

# Vermont Adult Behavioral Risk Factor Survey

## Data Brief – Cardiovascular Disease Prevention

Cardiovascular disease (CVD) is the second leading cause of death in Vermont and accounted for 23% of Vermont resident deaths in 2009<sup>1</sup>. According to the Behavioral Risk Factor Surveillance System, eight percent of Vermonters, or about 39,000 Vermont adults were living with cardiovascular disease in 2011<sup>2</sup>.

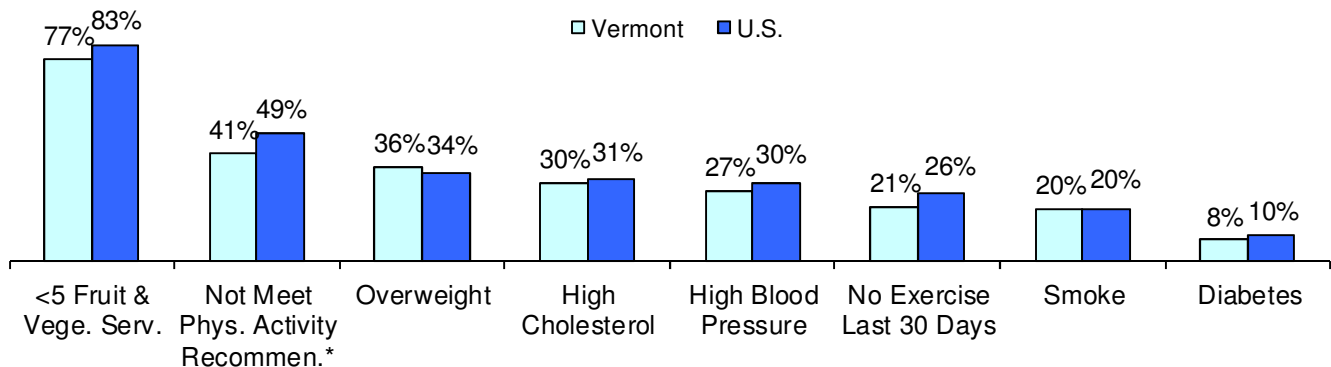
CVD is caused by a narrowing of blood vessels and is commonly due to atherosclerosis. Coronary heart disease, heart attacks, and strokes all result from CVD<sup>3</sup>. According to the Centers for Disease Control and Prevention (CDC) several behaviors and conditions can put people at greater risk for developing CVD. The leading risk factors for cardiovascular disease include tobacco use, poor diet and physical inactivity, being overweight or obese, high blood pressure, high cholesterol and diabetes<sup>4</sup>. Leading a healthy lifestyle by avoiding tobacco use, being physically active and eating well greatly reduces a person's risk for developing CVD.

### Vermont Adults at Risk for CVD

In 2011, more than three-quarters (77%) of Vermont adults said they did not eat the recommended daily servings of fruits and vegetables. About half of adults (41%) did not participate in enough weekly exercise to meet current recommendations\* and 21% said they did not participate in ANY exercise during the past month. More than a third (36%) of Vermont adults had a Body Mass Index classifying them as overweight, while slightly less than a third reported ever being diagnosed with high cholesterol or high blood pressure (30% and 27%, respectively). One in five (20%) currently smoke and less than 10% of all Vermont adults have been diagnosed with diabetes.

For all CVD measures, except high cholesterol and current smoking, a significantly smaller proportion of Vermont adults were at risk as compared to the U.S. There was no statistical difference between Vermont and the U.S. for high cholesterol and smoking.

**Figure 1: Prevalence of CVD Risk Factors  
Vermont Adults. 2011\*\***



Note: Overweight data is limited to adults 20 and older and includes adults with a Body Mass Index (BMI) classified as overweight (BMI of 25 to <30)

\*Current physical activity recommendations are 150 minutes of moderate or 75 minutes of vigorous activity per week.

\*\*All data in Figure 1, except that for cholesterol and diabetes is age adjusted to the U.S. 2000 standard population.

<sup>1</sup>Vermont Vital Statistics, 2009: <http://www.healthvermont.gov/research/index.aspx#vitalstats>

<sup>2</sup>The BRFSS defines CVD as adults ever diagnosed with coronary heart disease, a heart attack or a stroke. As individuals may be diagnosed with more than one cardiovascular event, the sum of the individual percents may not equal the overall total for CVD.

