WEST VIRGINIA BEHAVIORAL RISK FACTOR SURVEILLANCE SYSTEM REPORT 2013

WEST VIRGINIA Department of Health & Human Resources
BUREAU FOR PUBLIC HEALTH

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WEST VIRGINIA

BEHAVIORAL RISK FACTOR

SURVEILLANCE SYSTEM REPORT

2013

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EXECUTIVE SUMMARY

INTRODUCTION

Each year since 1984, the West Virginia Behavioral Risk Factor Surveillance System has measured a range of risk factors that can affect our health. This report presents state survey results for the year 2013 as well as county data combined for the latest available five years (2009 through 2013).

The survey is conducted by telephone and represents a collaborative effort between the West Virginia Health Statistics Center (WVHSC) and the Centers for Disease Control and Prevention (CDC) in Atlanta. Standardized survey methods are provided by the CDC. All 50 states, the District of Columbia, and several U.S. territories now participate in the system, known as the Behavioral Risk Factor Surveillance System (BRFSS).

The information in this document serves as a resource for governments, business leaders, schools, and community groups, all of which are helping to shape the health of West Virginia.

HIGHLIGHTS OF FINDINGS

Health Status

- West Virginia ranked 2nd highest nationally in the prevalence of general health of adults as either fair or poor.
- Over one-fourth of West Virginia adults (25.7%) considered their health to be either fair or poor.
- Fair/poor health was most common among groups of adults aged 65 and older, those with less than a high school education and those who have an annual household income of less than $15,000.
- The prevalence of fair/poor health was highest in the southern counties.
- Approximately 17.5% reported poor physical health for at least 14 days in the past 30 days and 15.0% reported poor mental health at least 14 days in the past 30 days.
- The prevalence of reporting poor mental health in the past 14 days was significantly higher in West Virginia (15.0%) than the national prevalence (11.5%).

Health Care Access

- Nearly one-fourth of West Virginia adults (18 to 64) have no health care coverage (23.7%).
- Among adults of all ages, slightly less than one-fifth needed medical care within the past 12 months and could not afford it (18.4%).
- More than one-fifth of all adults also do not have a personal doctor or health care provider (23.3%).
- Over one-fourth of West Virginia adults did not have a routine checkup in the past year (25.6%).
- Nearly one-fifth (18.7%) have delayed getting needed medical care in the past 12 months.
- The prevalence of not taking prescribed medications because of cost was 13.7% for West Virginians.
- More than half of West Virginians (56.3%) reported they were “very satisfied” with health care they receive.
- Nearly one-third of West Virginians reported that they had medical bills they were currently paying off over time (30.8%).

Physical Activity

- Almost one-third of West Virginia adults (31.4%) participate in no leisure-time physical

activity or exercise which ranked West Virginia 9th highest in the nation.
- The prevalence of physical inactivity was highest in Lincoln, Logan, McDowell, Mingo, and Wyoming counties.
- More than half (52.8%) of West Virginians had less than the recommended 150 minutes of aerobic activity per week.
- Only 12.7% of West Virginians met both the aerobic and muscle strengthening physical activity guidelines, while nearly half (46.2%) did not meet either aerobic or muscle strengthening guidelines.

Nutrition

- Nine out of every 10 adults (90.2%) in West Virginia consume fewer than five servings of fruits and vegetables daily which ranked West Virginia the 3rd highest in the nation.
- The highest prevalence of consuming fewer than five servings of fruits and vegetables daily was found among those with less education and lower income.
- More than a third of West Virginia adults consume sugar-sweetened beverages daily (40.1%).
- The highest prevalence of sugar-sweetened beverage consumption was found among those 18-24 (60.2%).
- Nearly half of West Virginia adults (46.4%) are watching or reducing sodium or salt intake and approximately one-fourth have been advised by a health care professional to do so (24.7%).

Weight Status

- The prevalence of obesity in West Virginia was 35.1%, highest in the nation.
- The prevalence of obesity was significantly higher in Lincoln, Logan and Wirt counties than in the rest of the State.
- Approximately two-thirds (68.8%) of West Virginia adults were either overweight or obese, 3rd highest in the U.S.
- Only 21.6% of all adults had been advised by a health care professional to lose weight.

Tobacco Use

- More than one-fourth of adults (27.3%) currently smoke cigarettes every day or some days which ranked West Virginia the highest nationally.
- The prevalence of cigarette smoking was significantly higher among Multiracial, Non-Hispanics than among White, Non-Hispanics.
- Approximately 55.1% of current smokers had tried to quit smoking in the past year which was the 7th lowest in the nation.
- West Virginia ranked the highest in the nation in smokeless tobacco use (9.4%).

