



## Asthma- Guide to Success

Asthma is a chronic (long-term) lung disease that inflames and narrows the airways. Asthma causes recurring periods of wheezing (a whistling sound when you breathe), chest tightness, shortness of breath, and coughing. The coughing often occurs at night or early in the morning. Asthma affects people of all ages, but it most often starts during childhood. In the United States, more than 22 million people are known to have asthma. Nearly 6 million of these people are children.

The airways are tubes that carry air into and out of your lungs. People who have asthma have inflamed airways. This makes the airways swollen and very sensitive. They tend to react strongly to certain inhaled substances (cigarette smoke, pollen, perfumes).

When symptoms get more intense and/or more symptoms occur, an asthma attack occurs. Asthma attacks also are called flare-ups or exacerbations. It's important to treat symptoms when you first notice them. This will help prevent the symptoms from worsening and causing a severe asthma attack. Severe asthma attacks may require emergency care, and they can be fatal.

Asthma can't be cured but it often improves as your child gets older. Even when your child seems to be fine, they **still have the disease** and it can flare up at any time. It is **normal for parents have difficulty accepting** or believing their child may have a chronic disease. This is especially true when they have no family history or experience with asthma. Please discuss any fears or concerns about your child's diagnosis with Dr. Gully or the staff. We understand that the diagnosis can be confusing and scary; however, with today's knowledge and treatments, children with asthma can live normal lives and participate in sports and activities as other children do. We are here to ensure they can!

You can take an active role in managing your child's asthma. For successful, thorough, and ongoing treatment, build strong partnerships with your doctor and other health care providers.

### What Is Cough-Variant Asthma?

Cough-variant asthma is a type of asthma in which the main symptom is a dry, non-productive cough. (A non-productive cough does not expel any mucus from the respiratory tract.) People with cough-variant asthma, or CVA, often have no other "classic" asthma symptoms, such as wheezing or shortness of breath.

Cough-variant asthma is sometimes called chronic cough to describe a cough that has lasted longer than six to eight weeks. The coughing with asthma can occur during the day or at night. In children, it often occurs at night while sleeping. If you have nighttime asthma, it can interrupt sleep. People with cough-variant asthma often notice that coughing increases with exercise, called exercise-induced asthma. Coughing may increase when they are exposed to asthma triggers or allergy-causing substances like dust or strong fragrances, or when they are in cold air.

Anyone can get cough-variant asthma at any time, but it is common in young kids with childhood asthma. CVA may lead to the development of "classic" asthma, with symptoms that include shortness of breath and wheezing.

Like "classic" or "typical" asthma, no one really knows what causes cough-variant asthma. However, coughing may start after exposure to allergens, or when they are breathing in cold air. Coughing may also follow an upper respiratory infection or viral bronchiolitis such as the bronchiolitis caused by **Respiratory syncytial virus (RSV)**.

### How Is Asthma Diagnosed and Are Specific Tests Available?

Asthma is diagnosed by your healthcare provider after examining your child's lungs and taking a careful history of current symptoms and past medical history. Cough-variant asthma can be somewhat difficult to diagnose because the cough may be the only symptom, and cough itself may appear to be bronchitis, bronchiolitis, or croup. Most Healthcare Providers will become suspicious of asthma in a patient with recurrent episodes of "croup".

Specific tests are available, but they are expensive **and difficult to properly perform in children**. Most of the time your doctor can diagnose asthma by taking a careful history of symptoms, reviewing the medical history, and examining the patient particularly when they are ill. For these reasons, these tests are often reserved for children with chronic lung diseases such as cystic fibrosis. The two tests commonly used in adults include Spirometry and the Methacholine Challenge test. Under special circumstances, your child may be referred to a special lab with trained personnel to administer these tests properly. Most of the time, they are not necessary.

Sometimes the diagnosis is not clear. A trial of therapy may be helpful. The doctor may choose to give the patient standard asthma treatments. If the wheezing or cough responds to these types of treatments, a diagnosis of asthma or cough-variant asthma can be made.

## How Is Asthma Treated?

Asthma and Cough-variant asthma are treated in the same way. There are two types of inhalers:

1. **Inhaled Corticosteroid (ICS)**: this is called your “**PREVENTATIVE**” or “**DAILY**” medication.
2. **Short Acting  $\beta$ -agonist**: also called “**RESCUE**” inhalers. Albuterol and Levalbuterol are two examples.

You will also be given a spacer with or without a mask based on the age and ability of your child. Our nurses will do their best to make sure you understand how to properly give the medicines to your child. Do not get discouraged if you forget or we need to correct your technique. We realize treating your child's asthma can be quite overwhelming in the beginning and do not expect our newly diagnosed patient or their parents to do everything perfectly. Please do not hesitate to ask questions. Once your child is stable on medication, it will become as routine as brushing their teeth.

You should see a gradual improvement in your child's asthma symptoms over six to eight weeks. Often, the improvement is dramatic. You will soon see your child rest without coughing, participate in sports without wheezing or coughing, and recover more quickly from illnesses. Your child's behavior may improve. Unlike adults, children with asthma may become more hyperactive when they are struggling to breathe.

**The most important factor in the success in your child's asthma treatment is to follow your healthcare providers instructions for administering medication correctly and exactly as prescribed. Often your child will be prescribed a daily “preventative” inhaled steroid. Failure to give “preventative” inhaled treatments every day will often lead to unnecessary ER visits or missed days of school.**

Please be honest with your providers about the feasibility of giving medications daily and potential barriers to successful management (shared custody, other caretakers, work schedules, school administration etc.) so that we may work with you to make sure your child's asthma is well controlled. Your child's health is of utmost importance to the providers at Blue Ridge Pediatrics! Together we will be successful. Your child will require frequent visits to monitor their asthma control. Medication adjustments may be made seasonally, during illness, changing residence etc. We always try to manage your child's asthma according to the latest *American Academy of Allergy, Asthma and Immunology* guidelines. Your child's symptoms will be managed on the lowest effective dose of medication which requires frequent assessments.

### Your Child's Preventative Inhaler:

**2 puffs with spacer twice daily EVERYDAY**

### Your Child's Rescue Inhaler:

**1-4 puffs with spacer AS NEEDED for cough or wheeze**

### School checklist:

- **Spacer**
- **Signed Medication Administration Form**
- **Rescue inhaler**

Call Dr. Gully's office at **864-888-4464** if using rescue inhaler more than 3 times weekly (other than prior to exercise) to schedule an appointment. Your child's asthma may not be under control.