

# How Asthma Affects the Quality of Life in Youth

Washington State | 2013

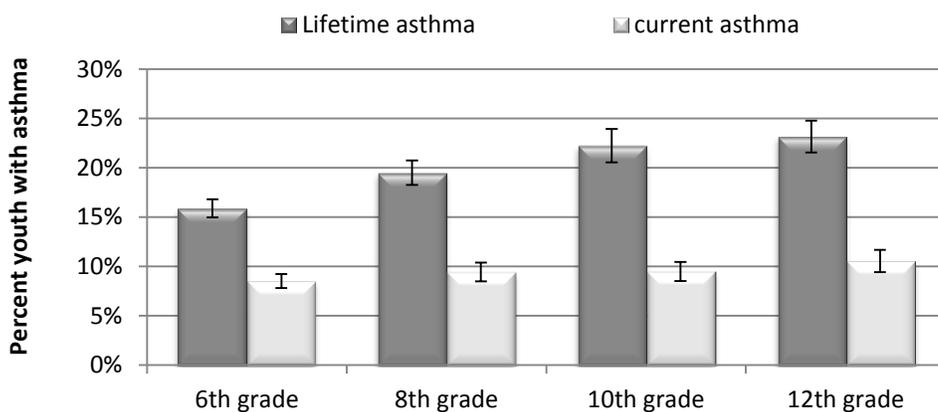
Asthma is a chronic respiratory condition. It is a common and complex disorder of the airways that causes the lungs to swell and narrow, leading to wheezing, shortness of breath, chest tightness, and coughing.<sup>1</sup> This chronic lung disease affects nearly 9 percent of Washington youth.\*

Having asthma can reduce quality of life by limiting activities. Asthma is also linked with depression and suicidal thoughts among young people. Youth with more severe symptoms are less likely to have high academic achievement than youth with fewer symptoms or those without asthma. Quality of life for youth with asthma is often measured by missed school days, inability to carry out normal activities, or perceived poor health status.

Youth with asthma are able to enjoy a higher quality of life when they have control of their asthma and asthma symptoms.

In 2012, youth in grades 8, 10, and 12 were more likely than youth in grade 6 to report ever being told by a doctor that they have asthma. Similarly, youth in higher grades were more likely to report having current asthma than youth in lower grades [Fig. 1].

**Figure 1**  
**Youth with Asthma by Grade**



Data Source: Washington Healthy Youth Survey, 2012



\*This fact sheet presents information on youth that are in grades 6,8,10 and 12 because data presented here are from the Healthy Youth Survey (HYS). More information on HYS can be found on: [www.askhys.net](http://www.askhys.net)

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## Measuring Asthma Quality of Life

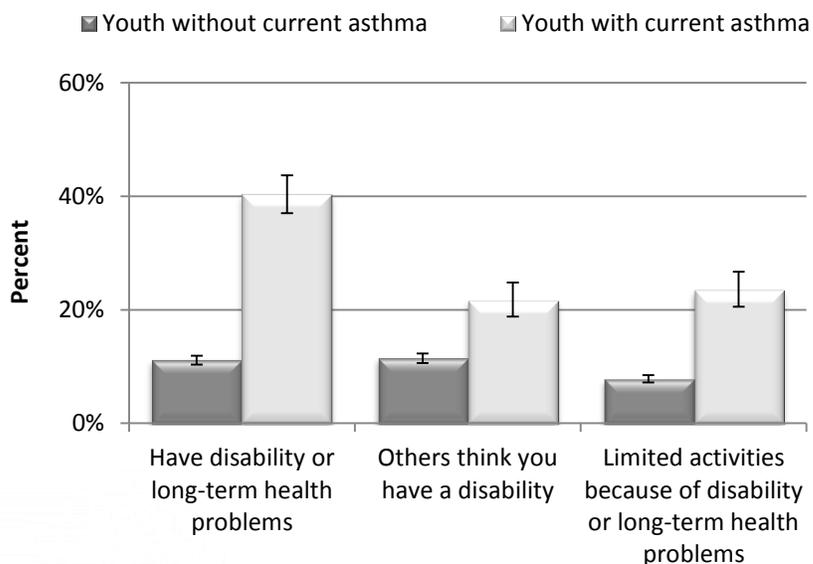
### School Performance: Physical Activity and Academic Progress

