Understanding Asthma:
Your Questions Answered

**What is it?** Asthma is a chronic medical condition that affects approximately 7 million children in the U.S. and it is characterized by recurrent episodes of wheezing, coughing, chest tightness and shortness of breath. This is due to the hypersensitivity of the airways (bronchioles) and to a variety of conditions that cause narrowing, swelling and mucous production within the airways. Its cause is not completely understood. It is thought to be due to an interaction of environmental factors in genetically susceptible individuals. This can be justified by the fact that children, whose parents have asthma, are at a higher risk for developing the condition during their lifetime. Other allergic conditions associated with asthma are eczema and allergic rhinitis also known as the “Atopic triad”.

**What are common triggers of asthma?** Viral respiratory infections (including colds and flu), environmental allergies and exercise. Exposure to dust mites, cigarette smoke, strong odors, and exposure to sudden changes in temperatures and food can also be triggers.

**What are common signs and symptoms?** Cough, wheezing (whistling sound during breathing), chest tightness, labored breathing and shortness of breath. Episodes of asthma don’t always include all of these symptoms and patients can experience these symptoms and not have asthma. Children under the age of 2 can develop asthma like symptoms and not have asthma. As they grow their airways mature and those symptoms become less likely to occur.

**How is asthma diagnosed?** The diagnosis of asthma in children is based on a detailed medical history and physical examination. Lung function testing is very helpful although it can be difficult to perform on children under the age of 5.

**How do you treat asthma?** It is important to avoid triggers such as cigarette smoke, and exposure to pollen. Annual flu vaccine is recommended. Optimal management of allergies with the proper allergy medications as well as taking the proper asthma medications will help in the treatment. Using asthma medications properly and understanding the differences is important.

**What is an Asthma Action Plan?** The severity and frequency of symptoms will dictate strategies to control the asthma and your doctor should outline and “Asthma Action Plan” to follow. The goal of treatment is for your child to maintain normal levels of activity, appreciate quality sleep, and decrease the use of rescue drugs and Emergency Room Visits.
**What Medications are there for asthma?** Quick relief or “rescue drugs” such as Albuterol (Ventolin, Proair) and Xopenex (Levalbuterol) are the first line of treatment and every patient with asthma should have it readily available at home and school. They act quickly by relaxing the muscles that surround the airways (bronchodilation) but their effect is relatively short lived. It is the drug of choice recommended before exertion in cases of exercise induced asthma.

Long term control medications include inhaled steroids (Flovent, Budesonide, Qvar, Asthmanex) which work by decreasing the inflammation of airways. These medications can take several hours to start working, but provide a longer lasting effect.

Other medication used may be combinations of steroids plus bronchodilators (Advair and Symbicort) and are reserved for children with more persistent symptoms.

**When should you call the doctor?** If your child is using rescue drugs more than twice a week on a regular basis, if symptoms are interfering with sleep, exercise and normal activity, and if your child’s symptoms are not improving. You should also be scheduling asthma follow up visits with your primary care physician every 4 months to make sure the medications are working and are still appropriate for your child.

**When is it an emergency?** Please seek immediate medical attention if the following occurs: breathing is faster and/or shallower, and there is a bluish coloration of lips, fingernails, or if the coughing and wheezing is not responding to the rescue drug.

Even when a child is feeling fine, asthma can still be present and flare at any time. However, if managed correctly with current treatments and preventive strategies, children can thrive and live normal lives.