

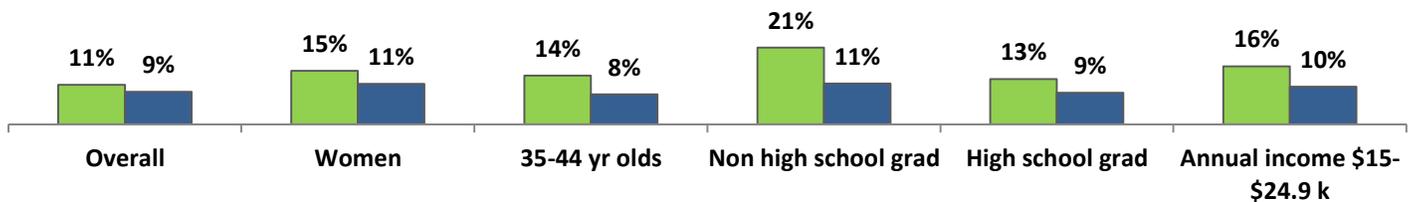
### Background

Since 2007 the current asthma prevalence among Vermont adults has been significantly higher than the U.S. average and in recent years it has been among the highest in the country. In an effort to identify health disparities caused by asthma and improve the quality of life of all Vermonters affected by asthma, this data brief compares asthma measures for Vermont adults and children to those for the U.S. using the Behavioral Risk Factor Surveillance System (BRFSS) and Asthma Call Back Survey (ACBS) data.

### Asthma among Adults

The prevalence of asthma in Vermont and other New England states has historically been among the highest in the nation. In 2012 the prevalence of current asthma in VT adults was 11%, the third highest in U.S. and significantly greater than the overall U.S. asthma prevalence (9%).<sup>1</sup> Select demographic groups within Vermont adults had significantly higher rates of current asthma compared to the U.S. averages; these groups included women, Vermonters 35-44 years old, those with a high school education or less, and those earning \$15,000-\$24,999 per year (Figure 1).<sup>1</sup>

**Figure 1. Adult Current Asthma Prevalence**    Vermont    U.S.

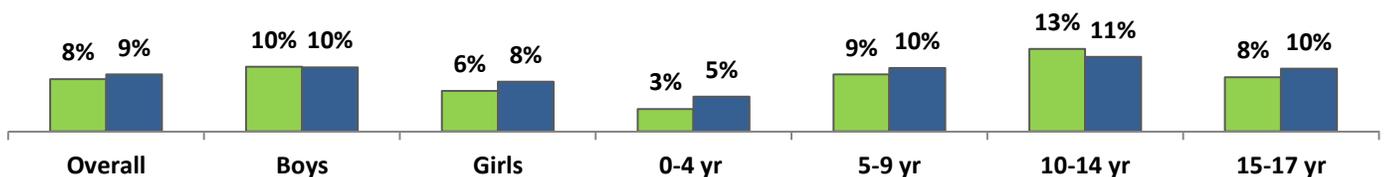


Vermont adults were significantly less likely to report missing days of work or usual activity due to their asthma than the U.S. average (23% vs. 36%). No significant differences were observed between Vermont adults and the U.S. average or nearby states (MA, ME, NH and NY) for many asthma measures including: time since asthma diagnosis, rates of asthma exacerbations, number of routine health care visits for asthma, receipt of an asthma action plan, advisement to change things in their home, work, or school to reduce environmental triggers, use of controller or rescue medication, depression, activity limitations, and work related asthma measures. One in five Vermont adults with current asthma reported that it was caused or aggravated by their current job and 56% indicated that their asthma was caused or aggravated by a current or former job which is similar to the U.S. average.<sup>2</sup>

### Asthma among Children

The prevalence of current asthma among Vermont children was 8% in 2011 and was similar to the average of the 16 states collecting data in 2011 (9%). Nationally, the prevalence of current asthma was greater in boys than girls (10% vs. 8%; Figure 2). Vermont boys and girls followed this trend, though not significantly different. The prevalence of current asthma among Vermont children varied by age with those 10-14 years of age having the highest prevalence and was similar to the variation of asthma prevalence with age in children nationwide.<sup>1</sup>

