Work-Related or Occupational Asthma

Asthma & Obesity

Asthma & Influenza

Who Has Asthma?

Asthma by the Numbers

Childhood Asthma

Taking Control of Asthma

Asthma is one of the most common chronic diseases that affects children and adults. It is characterized by inflammation and hyperreactivity of the airways, leading to symptoms such as wheezing, coughing, chest tightness, and shortness of breath. Asthma is a significant public health concern, with an estimated 23.7 million adults and 6.2 million children in the United States having asthma. The condition affects people of all ages, but it is particularly prevalent among children, especially those younger than 12 years old. Overall asthma prevalence rates increased from 3.3% in 1980 to 17.7% in 2010. Asthma prevalence is higher in non-Hispanic blacks (11.0%) and non-Hispanic whites (7.7%) compared to other racial and ethnic groups. The prevalence of asthma is also higher among adults older than 65 years (12.7%) and those with high-risk medical conditions, including diabetes, COPD, and hypertension.

Asthma and obesity are strongly associated. Obesity reduces pulmonary compliance and increases airway resistance, making asthma symptoms more severe. A meta-analysis of studies involving 170,973 people found that children with a body mass index (BMI) > 95th percentile compared with children with a BMI < 5th percentile were 1.5 times more likely to have an asthma diagnosis. In addition, adults with obesity are more likely to have severe asthma. The combination of obesity and asthma is known as “obesity asthma.” It is associated with greater asthma severity, more frequent asthma exacerbations, and higher healthcare costs.

Asthma symptoms can be triggered by seasonal or pandemic influenza. Studies have shown that children with asthma are more likely to be hospitalized for seasonal and pandemic influenza than non-asthmatic children. Children with asthma had greater odds of requiring hospitalization for H1N1 infection than non-asthmatic children, with an estimated 2.5 times higher odds. Children with asthma had greater odds of requiring hospitalization for pandemic influenza than non-asthmatic children, with an estimated 2.0 times higher odds.

Asthma patients experience a significant burden of work-related or occupational asthma. Work-related asthma affects an estimated 2.3 million workers in the United States. Asthma symptoms can be exacerbated by exposure to workplace irritants such as dust, chemicals, and allergens. Work-related asthma can result in decreased work productivity, increased healthcare costs, and decreased quality of life. Asthma patients may need to make significant changes to their work environment, including the use of personal protective equipment, altering work tasks, or even changing jobs.

Asthma costs the US about $56 BILLION DOLLARS each year. Direct healthcare costs, including medical expenses, lost productivity, and other indirect costs, account for a significant portion of these costs. In 2010, asthma contributed to 3,345 deaths in the United States, with the annual direct health care cost estimated at $17 billion. The total economic burden of asthma is much higher, with estimates ranging from $56 billion to $200 billion per year.