

Asthma in Children

DISEASE BURDEN OVERVIEW

More than 6 million children in the United States currently have asthma, a chronic lung disease with two main components: inflammation (swelling in the airways) and airway constriction (tightening of the muscles surrounding the airways).

- Asthma is the leading serious chronic illness of children in the U.S.
- Asthma prevalence has remained stable since 2001, but it is still at historically high levels
- Physician visits for children more than doubled between 1990 and 2004
- Children experience a higher incidence of asthma exacerbations resulting in hospitalization or emergency department visits compared with adults
- There were an estimated 198,000 hospitalizations in 2004 in children under 18
- Pediatric emergency department cases average 750,000 each year
- Asthma-related illness is the leading cause of school absenteeism – children missed an estimated 12.8 million school days due to asthma

Asthma can be a life-threatening disease if not properly managed. In 2004, the most recent year for which statistics are available, 3,816 deaths were attributed to asthma. However, deaths due to asthma are rare among children and the number of children under the age of 18 who have died as a result of asthma has been dropping steadily since 1999. In 2004, 186 children died as a result of uncontrolled asthma.

Still, despite the positive trends, millions of children with asthma do not have their condition under control, putting them at risk for increased asthma symptoms, sudden attacks, hospitalization and even death. In fact, 31 percent of children between the ages of 4 and 11 with asthma are not well-controlled, as well as 25 percent of children from 12 to 17 (Data from the Asthma USA survey; based on scores of 19 or less on the Asthma Control Test or Childhood Asthma Control Test).

HOW IS ASTHMA TREATED IN CHILDREN?

The National Institutes of Health (NIH) has published a set of guidelines that recommend a “rescue” inhaler be used as needed for the treatment of intermittent asthma.

For persistent asthma, guidelines recommend the following:

- Those younger than 5 who are not adequately controlled on a rescue inhaler should be initiated on an inhaled corticosteroid (ICS), which helps to reduce inflammation.
- Children 5 to 11 who require additional treatment should also be given an ICS, and may add a long-acting beta2-agonist (LABA) to treat airway constriction if an ICS alone is not enough to control asthma.
- Children 12 and older with persistent asthma should begin treatment on an ICS, moving to combination therapy of an ICS and LABA if the disease remains poorly controlled.
- Children 12 and older with moderate persistent asthma can initiate therapy with an ICS and a LABA.

Since asthma is a complex disease that affects different individuals in different ways, it is important for patients to work with their doctor to determine the most appropriate treatment plan. The NIH recommends the ongoing assessment of asthma control with validated questionnaires, such as the Asthma Control Test and the Childhood Asthma Control Test.

The Asthma Control Test is for people 12 years of age and older; the Childhood Asthma Control Test is for children 4-11 years of age. The ACT and Childhood Asthma Control Test are simple questionnaires, yet highly predictive tools physicians and patients can use to help assess asthma control.

The Asthma Control Test is a trademark of QualityMetric, Inc.

This information is provided by GlaxoSmithKline, a research-based company and a world leader in respiratory care.