**Figure 2. Child Current Asthma Prevalence**    Vermont    U.S.



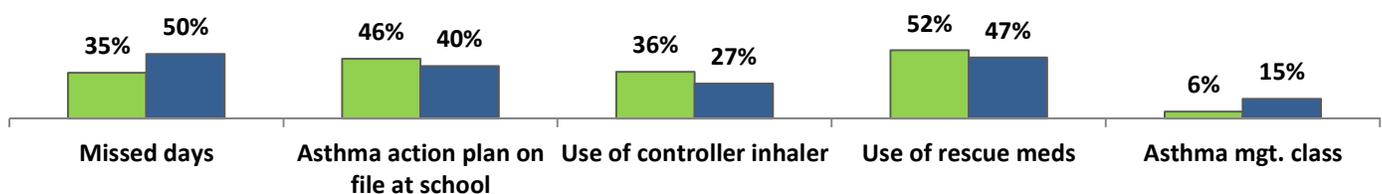
# Asthma in Vermont and United States

## Reducing the Burden of Asthma in Vermont

Several measures of child asthma were significantly better for Vermont children as compared to the U.S. average of the 36 states collecting data in 2006-2010.<sup>2</sup> Vermont children with current asthma missed fewer days of school or daycare in the past year due to their asthma compared to children nationwide (Figure 3). Forty-six percent of Vermont children with asthma had an asthma action plan on file with their school or daycare provider compared to 40% of children with asthma nationwide. In addition, Vermont children with current asthma used controller inhalers at a higher proportion than the national average (36% vs 27%).<sup>2</sup>

However, Vermont children with asthma were less likely to have taken an asthma education course as compared to the national average (6% vs. 15%).<sup>2</sup>

**Figure 3. Select Asthma Measures among Children with Current Asthma** ■ Vermont ■ U.S.



Approximately half of Vermont children with current asthma were first diagnosed 5 or more years ago, experienced an asthma exacerbation within the last year, received an asthma action plan from their healthcare provider, and reported that they are allowed to carry their asthma medication at school. Seventy-three percent of children with current asthma have had at least one doctor visit during the past year. Vermont children were similar to the U.S. average and nearby states (MA, ME, NH and NY) for these measures.<sup>2</sup>

### Discussion

Though Vermont's adult asthma prevalence is among the highest in the country, Vermont adults were less likely to miss work than those nationwide. Vermonters 35-44 years old, those with a high school education or less, those earning \$15,000-\$24,999 per year, and women had increased prevalences of asthma compared to U.S. averages for these groups. The child asthma prevalence in Vermont was similar to the nationwide average. Greater use of asthma action plans in schools and controller inhalers may contribute to Vermont's children being less likely to miss school due to their asthma than children nationwide. Programs aimed at improving asthma self-management among demographic groups with disparate burden of asthma and increasing attendance at an asthma management class present opportunities to lessen the impact of asthma in Vermont.

### For More Information on Asthma Data

Asthma Surveillance:

[http://healthvermont.gov/research/asthma/asthma\\_surv.aspx](http://healthvermont.gov/research/asthma/asthma_surv.aspx)

Maria Roemhildt, Ph.D.  
 Research, Epidemiology & Evaluation  
 Vermont Department of Health  
 108 Cherry Street  
 Burlington, VT 05401  
 802-951-4076  
[maria.roemhildt@state.vt.us](mailto:maria.roemhildt@state.vt.us)

### Data Sources and Detailed Data Tables

<sup>1</sup> Behavioral Risk Factor Surveillance System (BRFSS).

[www.cdc.gov/asthma/brfss/2012/default.htm](http://www.cdc.gov/asthma/brfss/2012/default.htm)

[www.cdc.gov/asthma/brfss/2012/brfsschilddata.htm](http://www.cdc.gov/asthma/brfss/2012/brfsschilddata.htm)

<sup>2</sup> Asthma Call Back Survey

[www.cdc.gov/brfss/acbs/2012/table/2012\\_tables.html](http://www.cdc.gov/brfss/acbs/2012/table/2012_tables.html)

[www.cdc.gov/asthma/acbs/acbstables.htm](http://www.cdc.gov/asthma/acbs/acbstables.htm)

*This publication was supported by cooperative agreement number EH14-1404 from the Centers for Disease Control and Prevention. Its contents are solely the responsibility of the authors and do not necessarily represent the official views of the Centers for Disease Control and Prevention.*