Disability is a long-term reduction in the ability to participate in daily activities. Youth with asthma experience limitations in daily activities like attending school and participating in play activities or sports.<sup>2</sup> Asthma accounts for more school absenteeism than any other chronic disease.<sup>3</sup> Prolonged absence or multiple brief absences from school may contribute to poor school performance.<sup>3</sup> Missing school also interferes with the child's peer acceptance. Asthma can disrupt sleep, ability to concentrate, and memory. In addition, repeated trips from the classroom to the school nurse to access asthma medication can disrupt learning.<sup>4</sup>

Nationally, asthma is a leading cause of disability in children and youth under the age of 18.<sup>5</sup> Over the past 25 years, asthma has contributed to a substantial rise in the overall prevalence of disability among children and youth.<sup>5</sup>

In Washington, youth with asthma are more than three times (40 percent) as likely as youth without asthma (11 percent) to report having a long-term disability or health problem. About one in three youth report they had to limit their activities because of their disability or long-term health problem [Fig. 2].

**Figure 2**  
Prevalence of disability and limited activities among youth with or without asthma



Data Source: Washington Healthy Youth Survey, 2012 ; 8-10-12<sup>th</sup> grade-standardized



### Mental Health

Many studies have suggested that asthma sufferers can be prone to depression, perhaps because of the isolation that can result from their uncontrolled symptoms.<sup>6</sup>

Constant struggle with asthma symptoms and disruption of normal activities can contribute to decreased quality of life for youth with asthma. Compared to youth without asthma, youth with asthma are more likely to experience mental health issues including suicidal thoughts, stress, and depression.

Research confirms that youth with asthma are more likely to have suicidal thoughts or even make a suicide attempt.<sup>6</sup> According to the Washington Healthy Youth Survey, in 2010-2012, about 32 percent of youth with asthma reported being depressed and 19 percent reported “seriously thinking” about suicide during the previous year [Fig. 3].

## Asthma Management, Policies, and Procedures

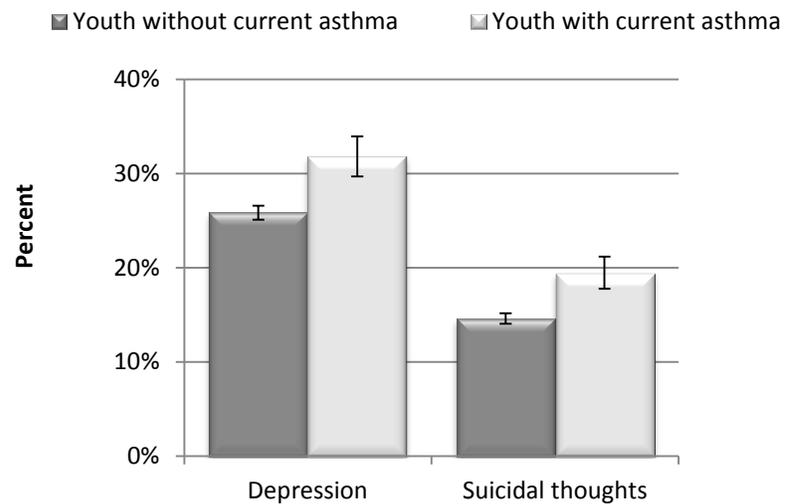
### Strategies for School System Leaders

Asthma is controllable. Schools, clinics, and communities can develop coordinated strategies to help youth

manage their asthma. One way to address asthma management within school settings is to follow the Center for Disease Control and Prevention’s six strategies to deal with asthma. These include:<sup>4</sup>

1. Establish management and support systems for asthma friendly schools.
2. Provide appropriate school health and mental health services for students with asthma.
3. Provide asthma education and awareness programs for students and school staff.
4. Provide a safe and healthy school environment to reduce asthma triggers.
5. Provide opportunities for safe, enjoyable physical activities.
6. Coordinate school, family and community efforts to better manage asthma symptoms and reduce school absences among students with asthma.

