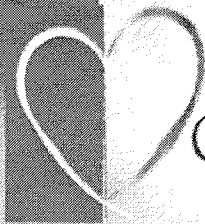


CHILDREN'S NATIONAL MEDICAL CENTER
The Diana L. and Stephen A. Goldberg Center for Community Pediatric Health

Asthma

A Guide for Patients and Families



Kohl's
Cares
for kids



*Kohl's is proud to partner with
Children's National Medical Center's
Mobile Health Program to provide
asthma prevention and treatment
education to children across
the District of Columbia.*

Nearly nine million children in the United States are living with asthma, a disease that affects the lungs and makes it hard to breathe. Asthma can start at any age and affects children of every race. Many times, more than one person in the same family has asthma.

There is no cure for asthma, but people with asthma can have active lives when they learn to control their asthma.

Children with asthma should be able to work, play and go to school like any other child.

If your child has asthma, there is a lot that you can do to control your child's asthma and keep him or her healthy.

Work with your child's healthcare team to keep asthma under control.

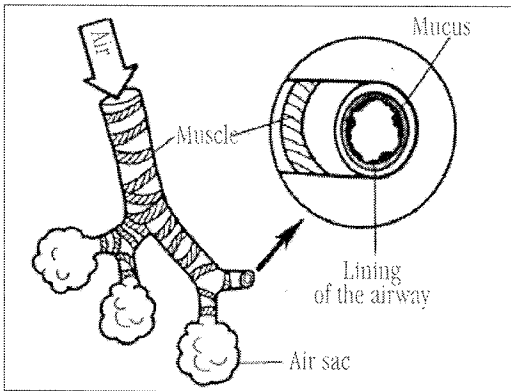
Children's Mobile Medicine
at Children's Health Center - THEARC
1901 Mississippi Avenue, SE
Washington, DC 20020
202-436-3060

Improving Pediatric Asthma Care
in the District of Columbia (IMPACT DC)
www.impact-dc.org
202-476-3970

Asthma

Airways carry air to the lungs. Airways get smaller and smaller like branches of a tree.

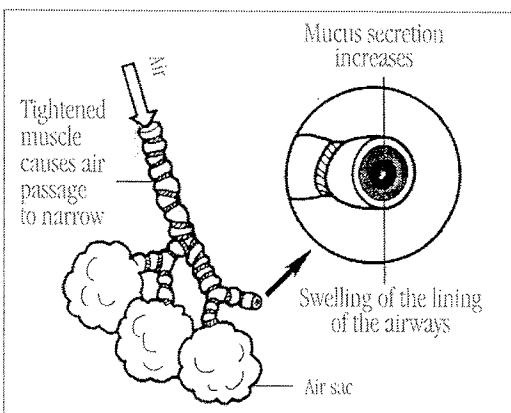
When asthma is under control, the airways are clear and open. Air flows easily in and out and always looks like this:



When asthma is not under control, the muscles around the airways inside the lungs tighten. The linings become red and swollen and the airways fill with mucus. When all of these things happen, an asthma attack may happen.

During an asthma attack, less air can get in and out of the lungs. Your child may complain of chest tightness, chest pain, headaches, shortness of breath, coughing, wheezing, or fatigue.

When children cough or wheeze, the sides of the airways get even more swollen and squeezed and make mucus. During an asthma attack, airways look like this:



Controlling Your Child's Asthma

PREVENTION AND CONTROL ARE THE KEYS TO KEEPING YOUR CHILD HEALTHY.

- Teach your child to recognize and stay away from things that start asthma attacks. These are called triggers.
- Make sure your child follows the doctor's directions for taking medication.
- Take your child to the doctor every three months for an asthma check-up and to update your child's asthma action plan. See the doctor even when your child feels fine and has no breathing problems.

KNOW YOUR CHILD'S TRIGGERS.

Many things can start asthma attacks. These things are called triggers. If you understand and reduce your child's triggers, you can help control his or her asthma. Some triggers include:

Indoor triggers

- Cigarette or marijuana smoke
- Mold and mildew
- Animals with fur
- Strong smells and sprays
- Dust in beds and pillows
- Dust from sweeping
- Cockroaches

Outdoor triggers

- Changes in weather
- Pollen from trees and flowers
- Air pollution

Other triggers

- Upper respiratory infections ("colds")
- Running, sports and other exercise
- Certain foods
- Laughing hard, crying or yelling
- Stress

KEEP THINGS OUT OF THE HOME THAT START ASTHMA ATTACKS.

