Barre District Office

2016 Behavioral Risk Factor Surveillance System Data

Guidance • Support • Prevention • Protection

VDH – Public Health Statistics June 2018



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What is the Behavioral Risk Factor Surveillance System or BRFSS?

The Behavioral Risk Factor Surveillance System (BRFSS) is a telephone survey conducted annually among adults 18 and older. The Vermont BRFSS is conducted by the Vermont Department of Health (VDH) in collaboration with the Centers for Disease Control and Prevention (CDC). All U.S. states, Washington D.C. and several U.S. territories participate in the survey.

Typically between 6,000 and 7,000 Vermont adults are interviewed as part of the Vermont BRFSS each year. Vermont residents ages 18 and older are eligible for the survey. A Vermont resident is defined as someone living in the state for at least 30 days in a given calendar year. Adults living in institutions such as nursing homes, group homes, or prisons are not eligible for the survey.

The BRFSS survey includes questions on chronic disease prevalence (e.g. asthma diagnosis), risk behaviors (e.g. currently smoke), demographics (e.g. age, gender, race), health care access (e.g. have health insurance), and preventive behaviors and health screening (e.g. routine visits to a doctor or colorectal cancer screening).

Additional information can be found on the VDH and CDC websites:

- http://healthvermont.gov/research/brfss.aspx
- http://www.cdc.gov/brfss/

A report summarizing the 2016 statewide results from the Vermont BRFSS can also be found on the VDH website: http://www.healthvermont.gov/sites/default/files/documents/pdf/summary_brfss_2016.pdf.

Changes to BRFSS Methodology

In 2011, the CDC implemented changes to the BRFSS weighting methodology in order to more accurately represent the adult population. Population weights are now calculated using iterative proportional fitting (or "raking") methodology. This allows the weights to be calculated using smaller sample sizes, adjusts for more demographic variables, and incorporates cell phone interview data into estimates.

While these adjustments make the calculations more representative of the population, the changes in methodology also limit the ability to compare 2011 and subsequent results to previous years. VDH's Center for Health Statistics recommends that comparisons between 2011 BRFSS data and earlier years be made with caution. Statistical differences between 2011 and earlier years may be due to methodological changes, rather than changes in opinion or behavior.

Demographics of Barre District Office*

The next few pages describe the demographic makeup of Barre area adults in 2015-2016.

Half of Barre adults are female. Nearly seven in ten adult Barre residents are ages 25-64, with a quarter ages 65 and older.

• Barre adults report similar sex and age distributions to Vermont overall.

About four in ten (38%) Barre area adults has a college degree or higher.

 Barre adults are statistically more likely than Vermont adults overall to have a college degree or higher (38% vs. 33%).

More than half of Barre adults live in a home making \$50,000 or more annually, while one in five lives in a home making less than \$25,000 per year.

Barre adults report a similar annual household income distribution to Vermont adults overall.

Five percent of adults in the Barre area report being a person of color. This is statistically similar to the six percent reported among Vermont adults overall.



*See page 31 for a list of the towns included in the Barre Health District.

Demographics of Barre District Office

About two-thirds (65%) of Barre adult residents are currently employed, while about one in five (19%) is retired. Seven percent are a student or homemaker, and five percent or fewer are unable to work or unemployed.

Barre area adults have a similar employment distribution to Vermont adults overall.

More than half of Barre adults are married (56%). About one in six (17%) are never married or divorced. Seven percent or fewer are widowed or part of an unmarried couple.

Adults in the Barre area are statistically less likely to report being never married, compared with the overall Vermont adult population (17% vs. 22%)

Seven in ten adults in the Barre area said there are no children less than 18 in their home. Six percent reported having three or more children in the home.

• The number of children in the home reported by Barre area adults is similar to that for Vermont overall.



*Includes those who reported their marital status as divorced or separated.



Health Status Indicators

In 2015-2016, eleven percent of Barre area adults reported being in fair or poor general health. Similar proportions reported having poor physical (12%) and mental (11%) health.

• Poor mental and physical health are defined as 14 or more days of poor mental/physical health in the last month.

There are no statistically significant differences in health status, regardless of the measure, when comparing Barre area adults and Vermont adults overall.

Among adults in the Barre area, health status indicators have not changed statistically since 2011. See Appendix A for results over time.



Health Status Indicators

Rates of poor general health, poor physical health, and poor mental health among Barre adults do not differ statistically by gender.

