



Children and Youth with Asthma

Washington State, 2009-2010

What is Asthma?

Asthma is the most common chronic disease among children. Asthma is a chronic inflammation of the airways which is associated with airway sensitivity, airflow limitation, and respiratory symptoms. Asthma symptoms can include cough, wheezing, shortness of breath, chest tightness and phlegm. Asthma can reduce an individual's quality of life and limit their ability to participate in activities. Uncontrolled asthma increases the likelihood of unplanned doctor visits and expensive hospitalizations.

Information on the prevalence of asthma among children comes from two sources: The Washington Behavioral Risk Factor Surveillance System (BRFSS) is a household telephone survey that asks adults age 18 or older about their own health and about the health of children living in the household. The Healthy Youth Survey (HYS) is a school based survey that asks children about their own health status.

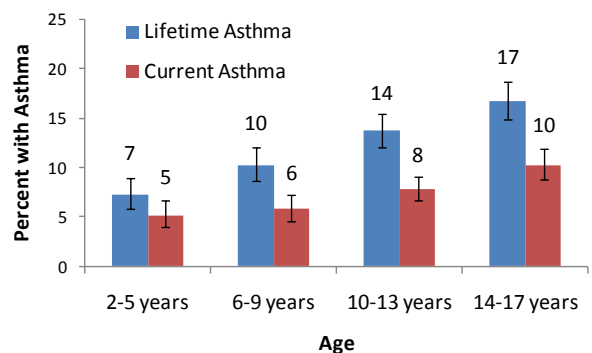
Who Has Asthma?

The term "lifetime asthma" refers to children who have been diagnosed with asthma at some time in their lives. Children with lifetime asthma who also say that they still have asthma, or have recent symptoms, or who are taking asthma medication are said to have current asthma.

According to BRFSS, 17 percent of children have lifetime asthma and 10 percent have current asthma by late adolescence.

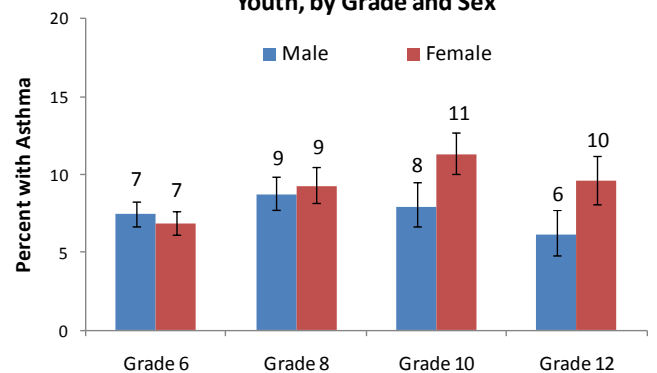
Among very young children, boys are more likely than girls to have current asthma. That relationship begins to change in adolescence. By the late teens, girls have a higher prevalence of current asthma than boys.

Figure 1. Prevalence of Asthma among Washington State Children by Age



Source: Washington BRFSS, 2009-2010

Figure 2. Prevalence of Current Asthma among Youth, by Grade and Sex

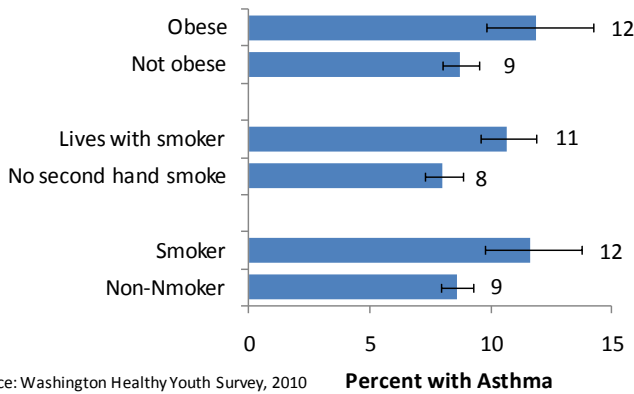


Source: Washington Healthy Youth Survey, 2010

Risk Factors for Asthma

The causes of asthma are not fully understood. Asthma is probably not a single disease, but a syndrome of related disorders stemming from many causes. However, many common factors have been identified that increase a child’s risk of developing asthma, and increase the severity of symptoms in children with asthma. Smoking (tobacco or marijuana), obesity, family history of asthma, and environmental triggers such as mold and second-hand smoke all increase the risk of asthma.

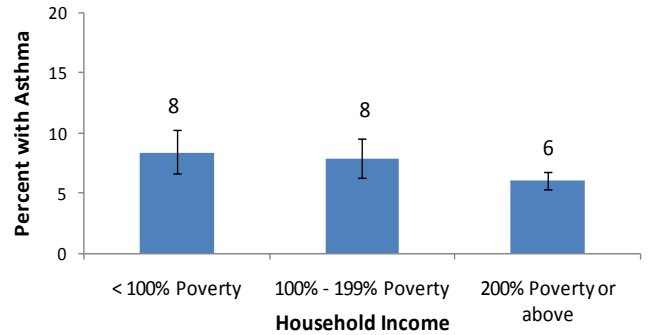
Figure 3. Current Asthma Prevalence among Washington State High School Youth



Source: Washington Healthy Youth Survey, 2010
Combined high school youth estimate

Social position has significant impacts on health. Children growing up in the face of racial discrimination or economic hardship experience chronic stress, fear, and uncertainty, and are exposed to greater environmental risk. Such early experiences can affect all aspects of a child’s development, and increase the likelihood of chronic health problems.

