

# WHAT YOU NEED TO KNOW ABOUT YOUR CHILD'S ASTHMA

*A guide for parents of children with newly diagnosed asthma*



  
UNIVERSITY OF FLORIDA HEALTH

## What is asthma?

We have hundreds of tiny tubes called airways inside our lungs that carry air in and out of the body as we breathe. Children with asthma have sensitive airways. When their airways come in contact with certain “triggers,” they narrow and it becomes hard to breathe.

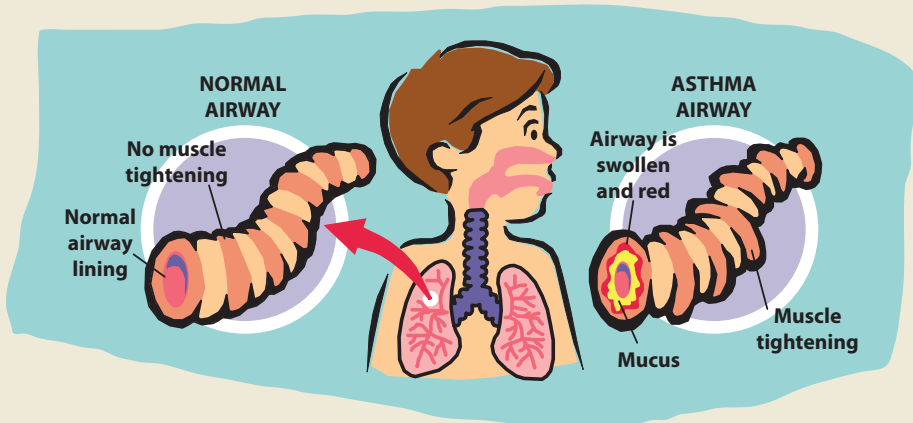


Image Source: Caring for Your Child's Asthma. Princess Margaret Hospital for Children. Version 2, 2006.

# 3

## THERE ARE THREE REASONS WHY AIRWAYS BECOME NARROW:

- ▶ The inside linings of the airways become red and swollen – also called inflammation.
- ▶ The airways make extra mucus.
- ▶ The muscles around the airways tighten.

## WHAT ARE THE SIGNS THAT YOUR CHILD MAY HAVE ASTHMA?

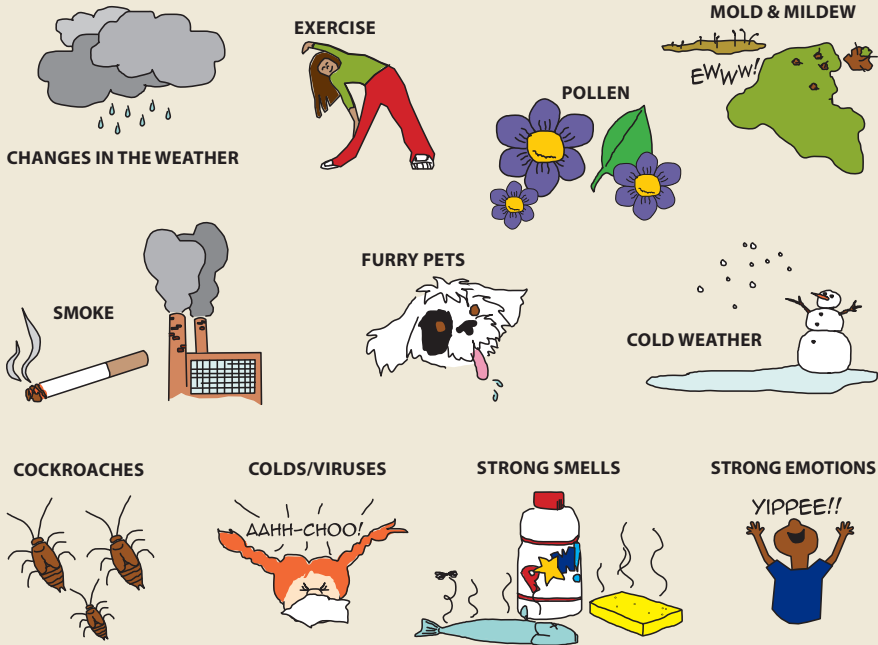
- ▶ Wheezing
- ▶ Tight feeling in the chest
- ▶ Persistent cough
- ▶ Shortness of breath or tummy breathing (when tummy and ribs “suck in” trying to get more air)

**Children may have one or more of these symptoms at a time.**



## What can trigger your child's asthma?

Every child's asthma varies. What may trigger your child's asthma may not trigger another's. Anything that worsens asthma or brings on an attack is called a trigger. Common asthma triggers are included below.



