptoms, it means your child is having an asthma attack. Follow your asthma action plan, talk to your child's doctor, get emergency help or call 911.**

## TO LEARN MORE

Go to [www.choa.org/asthma](http://www.choa.org/asthma) to learn more about asthma. For additional information, visit the following:\*

- [www.nhlbi.nih.gov](http://www.nhlbi.nih.gov)
- [www.schoolasthmaallergy.com](http://www.schoolasthmaallergy.com)
- [www.asthmaandschools.org](http://www.asthmaandschools.org)
- [www.aanma.org](http://www.aanma.org)
- [www.aafa.org](http://www.aafa.org)
- [www.lungusa.org](http://www.lungusa.org)