



Children's Hospital

HEALTHY

Kidz

A Quarterly Publication for Parents of Preschoolers
Volume VII • Spring 2001

Asthma

Asthma is a complex and misunderstood disease, which is often overlooked by many people. But for the more than 4.8 million children under the age of 18 suffering from asthma, educating parents and care givers about the symptoms and control of asthma is a priority.

Asthma is the leading chronic illness among children, causing it to become the main cause of school absenteeism. It is also the second highest cause of hospitalization in children at Children's Hospital. John Rogers, M.D., pediatric pulmonologist at East Tennessee Children's Hospital, discusses the following concerns of asthma.

Q. What is asthma, and what are its symptoms?

A. Asthma is a chronic lung disease affecting children with unusually sensitive airways which are easily irritated by various triggers. The irritability is related to a defect in the child's airways. In an asthma attack, the lining of the air passages swell, excess mucus is produced in the glands of the air passages, and the muscles may tighten around the airway causing a "bronchospasm." All of these factors combined can cause a narrowing of the airway, making it hard for air to pass

in and out of the lungs.

Symptoms of asthma may include a persistent dry cough, nighttime coughing that often wakes the child, wheezing, shortness of breath with physical activity, and chest tightness. Signs of asthma for infants may include chronic rattle-like coughs, difficulty breathing and recurrent wheezing.

Q. What triggers asthma attacks?

A. Asthma attacks, or episodes where the child has problems breathing, are triggered by various factors depending upon the individual. The following triggers are the most common:

Respiratory infections – these infections trigger tightening and swelling of the muscles and formation of excess mucus which make breathing more difficult.

Irritants – Smoke (especially cigarette smoke), air pollution, strong odors, aerosol sprays and paint fumes are some of the substances which can irritate tissues of the lungs and the airways. The reaction is similar to those caused by respiratory infections and can be similar to reactions caused by allergens.

Allergies – many environmental factors, or allergens, such as dust, pollen,

mold, food and animals cause chemicals, or histamines, to be released. When released, the chemicals cause tightening or swelling of the muscles and formation of excess mucus, along with typical allergic reactions such as sneezing and itchy, watery eyes.

Exercise – vigorous activity, such as jogging, is the cause of attacks in 80 percent of children with asthma.

Emotions – Crying, laughing or yelling in response to an emotional situation may lead to an attack. Also, anxiety and nervous stress can lead to fatigue, which may lead to an increase in asthma symptoms. Asthma does not develop in a child as a result of emotional or psychological problems.

Weather – Exposure to cold weather has been proven to cause attacks in most children with asthma.

Q. What should I do if my child shows asthma symptoms?

A. If you believe that your child is showing signs of asthma, you should consult your child's pediatrician and explain the symptoms you have noticed. Often, if your pediatrician believes your child has asthma, he will refer you to a pulmonologist.

Asthma, continued on page 2

In this issue . . .

Allergies 3-4

Asthma, continued from page 1

A pediatric pulmonologist is a physician who is skilled in the area of the lungs and treats lung diseases such as asthma or cystic fibrosis. The pulmonologist will be able to offer current treatments and monitoring to control the child's asthma, which will lead to a more "normal" lifestyle for the child.

Q. What types of treatments are available to children with asthma?

A. There are many different types of treatment for asthma that can be individualized to fit the needs of your child, which depends on what triggers the attacks. Your doctor may prescribe the following treatments:

Avoiding triggers – controlling your child's asthma may be as simple as avoiding specific allergens or irritants, especially cigarette smoke.

Medications – there are four prominent categories of medications which your child's physician may prescribe to control the asthma. Your child's physician may prescribe one or a combination of the medications. The categories include corticosteroid medications, which are steroids produced by the body (but different from those misused by some athletes) that are used to control severe asthma; other anti-inflammatory agents that directly reduce inflammation of the airways; bronchodilators to be used as an attack occurs to relax and open up the muscles of the airways; and anti-allergy drugs or injections that help prevent triggers which cause attacks.

You should not give your child treatments or make adjustments to asthma treatments that have not been prescribed or approved by your child's physician.

Q. What are the various forms of asthma treatments?

A. Treatments or medications can be prescribed for the child in forms that are easiest for the child to use. Many corticosteroid medications, anti-inflammatory agents and anti-allergy drugs come in the form of an inhaler or nebulizer but may also be prescribed in pill or syrup form.

Inhalers are used to deliver medicine more directly to the air passages. An inhaler is usually simple to use and is the preferred method of giving medicine to most children with asthma. There are attachments for inhalers that help make breathing in the medication easier and are more controlled for younger children.

