



Best Practices in Childhood Asthma (BPCA) Program Special considerations for identifying and managing asthma in young infants and children

Risk Factors for the Development of Asthma in Infants and Young Children

Because most cases of asthma begin during the first years of life, identification of young children at high risk of developing the disease is an important concern. Unfortunately, wheezy infants who will go on to develop asthma coexist with a larger group of their peers who also wheeze in early life but whose symptoms are transient and usually subside during the preschool or early school years. Distinguishing these two asthma like phenotypes during infancy and early childhood simply on the basis of their clinical presentation is problematic.

A reliable clinical index has been developed to define risk factors for the development of asthma in infants and young children. A positive index (indicating children at high risk of developing persistent symptoms) includes the following combination of parameters:

- **Any wheezing in the first 3 years of life, plus:**
- **One of two major criteria:**
 - parental history of MD diagnosed asthma

or

 - physician-diagnosed atopic dermatitis at age ≥ 2 years

or
- **Two of the following minor criteria:**
 - physician-diagnosed allergic rhinitis at age ≥ 2 years,
 - wheezing apart from colds, or
 - peripheral blood eosinophilia ($\geq 4\%$)

Initiation of Long-term Control Therapy in Infants and Young Children

Based on observational studies, it is the opinion of the NAEPP Expert Panel that the initiation of long-term-control therapy should be considered in infants and young children who have had:

- More than three episodes of wheezing in the past year that lasted more than 1 day and affected sleep
- and**
- Who have risk factors for the development of asthma as described above.

This is in addition to previously recommended indications for starting long-term-control therapy in infants and young children who have:

- Required symptomatic treatment more than two times per week
- or**
- Experienced severe exacerbations less than 6 weeks apart

References:

Martinez F, Wright A, Taussig L, Holberg C, Halonen M, Morgan W. Asthma and wheezing in the first six years of life. *N Engl J Med.* 1995; 332:133–138.

Castro-Rodríguez J, Holberg C, Wright A, Martinez FD. A clinical index to define risk of asthma in young children with recurrent wheezing. *Am J Respir Crit Care Med.* 2000;162:1403-1406.

National Asthma Education and Prevention Program. *Expert Panel Report: Guidelines for the Diagnosis and Management of Asthma-Update on Selected Topics 2002.* Bethesda, Maryland: National Institutes of Health; 2003.