Images by Karen Mustafa – UF Health Shands Publication Services 2012

## Is there a cure for ASTHMA?

There is no cure for asthma, but it can be controlled. Controlling your child's asthma will allow him or her to participate in daily activities, including sports activities, without asthma getting in the way.

## WHAT ARE THE GOALS OF ASTHMA TREATMENT?

- ▶ Decreased cough, wheezing, chest tightness and shortness of breath
- ▶ Limit nighttime symptoms to one per month
- ▶ Reduce the need for a rescue inhaler (albuterol) to less than three times a week
- ▶ Eliminate the need for emergency room visits or admission to the hospital
- ▶ Enable participation in physical activities
- ▶ Eliminate missed days from school or daycare because of asthma
- ▶ Return lung function to normal

## Asthma Medications

There are two main groups of medications: **Quick Relievers** and **Controllers**

### **QUICK RELIEVERS (albuterol, Ventolin®, Proair®, Maxair®, prednisolone, prednisone, dexamethasone)**

They are also known as bronchodilators or rescue inhalers. These inhalers are usually blue/grey. Relievers usually provide relief for asthma symptoms within minutes. Relievers work by opening the airways to make it easier for your child to breathe, and should **ONLY** be used when needed. Your child should have his or her inhaler with them at all times, or available at school or daycare, in case they experience asthma symptoms. When quick relievers are not effective, your child may need a short course of oral steroids (prednisolone, prednisone or dexamethasone).

### **CONTROLLERS**

#### **Inhalers (Qvar®, Pulmicort®, Flovent®, Asmanex®)**

These inhalers are corticosteroids, which are also known as steroids. Most of the them are autumn colored: yellow, brown, red and orange.

#### **Tablets (Singulair®)**

This medication also comes in a chewable tablet or granules for younger children.

Controller medications reduce inflammation in the airways and make them less sensitive to triggers. These medications **MUST** be taken twice daily to prevent asthma symptoms. When your child first starts on a controller medication, it may take up to a week before it is fully effective. It is important **NOT** to stop your child's controller medications only after a few days. Controllers are safe to use every day and keep your child from getting more frequent, asthma flare-ups. Controller medications **SHOULD NOT** be used as a quick reliever for asthma flare-ups.

#### **Combination medications (Advair®, Symbicort®, Dulera®)**

Combination medications combine an inhaled steroid with a long-acting bronchodilator. Rescue inhalers or quick relievers are still required when an increase in asthma symptoms occurs.

#### **Giving your child asthma medications**

There are different types of devices used to give children asthma medications. All children 5 years of age and younger should use an inhaler and valved holding chamber with mask to take their medication. Children 6 years and older should use a valved holding chamber with a mouthpiece. If your child has difficulty, a facemask with a small volume spacer can be used. Older children may be able to use a dry powder inhaler or a breath-actuated inhaler as well.

## Valved holding chambers

A valved holding chamber looks like a clear plastic tube that has a mouthpiece or facemask attached to one end and an inhaler opening at the other end. Inhaler medications are sprayed into the spacer and inhaled through a facemask or mouthpiece. It allows more medication to enter the lungs and lessens the chance for side effects. Chambers come in different sizes for different age groups, which depends on your child's medication and ability. Parents prefer this method because it delivers the medicine more quickly than a nebulizer. Almost anyone from infants to the elderly can use an inhaler when it's attached to a valved holding chamber. Older children may be able to use a metered-dose inhaler without a chamber, a dry powder inhaler or a breath-actuated inhaler.



## Nebulizers

Nebulizers or “breathing machines” are devices that change asthma medication from the liquid form to the inhaled form. They are an old-fashioned way of delivering medication and are rarely used at home, because most children obtain the same results by using an inhaler with a valved holding chamber, with fewer side effects. Your doctor will work with you and your child to decide which device is more appropriate.