- Do not smoke inside. Consider getting help to quit.
- Keep animals outside whenever possible. Many people with asthma are allergic to animals with fur or feathers.
- Keep strong smells and incense out of the home. Do not use soap, shampoo or lotions that smell like perfume.
- Limit dust.

KEEP THE BEDROOM SIMPLE.

- Take out soft chairs, cushions and extra pillows.
- Think about taking out rugs and carpets. They collect dust.
- Vacuum or wet mop at least once a week.
- Do not let animals on the bed or in the bedroom.
- Take stuffed toys off the bed.
- Put special dust-proof covers with zippers on the mattress and pillow.
- Do not use a pillow or a mattress made of goose down.
- Wash sheets and blankets often in hot water. Put them in the sun to dry if possible.

DON'T DO THESE CHORES WHEN A PERSON WITH ASTHMA IS HOME.

- Sweep, vacuum or dust
- Paint
- Spray for insects
- Use strong cleaners
- Cook strong-smelling foods

After you do these chores, air out the house before the person with asthma returns. If there is no one to help, people with asthma can use a mask or scarf when they sweep or dust.

USE WINDOWS TO KEEP THE AIR FRESH AND CLEAN.

- Open windows wide when it is hot or stuffy, when there is smoke from cooking or when there are strong smells inside.
- Avoid heating with wood or kerosene, but if you must, keep a window open a little to get rid of fumes.
- If possible, close windows and use an air conditioner with a new filter, especially when the outside air is full of exhaust from cars, pollution from factories, dust, or pollen from flowers and trees.

Asthma Medications

MOST PEOPLE WITH ASTHMA NEED TWO KINDS OF ASTHMA MEDICINE.

- Preventive or controller medicine Many people need to take this medicine every day to keep airways healthy and keep asthma from getting worse. It works to keep airways from swelling and filling with mucus.
- Quick-relief or rescue medicine Everyone needs this medicine to stop asthma attacks when they start. It works by relaxing the muscles that have tightened around the airways during an asthma attack. Quick relief medicines should not be used every day, only during an asthma attack. If your child needs to use his/her quick-relief medicine every day, they need to be seen by their doctors.

ASTHMA MEDICINE CAN BE TAKEN IN DIFFERENT WAYS.

When asthma medicine is breathed in, it goes right to the airways in the lungs where it is needed. Inhalers for asthma come in many shapes. Most are sprays. Some are powder.

PREVENTIVE (CONTROLLER) MEDICINES FOR ASTHMA ARE SAFE TO USE EVERY DAY.

- Your child cannot become addicted to preventive medicines for asthma even if he or she uses them for many years.
- Preventive medicine makes the swelling of the airways in the lungs go away.
- *These medicines are used even when your child is feeling good.*
- The doctor may tell your child to take preventive medicine every day if your child:
 - ❖ Coughs, wheezes, has a tight chest, or uses rescue medicine many days a week.
 - ❖ Wakes up at night because of coughing or wheezing.
 - ❖ Has more than one asthma attack a year.
 - ❖ Has asthma attacks serious enough to be hospitalized.

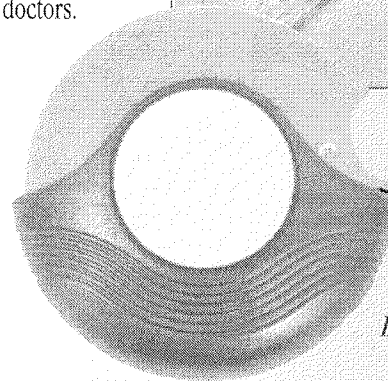
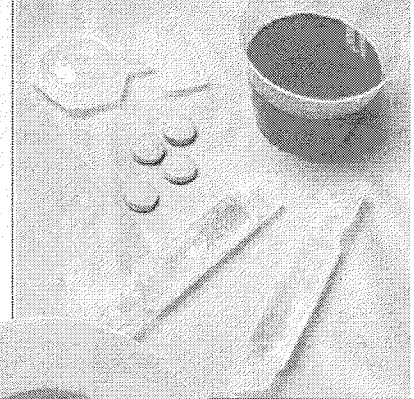
PEAK FLOW METERS MEASURE HOW WELL YOUR CHILD IS BREATHING.