Fair or poor health increases with increasing age.

Adults 65 and older are statistically more likely to be in fair or poor general health than those 18-44.

There are no statistical differences in poor physical or mental health by age.

Poor health, regardless of the indicator, among Barre area adults is highest among those with the lowest income.

- All differences in fair or poor general health by annual household income are statistically significant.
- Those in homes with annual incomes of less than \$25,000 annually are statistically more likely to have poor physical and mental health than those in homes with more income.



Healthcare Access Indicators

In 2015-2016, more than one in ten adults in the Barre area said they do not have a personal doctor for health care. Eight percent said they needed care in the last year but did not seek it due to the cost. Among Barre area adults ages 18-64, one in fourteen said they do not have health insurance.

When compared with Vermonters overall, Barre area adults have statistically similar rates of not having a personal doctor (11% vs. 12%), not seeing a doctor due to cost (both 8%), and not having a health plan (7% vs. 6%)

Additionally, among Barre area adults, health access indicators have not changed statistically since 2011. See Appendix A for results over time.



Healthcare Access Indicators

Barre males are statistically more likely than area females to not have a personal doctor.

• There are no statistically significant differences by gender in delaying care due to cost and having a health plan.

Poor health care access decreases with increasing age.

- Barre adults 18-44 are statistically more likely than those 65 and older to not have a personal doctor.
- Adults 18-64 in the Barre area are statistically more likely than those 65 and older to delay care due to cost.
- Differences in health care coverage by age are not statistically significant.

Adults in the Barre area who have higher annual household incomes are less likely to report poor healthcare access.

- Adults living in homes with the highest incomes, \$50,000 or more per year, are statistically less likely than those making less than \$25,000 annually to have poor healthcare access, regardless of the measure.
- Additionally, adults in homes making \$50,000 or more are statistically less likely than those with an income of \$25,000-\$49,999 to not have a health care plan



About one in three (29%) Barre adults have arthritis, and about a quarter of area adults have a depressive disorder or obesity. One in ten Barre adults reported ever being diagnosed with asthma, while eight percent each said they have cardiovascular disease (CVD) and diabetes. Seven percent or fewer reported non-skin cancer, skin cancer, and COPD.

Barre area and Vermont adults reported similar rates for all chronic conditions, regardless of the measure.

The prevalence of chronic conditions among Barre area adults have not changed statistically since 2011. See Appendix A for trend results.



Barre District Office: BRFSS Data, 2015-2016

Women in the Barre area are statistically more likely than men to have asthma (13% vs 6%).

• There are no statistically significant differences by gender in the prevalence of arthritis, obesity, and depressive disorders.

Arthritis prevalence among Barre adults increases with increasing age.

• All differences by age are statistically significant.

In contrast, diagnosis with a depressive disorder decreases with age.

 Barre area adults who are 65 and older are statistically less likely to have a depressive disorder than those 18-44.

There are no differences in obesity and asthma prevalence by age.

The prevalence of arthritis, depressive disorders, and asthma among Barre adults are highest among those with the lowest annual household incomes.

 Arthritis, depressive disorders, and asthma prevalence is statistically higher among those with an income of less than \$25,000 compared with those in homes making \$50,000 or more per year.

There are no statistically significant differences in the prevalence of obesity by annual household income level.



There are no statistically significant differences by gender in the prevalence of CVD, diabetes, or COPD among Barre adults.

CVD, diabetes and COPD prevalence among Barre area adults all increase as age increases.

- All differences by age are statistically significant for CVD and diabetes.
- Differences in COPD prevalence by age are not statistically significant.

Barre area adults living in homes with less income are more likely to have CVD, diabetes, and COPD.

- Those in homes making less than \$25,000 per year are statistically more likely than those in homes with incomes of at least \$50,000 per year to have CVD.
- Adults in homes making less than \$50,000 per year, are statistically more likely than those in homes with more income to have diabetes and COPD.



Among adults in the Barre area, women are statistically more likely than men to report a diagnosis of a non-skin cancer (10% vs. 4%).

• There are no differences in skin cancer prevalence by sex.

The prevalence of both skin cancer and non-skin cancers increase with increasing age.

• All differences by age are significant for those who reported ever having cancer, regardless of the type.

There are no statistical differences by annual household income level in the prevalence of non-skin cancer or skin cancer, among Barre adults.



In 2015-2016, about one in five (19%) adults in the Barre area binge drank in the last month, while one in ten (9%) heavily drank.