<sup>3</sup><http://www.who.int/mediacentre/factsheets/fs317/en/index.html>

<sup>4</sup>[http://www.cdc.gov/heartdisease/risk\\_factors.htm](http://www.cdc.gov/heartdisease/risk_factors.htm)

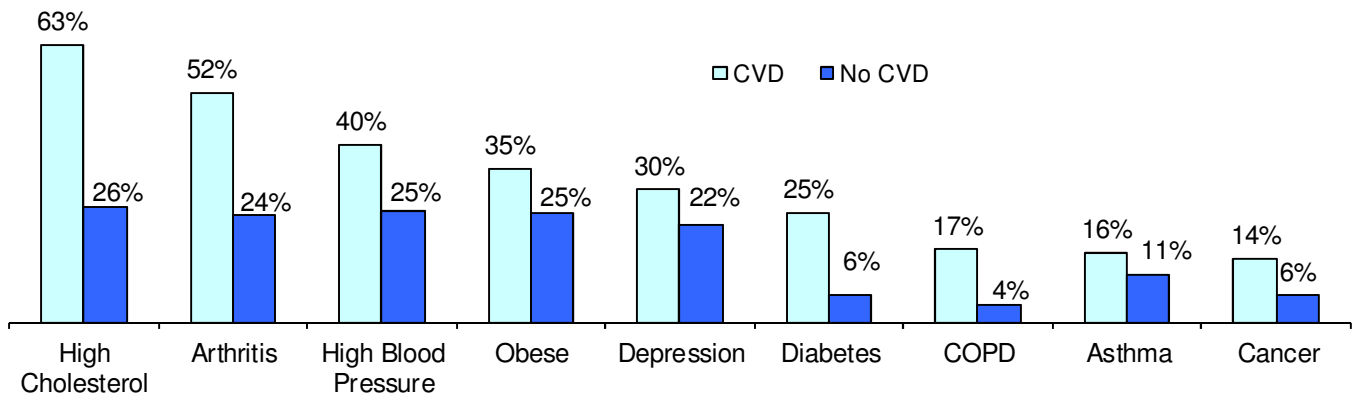
## CVD Co-Morbidities

High cholesterol, high blood pressure and diabetes are all known risk factors for CVD<sup>4</sup>, so it was not surprising that Vermont adults with CVD were significantly more likely to report having these conditions, as compared to those without CVD.

Chronic Obstructive Pulmonary Disease (COPD) was also significantly more likely among Vermont adults with CVD when compared to those without the condition. This was also not surprising given that the largest risk factor in the development of COPD is smoking, which is a risk factor for CVD<sup>5</sup>.

Vermont adults with CVD were also significantly more likely to have other chronic conditions than those without CVD. These included arthritis, depression, asthma, and cancer. The rate of obesity was statistically similar in those with and without CVD.

**Figure 2: Prevalence of Co-Morbidities by CVD Status  
Vermont Adults, 2011**



Note: Data for high cholesterol and hypertension is age adjusted to U.S. 2000 standard population

## Identifying Who Has Cardiovascular Disease

While less than 10% of Vermont adults have been diagnosed with CVD, there are specific populations that experience CVD at higher rates. Men, older adults (65+) and adults of lower socio-economic status were all significantly more likely to have CVD.

CVD prevalence increases significantly with age - nearly a quarter of adults 65 and older have been diagnosed. This is more than two-times the reported prevalence among those 40 to 64.