Nebulizers are machines that deliver a liquid medication through a mist that is inhaled through a

"pipe" or mask; nebulizers are larger than inhalers. Nebulizers are more often prescribed for young children or for children whose asthma is not controlled as well with other medications.

Q. How can I help prevent my child's asthma attacks?

A. To help avoid triggers and reduce the risk of an asthma attack, follow these tips:

— Keep your child's environment free of tobacco smoke at all times.

— Make it easy for your child to keep his or her room as clean as possible.

— Clean your child's room often, and clean the floors, furniture, tops of doors, window frames, etc., with a damp cloth weekly. Keep the room well ventilated while cleaning.

— It may be helpful to remove carpets or rugs to reduce dust mites and for easy cleaning of the floor; making sure stuffed animals can be washed or are kept covered by plastic when not used; using washable drapes on windows instead of blinds; avoiding open bookshelves, upholstered furniture, fuzzy blankets or feather- or wool-stuffed blankets and pillows; using a washable mattress cover; and washing all bedding once a week in hot water.

— Reduce the child's exposure to strong odors such as various household chemicals, colognes or perfumes, scented laundry detergents and air fresheners.

— Try to keep your child's mouth and nose covered with a scarf or mask when exposed to cold weather.

— Make sure your child gets plenty of exercise to help strengthen lungs and airways. If exercise triggers an attack, your child's pediatrician may adjust the medication or type of exercise to allow the child to continue an exercise program.

Q. What do I do when I have to send my child to school?

A. To help children with asthma feel good while at school, school personnel and families must communicate and work together. To help school personnel understand the disease and what steps should be taken when your child shows symptoms of an attack, you should follow these simple tips:

— Meet with teachers, the school nurse, coaches and perhaps the principal at the beginning of the school year to inform them of your child's asthma.

Asthma, continued on page 4

Allergies

WHAT THEY ARE AND HOW YOU CAN HELP YOUR CHILD OVERCOME THEM

A hypersensitivity to substances eaten, inhaled or brought into contact with the skin is called an allergic reaction. The body's natural immune system directs antibodies to respond to these substances. Discovering the source of an allergy and avoiding the cause is the best treatment. When this isn't possible, antihistamines can be taken to reduce the symptoms.

In rare cases, an allergic reaction can be life-threatening, such as with insect stings or bites. Contact with these types of allergens can cause difficulty breathing and a drop in blood pressure (anaphylactic shock). For these serious allergies, it may be necessary to carry and epinephrine syringe designed to administer a shot that will decrease the severity of the reaction.

COMMON SYMPTOMS OF ALLERGENS

- watery eyes
- sneezing
- abdominal pain, diarrhea, nausea or vomiting
- hives or swelling beneath the skin
- nasal congestion
- headaches

EMERGENCY SYMPTOMS

If these symptoms are present, get your child to an emergency room immediately:

- wheezing or difficulty breathing
- swelling of the lips, tongue or face
- significant swelling around the site of an insect sting or bite
- an itchy or warm skin rash

Chick-fil-A 10-Second Tip

Snacks can be good for you, if you choose the right foods. When you are hungry for a snack, try some of the following: apples and peanut butter graham crackers popcorn (without butter) yogurt granola bars baby carrots

TYPES OF ALLERGIES AND TIPS FOR CONTROLLING THEM

Seasonal Allergies

- Keep your home and car windows closed.
- Limit your child's time outside.
- Vacuum and dust your home often.
- Talk to your child's doctor about using over-the-counter medications or trying immunotherapy (allergy shots).
- Change or clean the heating and cooling system filters regularly.

Dust and Mite Allergies

- Keep the bedroom and the other areas where your children spend most of their time as dust-free as possible.
- Avoid carpeting and upholstered furniture. Consider replacing carpeting with throw rugs. Rugs should be washed at temperatures hot enough to kill dust mites.
- Cover mattresses and pillows with dust-proof covers and wipe them down weekly.
- Avoid using wool or down blankets and feather pillows.
- Wash bedding weekly in hot water.
- Change or clean the heating and cooling system filters regularly.

Mold and Mildew Allergies

- Keep the house well ventilated and dry during damp weather.
- Use a dehumidifier during humid weather and an air conditioner during hot weather. This will remove mold spores from the air.
- Change or clean your heating and cooling system filters regularly.
- Clean bathroom and kitchen surfaces often with bleach to reduce mold growth.

Pet Allergies

- Keep pets outside, or at least out of the bedroom.
- For severe symptoms, the best solution may be to get rid of the pet.
- Bathe and groom indoor pets frequently to limit excess hair, dander and pollen.
- Vacuum and dust your home often.
- Change or clean the heating and cooling system filters regularly.