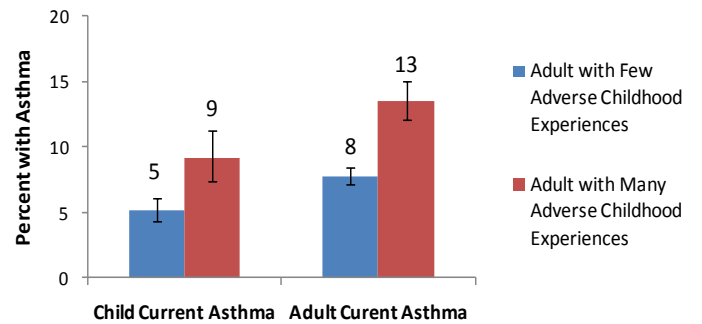
Figure 4. Current Asthma among Washington State Children by Household Income, 2009-2010



Source: Washington BRFSS, 2009-2010

Experiences in childhood have health effects that span the generations. Children who experience adverse conditions such as abuse, family violence, or broken homes are more likely to have asthma as adults. Also, children living with adults who have had adverse childhood experiences are more likely to have asthma themselves.

Figure 5. Current Asthma among Children and Adults by Childhood Experience of Adults in the Household



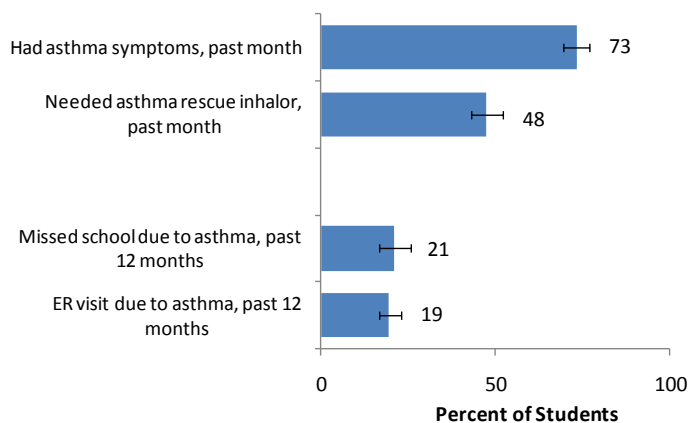
Source: Washington BRFSS, 2009-2010

Control of Asthma

While most people with asthma are able to live active lives with minimal disability, it is important for asthma to be well-managed. Regular doctor checkups are needed to ensure that the highest possible level of control is maintained. Controller medication, avoidance of asthma triggers and use of rescue medication to treat symptom flare-ups can keep asthma under control for the majority of people. Nearly three fourths of Washington high school youth with current asthma have had recent asthma symptoms and half have needed to use a rescue inhaler within the past month. These are indicators that asthma is not well controlled for many Washington youth.

When asthma is not well-controlled, the results can be life-threatening. Uncontrolled asthma might require unscheduled doctor visits, trips to emergency departments or hospitalizations. Uncontrolled asthma can also lead to school absences, and interfere with normal activities. About 1 out of 5 Washington high school youth with asthma had been to the emergency room in the past year because of asthma, and 1 out of 5 missed school at least once in the past year due to asthma.

Figure 6. Asthma Control among Washington High School Youth with Asthma



Source: Washington Healthy Youth Survey, 2010
Combined high school youth estimate

Recommendations

The National Asthma Education and Prevention Program guidelines recommend the use of preventive medication for anyone who has persistent asthma. In 2008, about half of high school youth with current asthma reported having taken preventive asthma medication in the previous 12 months (HYS 2008).

The 2007 Guidelines on Asthma of the National Asthma Education and Prevention Program recommend that each person who has asthma have a written asthma action plan from their doctor. An asthma action plan shows the person's daily treatment, how to control asthma in the long term, and how to handle worsening asthma or asthma attacks. The plan explains when to call the doctor or go to the emergency room. In 2008, about 26 percent of high school youth reporting current asthma also reported receiving an asthma action plan at some time from their doctor. Twenty two percent did not know whether they had received a plan.

Certain air pollutants can "trigger" asthma attacks and worsen symptoms. Common environmental triggers include dust mites, mold, cockroaches, animal dander, diesel exhaust, ozone, wood smoke, and tobacco smoke. Reducing exposure to these triggers can reduce the number and severity of asthma attacks.

The home environment can have a big impact on people with asthma. In-home asthma education and supplies (like mattress and pillow encasings) that address multiple triggers in the home have been shown to reduce asthma symptoms and the use of emergency health care among children.

Contact

For further information:
Asthma Program
Washington State Department of Health
PO Box 47855, Olympia, WA 98405-7855
360-236-3851
www.doh.wa.gov