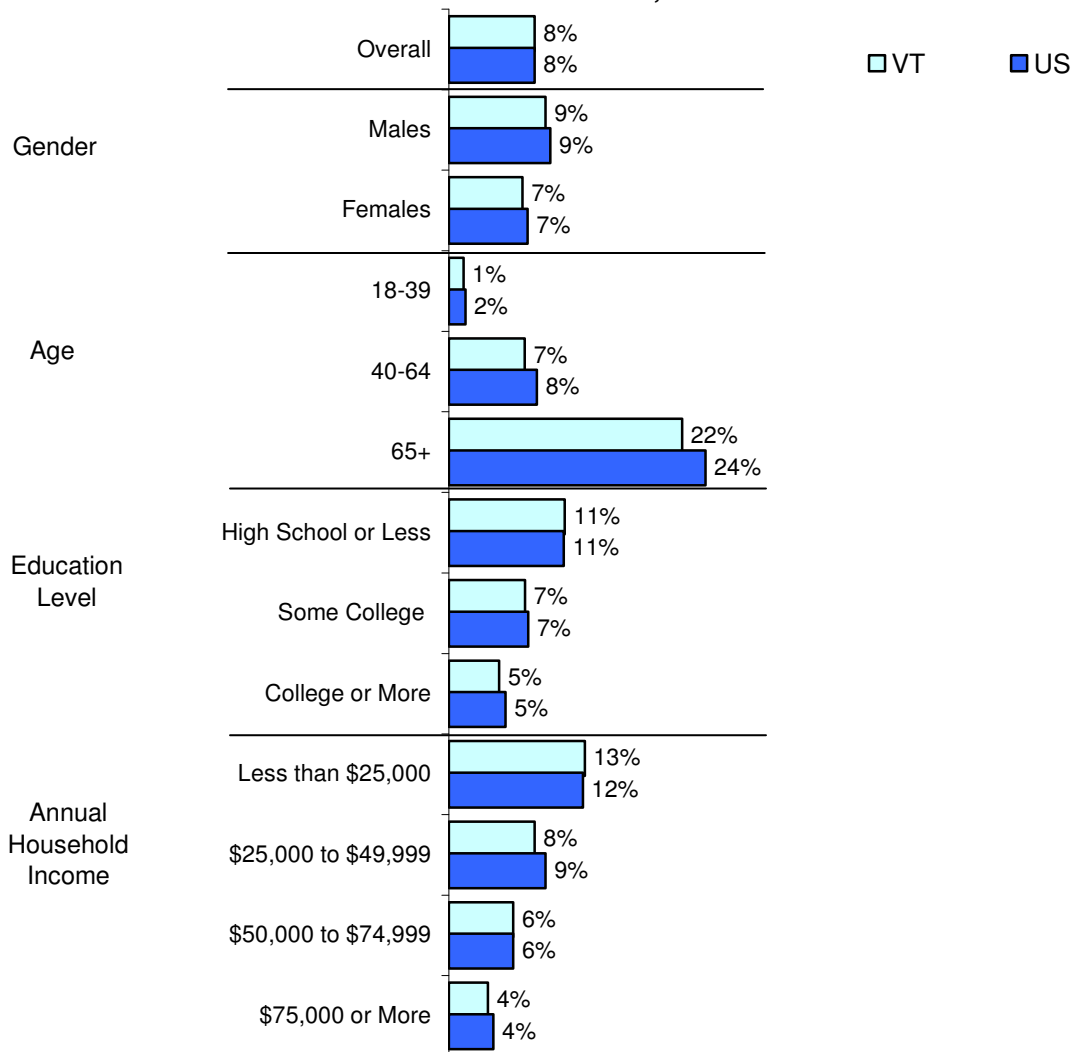
In the data presented in Figure 3, the measures of education level and annual household income are used as proxies for socio-economic status (SES). With both measures, adults of lower SES were significantly more likely to have been diagnosed with CVD than higher SES. Adults with a high school education or less were more than twice as likely to report CVD as those with at least a college degree. Similarly, adults in homes making less than \$25,000 per year were twice as likely to report CVD as

<sup>5</sup><http://www.cdc.gov/copd/>

those in homes making \$50,000 to \$74,999. This increased to three times more likely when compared to those in homes making \$75,000 per year or more.

There were no statistically significant differences in CVD prevalence between Vermont and the U.S.

**Figure 3: Prevalence of Cardiovascular Disease by Demographics  
Vermont Adults, 2011**



For more information about cardiovascular disease prevention efforts in Vermont please visit [http://healthvermont.gov/prevent/ladies\\_first/women\\_hd.aspx](http://healthvermont.gov/prevent/ladies_first/women_hd.aspx) or contact Kimberly Swartz at [Kimberly.Swartz@state.vt.us](mailto:Kimberly.Swartz@state.vt.us).

For more information on the BRFSS or to suggest ideas for future BRFSS Data Briefs, contact Jessie Hammond, M.P.H. (802-863-7663; [Jessie.Hammond@state.vt.us](mailto:Jessie.Hammond@state.vt.us)).