A peak flow meter can be used at a clinic or at home to measure how well your child is breathing. Peak flow meters help doctors:

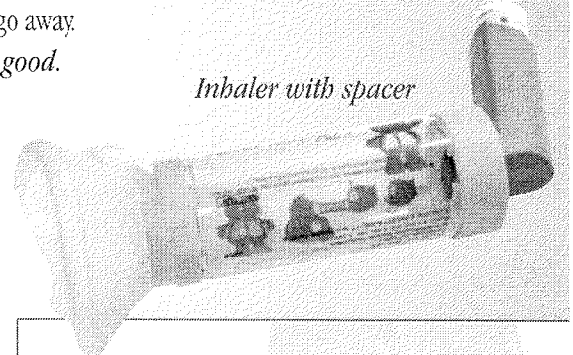
- Decide if someone has asthma.
- See how bad an asthma attack is.
- See how well asthma is controlled over time.

If your child uses a peak flow meter every day at home, you and your child can find breathing problems before your child starts to wheeze or cough. Then you will know when more asthma medicine is needed.

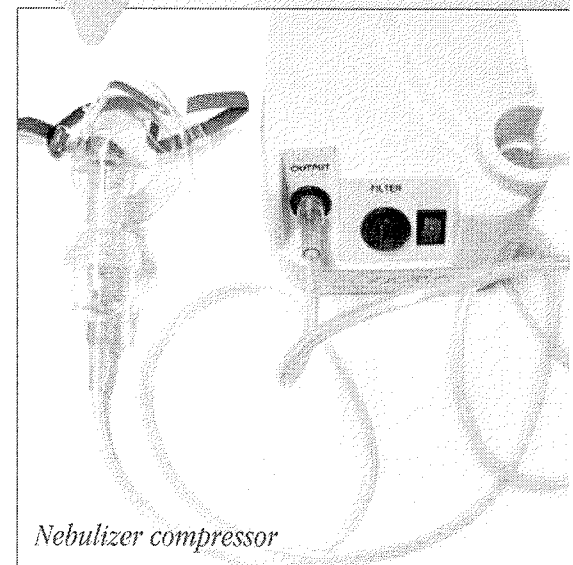
Pills, syrups and nebulized solutions



Diskus



Inhaler with spacer

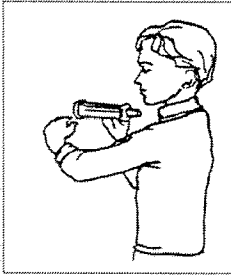


Nebulizer compressor

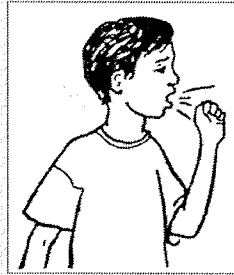
Signs of an Asthma Attack

You and your child need to know the signs that an asthma attack is starting so that your child can act fast and use a rescue medicine.

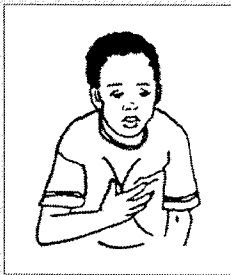
Some signs include:



A low number on the peak flow meter



Cough



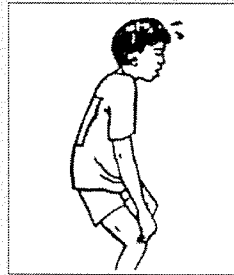
Tight chest, fast heart beats



Stomach ache, vomiting



Wheeze



Feels tired, quiet, lays around



Feels dizzy, head hurts

TOO MUCH QUICK-RELIEF (RESCUE) MEDICINE FOR ASTHMA ATTACKS CAN HURT YOUR CHILD WHEN IT IS USED ALONE.

Quick-relief medicine for asthma makes your child feel better for a little while. It may stop the attack.