Binge drinking was defined as five or more drinks in one sitting for men and four or more drinks for women. Heavy
drinking was defined as more than two drinks per day for men and more than one for women.

Eighteen percent of Barre area adults did not participate in any leisure time physical activity. Fewer, 15% currently smoke. Of smokers, 60% said they tried to quit at least once in the last year (data not shown). Two percent of Barre area adults use smokeless tobacco.

Fifteen percent of adults in the Barre area also used marijuana in the 30 days. Less one in twenty (4%) wear their seatbelt seldom to never.

Barre area and Vermont adults had similar risk factor prevalence for all measures.

The prevalence of recent marijuana use among Barre area adults tripled from 2011-2012 to 2015-2016 (5% to 15%), a statistically significant increase. See Appendix A for results over time.



VDH – June 2018 Barre District Office: BRFSS Data, 2015-2016

There are no statistically significant differences by gender in smoking and not participating in leisure time physical activity, among Barre area adults.

Among adults in the Barre area, smoking rates decrease with increasing age.

 Adults 65 and older are statistically less likely to smoke than younger adults.

Conversely, not participating in physical activity increases with increasing age, however differences are not statistically significant.

Barre area adults in homes with more income are less likely to smoke and less likely to not participate in physical activity.

 Adults in homes making \$50,000 or more annually are statistically less likely to smoke or not participate in exercise than those in homes making less than \$25,000 per year.



About one quarter of men in the Barre area binge drank in the last month. This is statistically higher than the 14% reported among women.

• Heavy drinking does not differ statistically by gender.

Men are also statistically more likely to use marijuana than women (9% vs. 3%).

Binge drinking and marijuana use decreases with increasing age.

• All differences in binge drinking and marijuana use by age are statistically significant.

There are no significant differences in heavy drinking by age.

Binge drinking, heavy drinking and marijuana use do not vary statistically by annual household income level.



VDH – June 2018 Barre District Office: BRFSS Data, 2015-2016

Overall, one in twenty (4%) adults in the Barre area seldom or never wear a seatbelt when riding or driving in a car. This is statistically similar to the four percent of Vermont adults who reported the same.

Males are more than three times as likely as females to not use a seatbelt (7% vs. 2%). This is a statistically significant difference.

Adult non-use of seatbelts in the Barre area does not differ by age or annual household income level.



VDH – June 2018 Barre District Office: BRFSS Data, 2015-2016

In 2013/2015, about a quarter (23%) of Barre area adults ate fruits and vegetables five or more times per day. Roughly a third (35%) ate two or more fruits and two in ten reported eating three or more vegetables.

Barre area adult consumption of fruits and vegetables is statistically similar to that among Vermont adults overall.

Fruit and vegetable consumption, among Barre area adults, did not change statistically from 2011/2013 to 2013/2015. See Appendix A for trend results.



Women in the Barre area eat more fruits and vegetables than men.

- Nearly three in ten (28%) women eat five or more fruit and vegetables per day. This is statistically higher than the 18% reported by men.
- Women are also statistically more likely than men two or more fruits a day (42% vs. 29%).
- There is no statistical difference by gender in vegetable consumption.

There are no differences in fruit and vegetable consumption by age.

Fruit and vegetable consumption increases as annual household income level increases.

- Adults in homes making \$50,000 or more are statistically more likely than those in homes making less than \$25,000 per year to eat 5 or more fruits and vegetables per day.
- No other differences are statistically significant.



Note: Fruit and vegetable data, except that by age, are age adjusted to the U.S. 2000 standard population.

In 2013/2015, about six in ten (61%) Barre area adults reported met physical activity recommendations*. This is similar to the 59% reported among Vermont adults.

There are no differences in meeting physical activity recommendations by gender and age.

Among Barre area adults, meeting physical activity recommendations increases with increasing annual household income. Those in home making at least \$50,000 annually are statistically more likely than those in homes making less than \$25,000 to meet physical activity recommendations.

Meeting physical activity recommendations did not change statistically from 2011/2013 to 2013/2015. See Appendix A for trend results.



Met Physical Activity Recommendations, Overall and by Sub-groups Barre Adults

*For adults, the CDC currently recommends they participate in 150 minutes of moderate physical activity or 75 minutes of vigorous activity per week. Strength building activities are recommended at least two times per week. For more information see: www.cdc.gov/physicalactivity/everyone/guidelines/index.html. Note: Met physical activity recommendation data, except that by age, are age adjusted to the U.S. 2000 population.