## How can you keep your child's asthma under control?

1. Administer asthma medications. Use controller medications daily to help prevent symptoms and keep your child from getting sick often. Use relievers (albuterol) as rescue medications for asthma flare-ups. Inhalers need to be used correctly to get the most benefit. Have your child's inhaler technique checked regularly by his or her doctor, pharmacist or asthma educator. Make sure your child always has medication left in their inhaler and that it has not expired. For inhalers with counters, refill the prescription when the counter indicates that there is only 20 puffs left.
2. Try to avoid your child's triggers. Some triggers like cigarette smoke are possible to avoid, but others like colds and flus can be difficult. If your child tests positive for allergies, your doctor or asthma educator will give you information on how to decrease exposure to them.
3. Ask for and maintain a written Asthma Action Plan. An Asthma Action Plan includes written instructions prepared by your doctor that helps you manage your child's asthma. This will tell you what medications your child will be using and what to do when your child's asthma is getting worse.
4. Monitor your child's asthma closely. Keep a diary to monitor how often your child needs reliever medications and how often he or she has symptoms. This information helps you and your doctor tell how well your child is doing. Bring the diary along with all medications and chambers to each doctor's visit.
5. Encourage exercise and activity. Asthma should not stop your child from running or playing sports. Exercise is important for good health. If your child's asthma is being triggered by exercise, you should let your doctor know. It may be a sign of uncontrolled asthma and your doctor may need to make some changes to your child's medications. The only time your child should not play sports is if he or she is sick with a cold or flu, or is experiencing asthma symptoms, such as wheezing, cough, shortness of breath or chest tightness.

## WHAT TO DO DURING AN ASTHMA FLARE-UP

1. Sit your child upright and provide reassurance. **DO NOT** leave him or her alone.
2. Help your child take two to four separate puffs of his or her quick-relief inhaler (albuterol). **NOTE:** This medication is best given one puff at a time using a chamber if they can't use the inhaler alone. Ask the child to take six breaths from the chamber after each puff of medication.
3. Wait 15 minutes. If there is little or no improvement, repeat steps 2 and 3.
4. If there is little or no improvement, call your doctor. Your doctor is likely to prescribe oral steroids or ask you to give oral steroids that you have on hand. He or she may also advise that you seek immediate medical assistance.

## Frequently Asked Questions

### ▶ **Should my child with asthma receive the flu vaccine?**

It is strongly recommended that all children receive this vaccine before every flu season.

### ▶ **What are the side effects of asthma medications?**

**ALBUTEROL** – rare increase in heart rate, shakiness or headache.

**PREDNISOLONE, PREDNISON, OR DEXAMETHASONE** – Short five-day courses sometimes increase appetite and weight gain in overweight children. There are no long-term side effects in children who require less than 4 short courses in a year.

**INHALED STEROIDS** – May cause thrush (whitish spots that won't scrape off) in the mouth, but may be prevented by rinsing mouth with water after each use. At low doses side effects are rare. At higher doses given for extended periods there may be a decrease in height as an adult by 1/2 to 1 inch.

**SINGULAIR®** – Unlikely to cause any side effects

### ▶ **Will my child grow out of asthma?**

It is hard to predict if your child will grow out of asthma. Some children may go a long time with no asthma symptoms, but asthma can happen at any time with the right triggers. About half of pre-school children who wheeze will stop wheezing by age 6.

### **Children are more likely to have asthma as adults if they:**

- ▶ **Have allergies**
- ▶ **Have a parent, brother or sister with asthma**
- ▶ **Are exposed to cigarette smoke**
- ▶ **Are older when asthma first occurs**
- ▶ **Continue to be exposed to allergens**
- ▶ **Have severe, persistent asthma**

### ▶ **Does your child need to take medicine every day?**

If your doctor prescribed a medication for your child to take every day it is because your child's asthma symptoms happen too often. Your child **MUST** take it every day to stay well. Daily medicines won't prevent every asthma flare-up, but if you use them every day, your child won't get sick as often and will be able to exercise without asthma problems most of the time.

### ▶ **Does my child need special care at school?**

- ▶ **Inform teachers, the school nurse, coaches and other relevant school staff about your child's asthma by providing them with your Asthma Action Plan.**
- ▶ **Educate school personnel on your child's asthma medications and how to assist when symptoms develop at school.**
- ▶ **Check for triggers in the school.**

### ▶ **What can I do to help my child cope with asthma?**

Ensure your child's emotional well-being by reassuring that it doesn't have to slow him or her down and that having asthma doesn't make him or her different than others.



**UF** | Department of Pediatrics  
UNIVERSITY of FLORIDA

**PEDIATRIC ASTHMA CENTER OF EXCELLENCE  
AT THE UNIVERSITY OF FLORIDA**

**877.543.7783 (KIDS-R-UF) or 352.273.5625  
2000 SW Archer Road, Gainesville, FL 32608  
UFHealth.org/PACE**