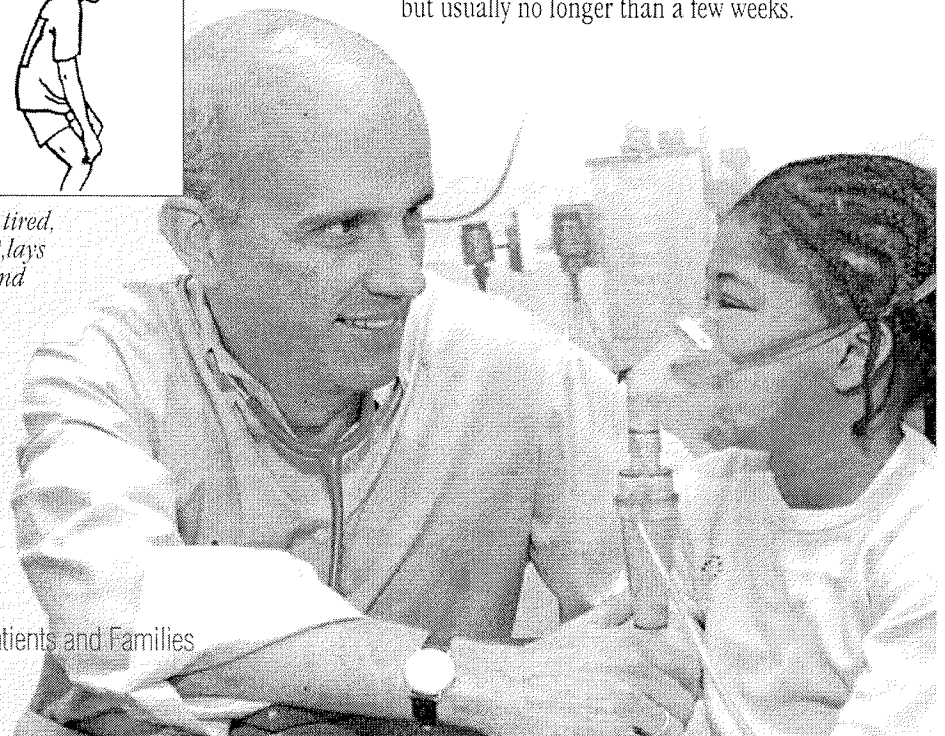
With some attacks, your child may think he or she is getting better, but the airways are getting more and more swollen. Then there is danger of having a very bad asthma attack that could kill your child.

If your child uses quick-relief medicine many times a week to treat coughing or wheezing, then he or she may need a medicine to control the swelling in the airways and prevent future asthma attacks.

USING TOO MUCH QUICK RELIEF MEDICINE NEEDS ATTENTION.

If your child is using quick relief medicine more than three times each day, your child is probably having an asthma attack. Take your child to the doctor within the day.

The doctor may need to prescribe a steroid medicine. Steroids will fight the swelling in your child's lungs. The medicine may be a liquid or a pill. Your child will need to take it until the asthma attack is over, but usually no longer than a few weeks.



**GET EMERGENCY HELP FROM A DOCTOR
IF YOUR CHILD DOES NOT GET BETTER.**

Get help if you see any of these asthma danger signs in your child:

- The quick-relief medicine does not help for very long or it does not help at all.
- It is hard to talk and breathe.
- The nose opens wide when he or she breathes.
- Skin is pulled in around the ribs and neck when he or she breathes.
- Your child's cough is strong or tight, especially if he or she vomits afterward.
- The breathing rate or heartbeat is very fast.
- It is hard to walk.
- Your child is too tired to play.
- Lips or fingernails turn gray or blue.

ASTHMA ACTION PLAN

- Proper asthma care involves your child seeing their doctor at least every 3 months to check on their asthma and update their asthma action plan.
- The asthma action plan is like a map to help you in the care of your child's asthma.
- You, your child's doctor and your school nurse should have a copy of your child's asthma action plan.

If you cannot contact your doctor, go directly to the emergency room. DO NOT WAIT. Call an ambulance (911) if necessary.

Make an appointment with your child's doctor within two days of an ER visit or hospitalization.

**TELL THE DOCTOR ABOUT ANY PROBLEMS
WITH YOUR ASTHMA MEDICINES.**

- The doctor can change the asthma medicine or change how much your child takes. There are many asthma medicines.
- Take your child to the doctor every three months for check-ups so the doctor can see how well the asthma medicine works.
- Asthma may get better or it may get worse as your child gets older. Your child's doctor may need to change asthma medicines.
- Pulmonologists, allergists and other specialty doctors may help your child if his or her asthma is especially hard to control.