VDH – June 2018 Barre District Office: BRFSS Data, 2013, 2015

Seven in ten (70%) Barre area adults saw their doctor for a routine visit in the previous year, the same as among all Vermont adults.

Eight in ten (80%) Barre area adults ages 65 and older have received a pneumococcal vaccine. Two-thirds (64%) reported having a flu shot in the last year.

• Vermont adults, ages 65 and older get pneumococcal and flu shot vaccines at similar rates to Barre adults, 77% and 59%, respectively.

Routine doctor visits and receipt of vaccinations among Barre area adults have not changed since 2011. See Appendix A for results over time.



Among Barre area adults, women are statistically more likely to have had a routine doctor visit, compared with men (78% vs. 62%).

There are no significant differences by gender for receipt of an annual flu vaccine nor a pneumococcal vaccine.

Routine visits to the doctor in the last year increase with age.

• Adults 65 and older are statistically more likely to have had a routine doctor visit than those in younger age groups.

There are no differences, among Barre area adults, in the occurrence of routine doctor visits, pneumococcal or flu shot vaccinations by annual household income level.



Oral Health

Barre area adults saw a dentist for any reason in the last year at a statistically similar rate to Vermont adults overall (74% vs. 71%). Adults 45-64 have had a tooth removed at the same rate (49%) as VT adults overall.

Reported routine dental visits and teeth extractions did not change statistically from 2012/2014 to 2014/2016. See Appendix A for trend results.



Barre District Office: BRFSS Data, 2014, 2016

<u>Oral Health</u>

Among Barre area adults, females are statistically more likely than males to have seen their dentist in the last year (79% vs. 68%).

There are no statistically significant differences by gender in teeth removed or extracted, among Barre adults 45-64.

There are no differences in routine dental visits by age.

Barre area adults living in homes with more income are more likely than those with less income to routinely see their dentist. They are less likely to have had teeth removed.

- All difference by annual household income are statistically significant for routine dental visits.
- Similarly, those in homes making at least \$50,000 are statistically less likely to have had teeth removed, compared with those in homes with less income.



HIV Screening

In 2015-2016, more than a third (38%) of Barre area adults had ever been tested for HIV. This is similar to the 37% reported among Vermont adults overall.

Men and women in the Barre area experience HIV testing at similar rates.

Ever having an HIV test decreases with increasing age. In other words, as adults age they are less likely to have had an HIV test.

• Adults 18-44 are statistically more likely than those 65 and older to have ever been tested for HIV.

There are no differences in HIV testing by annual household income level, among Barre area adults.

HIV testing among Barre adults is trending up, increasing from 31% in 2011-2012 to 38% in 2015-2016. However, the difference between the 2011-2012 and 2015-2016 is not statistically significant. See Appendix A for results over time.



Cancer Screening

In 2014/2016, eight in ten (79%) women ages 50-74 in the Barre area met breast cancer screening recommendations. This is the same as among all Vermont women in this age group.

• The breast cancer screening recommendation is a mammogram every two years.

Eighty-nine percent of women 21 to 65 who live in the Barre area received a PAP test in the last three years. This is statistically similar to the 86% among Vermont women of the same age.

 Cervical cancer screening recommendations are for a PAP test every three years, and excludes women who have had a hysterectomy.

Among adults 50 to 75 living in the Barre area, three-quarters met colorectal cancer screening recommendations. This is similar to the 72% among by all Vermonters of the same age.

• Recommendations for screening for colorectal cancer are: a fecal occult blood test (FOBT) annually OR sigmoidoscopy every five years and FOBT every three years OR colonoscopy ever ten years.

Receipt of mammograms among women 50-74, and of colorectal cancer screening among adults 50-75 did not change statistically from 2012/2014 to 2014/2016. Changes in cervical cancer screening could not be measured due to a difference in how hysterectomies were asked about in 2016 and earlier years.



Cancer Screening

Among Barre area adults ages 50-75, receipt of colorectal cancer screening is similar for men and women.

Barre area adults in homes with more income are more likely to receive recommended cancer screenings.

- Those in homes making \$50,000 or more annually are statistically more likely than those in homes making less than \$25,000 to meet breast and colorectal cancer screening recommendations.
- There are no statistical differences in receipt of cervical cancer screening by annual household income levels.