**Figure 3**  
**Prevalence of depression and suicidal thoughts among youth with or without asthma**



Washington Healthy Youth Survey, combined 2010 & 2012 ; grades 8-10-12 standardized



## Strategies for Healthcare Providers

Although studies show that asthma control is within reach for most individuals who have asthma, it continues to remain under-recognized and under-treated. Health care providers can address this by using clinical tools that can assist the clinician in the diagnosis and management of asthma. [The Four Pillars of Asthma Management](#) tool recommends clinicians to:<sup>7</sup>

1. Plan visits at regular intervals for better asthma management.
2. Prescribe asthma medications appropriately based on severity of asthma.
3. Educate patients to improve self-monitoring and self-management of their asthma.
4. Assess environmental triggers and teach ways to reduce exposure to triggers.

There are many tools that can be used to understand depression among youth with moderate to severe asthma.<sup>8</sup> Most screening tools are not used to diagnose asthma-specific depression. They are used to assess the symptoms associated with depression. Some depression screening tools that healthcare providers and licensed school professionals can use are:

- Reynolds Adolescent Depression Scale<sup>9</sup>
- Center for Epidemiological Studies Depression Scale for Children (CES-DC)<sup>10</sup>
- Beck Depression Inventory (BDI) Scale<sup>11</sup>

A comprehensive plan that addresses the medical management of the disease and the avoidance of asthma triggers is the best way to effectively manage asthma.<sup>12</sup> The ultimate goal is to have well-controlled asthma so that youth with asthma can live normal, active lives.



## Citations

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<sup>2</sup> Prevalence, impact and trends in childhood disability due to asthma. *Archives of Pediatric and Adolescent Medicine*. 2000; 154:287-293.

<sup>3</sup> Moonie, S., Sterling, D., Figgs, L., & Castro, M. (n.d.). Asthma status and severity affects missed school days. (2006). *Journal of School Health*, 76(1), 18-24. Available online at: <http://www.asthma-stlouis.org/PDF/AsthmaStatusSeverity.pdf>

<sup>4</sup> CDC. Adolescent and School Health. *Strategies for Addressing Asthma within a Coordinated School Health Program*. Available online at <http://www.cdc.gov/healthyyouth/asthma/strategies/asthmacsh.htm>

<sup>5</sup> Prevalence and impact of disabling chronic conditions in childhood. *American Journal of Public Health*. 1998 Apr; 88(4): 610-7.

<sup>6</sup> Asthma and Suicide – Is there a link? *Quality Health –Asthma Home Center*. September 17, 2009. Available online at: <http://www.qualityhealth.com/asthma-articles/asthma-suicide-connection>

<sup>7</sup> National Heart, Lung, and Blood Institute *Expert Panel Report 3: Guidelines for the Diagnosis and Management of Asthma 2007*, Bethesda, MD: National Institutes of Health; August 2007. NIH Publication 07-4051.

<sup>8</sup> Rubin, N. (1993). Severe asthma and depression. *Archives of Family Medicine*, 2(4), 433-40. Available online at:

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<sup>9</sup> Platt, M. *Reynolds Adolescent Depression Scale*; Association for Assessment in Counseling. Available online at: <http://aac.ncat.edu/newsnotes/y99fall1.html>

<sup>10</sup> Center for Epidemiological Studies Depression Scale for Children. Bright Futures - Tool for Professionals. Available online at:

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<sup>11</sup> Beck Depression Inventory Scale. Available online at: <http://cawt.com/Site/11/Documents/Members/Evaluation/BeckDepressionInventory1.pdf>

<sup>12</sup> United States Environmental Protection Agency. Health and Achievement: Managing Asthma in the School Environment. April, 2012. Available online at: <http://www.epa.gov/iaq/schools/managingasthma.html>