Food Allergies

- If you're unsure which foods cause your child's allergic reactions, try eliminating one thing at a time from his or her diet and then reintroducing it to monitor any reaction.
- Read package labels and avoid foods that contain the allergen.
- Educate your child and the people who care for your child about which foods to avoid.

Asthma, continued from page 2

— Try to explain the asthma medications the child must take and possible side effects. Emphasize that the child must be allowed to take required medications on schedule during school hours. Ask school personnel to assist when asthma attacks require immediate treatment, but that at all other times they treat the child with asthma as they would all other children.

— Before a child with asthma starts a physical education class, explain to the teacher/coach about exercise-induced asthma, treatment, signs of an attack, and the child's asthma management program. Because certain triggers – such as allergens, weather or irritants – may increase a child's asthma symptoms, the child and teacher/coach should know which medications should be used to prevent asthma attacks.

— If you need advice on how to better explain asthma and its treatments, meet with your child's physician; he will be able to offer information and refer you to other helpful resources.

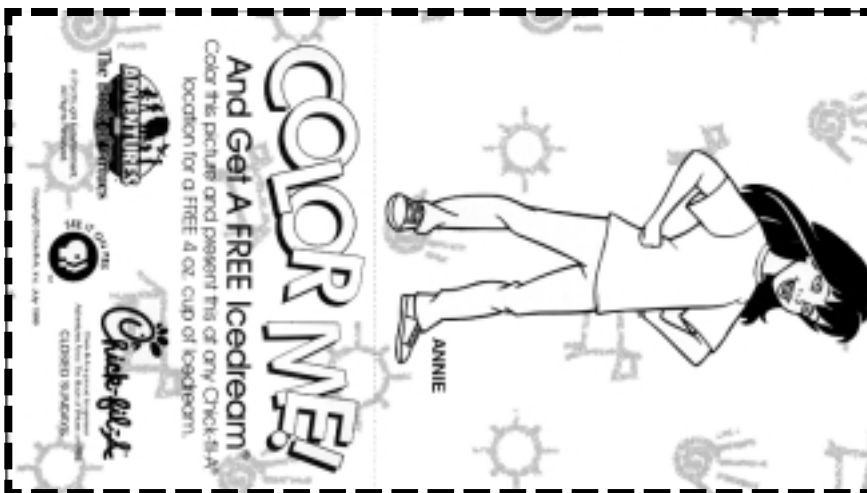
Children with asthma should be encouraged to participate in sports or other physical activities; there are many Olympic athletes who have asthma, including gold medallists Jackie Joyner-Kersey, Tom Dolan and Greg Louganis. There is no reason why asthma cannot be controlled to allow your child to enjoy a "normal" lifestyle and activities.

Q. What steps can I take as a parent in reducing my child's risk for asthma?

A. The following steps are recommended for reducing your child's risk for developing asthma:

- Do not smoke around the child or in the child's home.
- If crowded day care situations can be avoided, make every effort to do so.
- Use dust mite control measures.
- Limit exposure to furry animals.
- Eliminate wood stoves and fireplaces.
- Breast feeding your infant strengthens the child's immune system against becoming overly sensitized to allergens.

It is important to remember that while asthma cannot be cured, it can be controlled by closely following physician's orders. By properly following the instructions of a physician, asthma can not only be controlled but school absenteeism can be minimized, and children and families can enjoy a normal lifestyle.



Color this coupon, cut it out and take to any Knox Area Chick-fil-A to receive a free Icedream!



... is a quarterly newsletter for parents, published by East Tennessee Children's Hospital.

Brandi Armstrong, Editor
(865) 541-8166

This newsletter is a part of Children's Hospital's Healthy Kids Community Education Campaign, which serves as a resource for parents, offering classes, literature and other opportunities for learning how to improve children's health. For more information about Children's Hospital's Healthy Kids Campaign, please call the community education line at (865) 541-8262.

Correspondence regarding the newsletter or Children's Hospital's Healthy Kids Campaign may be addressed to:

Children's Hospital
Healthy Kids Campaign
P.O. Box 15010
Knoxville, TN 37901-5010



Children's Hospital
is a private, independent,
not-for-profit institution,
that has served the
East Tennessee region for
more than 60 years.



Chick-fil-A and WBIR-TV 10 have partnered with Children's Hospital as sponsors of Children's Hospital's Healthy Kids Campaign. Chick-fil-A and WBIR are dedicated to promoting better health for the children of this region.