VDH – June 2018 Barre District Office: BRFSS Data, Breast and Colorectal Cancer Screening - 2014, 2016; Cervical Cancer – 2012, 2014

Appendix A: Barre District Office Trend Results (2011-2016)

Health Status Indicators	2011- 2012	2012- 2013	2013- 2014	2014- 2015	2015- 2016	Significant Change Since 2011
Fair or Poor General Health	11%	12%	12%	11%	11%	No
Poor Physical Health	10%	10%	10%	11%	12%	No
Poor Mental Health	10%	10%	10%	11%	11%	No
Health Access Indicators	2011- 2012	2012- 2013	2013- 2014	2014- 2015	2015- 2016	Significant Change Since 2011
No Personal Doctor	8%	9%	11%	11%	11%	No
No Doctor Because of Cost	7%	9%	8%	8%	8%	No
No Health Plan (ages 18-64)	10%	10%	10%	9%	7%	No
Chronic Conditions	2011- 2012	2012- 2013	2013- 2014	2014- 2015	2015- 2016	Significant Change Since 2011
Arthritis	26%	29%	31%	29%	29%	No
Depression	24%	25%	24%	25%	26%	No
Obesity	22%	23%	24%	26%	25%	No
Asthma	9%	11%	11%	10%	10%	No
Diabetes	8%	9%	9%	8%	8%	No
Non-Skin Cancer	7%	7%	8%	8%	7%	No
Cardiovascular Disease (CVD)	9%	9%	9%	8%	8%	No
Skin Cancer	6%	6%	5%	6%	7%	No
Chronic Obstructive Pulmonary Disease (COPD)	5%	6%	6%	7%	6%	No

Appendix A: Barre District Office Trend Results (2011-2016)

Risk Behaviors	2011- 2012	2012- 2013	2013- 2014	2014- 2015	2015- 2016	Significant Change Since 2011
Cigarette Smoking	17%	15%	18%	17%	15%	No
Binge Drinking	16%	17%	17%	16%	19%	No
Heavy Drinking	9%	8%	8%	8%	9%	No
No Exercise	17%	14%	17%	19%	18%	No
Seldom or Never use Seatbelt	5%	5%	5%	4%	4%	No
	2011- 2012	2012- 2013	2013, 2015	2015- 2016		Significant Change Since 2011
Recent Marijuana Use	5%	6%	10%	15%		Yes
Preventive Behaviors	2011- 2012	2012- 2013	2013- 2014	2014- 2015	2015- 2016	Significant Change Since 2011
Routine Doctor Visit, in Last year	70%	68%	68%	69%	70%	No
Pneumococcal Vaccine, Ever, Ages 65+	71%	72%	74%	76%	80%	No
Flu Shot in the Last Year, Ages 65+	62%	65%	67%	67%	64%	No
Ever Tested for HIV	31%	30%	33%	35%	38%	No*

*Testing for HIV among Barre adults has a statistically significant upward trend, however, the change from 2011-2012 to 2015-2016 is not statistically different.

Appendix A: Barre District Office Trend Results (2011-2016)

Preventive Behaviors (cont).	2011, 2013	2013, 2015	Significant Change Since 2011
Meet Physical Activity Recommendations	59%	62%	No
Eat 2+ Fruits Per Day	38%	35%	No
Eat 3+ Vegetables Per Day	21%	20%	No
Eat 5+ Fruits & Vegetables Per Day	25%	23%	No
	2012, 2014	2014, 2016	Significant Change Since 2011
Routine Dental Visit, Last Year	74%	74%	No
Teeth Removed , Ages 45-64	45%	45%	No
Mammogram, Last 2 Years, Women 50-74	79%	79%	No
Meet Colorectal Cancer Screen Recommendations, Adults 50-75	74%	75%	No
PAP Test, Last 3 Years, Women 21-65	89%		

Contact the BRFSS Coordinator for additional information or for BRFSS data

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Additional sub-state level data can be found on the Vermont Department of Health website

http://healthvermont.gov/hv2020/index.aspx

Towns included in the Barre Health District are: Braintree, Brookfield, Orange, Washington, Williamstown, Barre City, Barre Town, Berlin, Cabot, Calais, Duxbury, East Montpelier, Fayston, Marshfield, Middlesex, Montpelier, Moretown, Northfield, Plainfield, Roxbury, Waitsfield, Warren, Waterbury, and Worcester.