

---

---

# THE "INFO"-HALER



TAKE IN THE INFORMATION

An easy to understand, informative newsletter for our patients of all ages from the  
*Allergy & Asthma Associates of Michigan, P.C.*

---

## ASTHMA IN CHILDREN

Asthma is the most common chronic childhood disease. It is now the number one cause of hospitalization and emergency room visits in most pediatric centers. It accounts for more missed school days than any other childhood illness. More than half of all asthma cases are found in children between the ages of two and seventeen. Some studies show that one child in every ten has asthma. Nearly three-quarters of all asthmatic children start to develop symptoms before they complete first grade. Asthma is 26% more prevalent in African-American children than in white children.

Heredity plays a major role in the tendency to develop asthma, though the tendency is not as clearly defined as having blue eyes or brown eyes, etc. Asthma does not always follow a predictable line of inheritance. It can skip from one generation to another, or surface in cousins, aunts, or uncles. The presence of an asthma gene does not guarantee that one will develop asthma. Asthma that begins in infancy and childhood, however, is more likely to be inherited than asthma that begins in later life. When one parent has asthma (especially the allergic type), the chances are approximately 20% that a child will develop asthma (greater if the parent with asthma is the mother). When both parents have asthma, the odds increase to 65%. In addition to heredity, other factors such as allergies, infections (like croup and bronchiolitis), irritants (like cigarette smoke), and environmental conditions may predispose a child to asthma.

The age of onset of asthma in children is important. In early childhood the incidence of boys with asthma is greater than the incidence of girls with asthma. In later childhood the ratio equalizes, than in adolescence it tends to reverse and the number of girls with asthma is greater than the number of boys by a three to two margin. When asthma begins in infancy, it is most likely the non-allergic type, while asthma beginning during the ages of four to ten years is usually the allergic type. Allergic asthma is often the easiest type of asthma to treat, with the best outlook for future control. All asthma, however, is manageable and reversible causing no permanent damage to the lungs or airways.

Asthma can be a difficult disease to diagnose since many childhood illnesses can mimic asthma. Asthma symptoms can vary from wheezing, shortness of breath, and chest tightness, to a commonplace hacking cough. Since a great deal of childhood asthma is of the allergic type, parents should be aware of potential allergy symptoms in their children. Allergic children often experience many of the following signs: frequent and repetitive sneezing, stuffy nose, itchy nose, mouth, throat, ears, or eyes, watery nasal secretions, watery eyes, red eyes, dark circles under the eyes (allergic shiners), mood changes, appetite changes, recurrent ear infections, nose bleeds (especially at night), less acute sense of smell, and even nausea and sore throats from post-nasal drip. In general, symptoms that come without a fever and last longer than a week or ten days should make one think of allergic possibilities.

Children do not "outgrow" asthma per say, but many go into permanent or partial remissions. The reason asthma is most common in children is because it affects smaller airways more dramatically than larger ones. When larger airways constrict, there is still enough room for air to move in and out, but when smaller airways constrict, the passage of air may be completely blocked. In children, especially under the age of six years, more than 80% of their airways are anatomically small. After the sixth birthday, the size of the airways begins to increase rapidly until the percentage of small airways decreases to about 20% by age fifteen. Childhood asthma, therefore, tends to improve as the lung anatomy changes to contain a greater percentage of larger airways.

Children also tend to have more asthma attacks than adults because they have less immunity than adults. Colds and respiratory viral infections are primary triggers of asthma attacks in most asthma patients. A typical two year old may have ten to fifteen colds per year, while an average twelve year old may experience three to four colds per year. As children grow older, they develop greater immunity to many of the colds and viruses that plagued them in their earlier years. As their immunity increases, they experience fewer of the asthma triggering infections and their asthma improves (especially as the cold season passes).

Once a person is diagnosed with asthma, they will have asthma for the rest of their lives. Asthma still remains in adulthood, but about 50% of all children with asthma become free of symptoms by age fifteen. The “twitchy airway condition” that characterizes asthmatic patients can flare up at any time, but it is even thought that the twitchiness or hyperirritability of the airways eases with age, possibly due to the maturing of the smooth muscles that surround the airways.

Asthma is a very frightening disease, yet a very manageable and reversible disease. Asthmatic children can and should live as normally as children who do not have asthma. Treatment goals for asthmatic patients are to avoid conditions that prompt asthma attacks, use preventative medications prior to exposure to asthma triggering activities, maintain control of the asthma on a daily basis, and always be prepared with an emergency action plan should an asthma attack occur.

Stephanie Cook R.N., B.S.N.  
Allergy & Asthma Assoc. of Mi. P.C