Inadequate Sleep

- Approximately 40.0% of West Virginians reported getting less than 7 hours of sleep in a 24-hour period.
- The highest prevalence of inadequate sleep occurred in those aged 35-44, those with less than a high school education and those with an income less than $15,000.

Hypertension

- Over 40% of West Virginia adults have been told by a health care professional that they have hypertension which ranked second highest nationally.
- More than three-fourths (80.6%) of those with hypertension are taking medication for it.
- The prevalence of hypertension was significantly higher in Mingo, Putnam, Taylor and Wayne counties than in the rest of the State.

Cholesterol

- Approximately eight out of 10 adults (82.4%) have ever had their cholesterol checked.

- More than three-fourths (78.7%) had their cholesterol checked in the past five years.
- More than 40% of West Virginia adults who had their cholesterol checked were told they have high cholesterol.
- The prevalence of high cholesterol was highest among those with less than a high school education (53.5%) and annual household income of less than $15,000 (53.5%).

Alcohol Consumption

- The prevalence of binge drinking among West Virginia adults was 11.2%, the third lowest in the nation.
- The prevalence of binge drinking was highest in Monongalia and Ohio counties.
- The West Virginia heavy drinking prevalence was 3.9% which was the second lowest in the nation.
- In West Virginia, 66.0% of adults did not drink at all in the past month, compared with 47.4% nationally which ranked the State the 3rd highest.

Seat Belt Use

- Approximately 83.3% of West Virginia adults always wear a seat belt when they drive or ride in a car.
- Women had a significantly higher prevalence of seat belt use than men.

Immunization

- About half of all adults (54.3%) and 26.1% of seniors did not have a flu immunization in the past 12 months.
- About 68.4% of all adults and 30.5% of seniors never had a pneumonia vaccination.

Cardiovascular Disease

- West Virginia ranked the highest in the nation in the prevalence of heart attack among adults at 7.8%.
- West Virginia ranked second highest in the prevalence of angina or coronary heart disease among adults (7.5%).
- For the prevalence of stroke among adults, West Virginia ranked 7th highest nationally (3.9%).
- The overall cardiovascular disease prevalence was highest in the nation at 13.7%.
- The prevalence of cardiovascular disease was highest among those with less than a high school education (23.9%) and annual household income less than $15,000 (21.3%).
- The prevalence of cardiovascular disease was significantly higher in Boone, Logan, McDowell and Raleigh counties than the State as a whole.
- Over one-fourth of adults in West Virginia had been advised by a health care provider to take aspirin to reduce the chance of heart attack or stroke (30.4%).

Diabetes

- Approximately 8.6% of West Virginia adults had borderline or pre-diabetes.
- More than 1 in 10 West Virginia adults had diabetes (13.0%) which ranked West Virginia the fourth highest nationally.
- The prevalence of diabetes was highest among those aged 65 and older, those with less than a high school education, and those with an annual household income of less than $15,000.
- Among those with diabetes, 80.4% had 2 or more doctor visits in the past year, 66.3% check their glucose daily, and 48.3% have taken a diabetes education class.
- Among those with diabetes, 18.3% have retinopathy or diabetes associated eye problems.
- The prevalence of diabetes was significantly higher in Grant, Logan, McDowell and Wyoming counties than it was in the rest of the state.

Cancer

- Approximately 6.8% of West Virginia adults had skin cancer and 7.3% had some other type of cancer.
- About 1 in 8 West Virginia adults are cancer survivors (13.0%) which ranked West Virginia the 10th highest for overall cancer prevalence.
- Cancer prevalence was significantly higher among females than males.
- Over one-fourth of West Virginia seniors had cancer during their lifetime (30.4%).

Respiratory Diseases

- Approximately 13.6% of West Virginia adults have ever been diagnosed with asthma and 9.0% of West Virginia adults currently had asthma.
- Women had significantly higher prevalence of both lifetime and current asthma than men.
- The prevalence of both lifetime asthma and current asthma was highest among those without a high school diploma and those with an annual household income of less than $15,000.
- The prevalence of chronic obstructive pulmonary disease or COPD in West Virginia was 10.6%, the 2nd highest in the nation.
- The prevalence of COPD was highest among adults aged 65 and older, those without a high school diploma and those with an annual household income of less than $15,000.

Arthritis

- More than 1 in 3 West Virginia adults had arthritis (36.2%) which ranked West Virginia highest in the nation.
- The prevalence of arthritis was significantly higher among women than men.
- Arthritis prevalence was highest among those with less than a high school education and those with an annual household income of less than $15,000.
- The prevalence of arthritis was highest in Logan, Marshall, McDowell, Mingo, Nicholas and Wyoming counties.
- Over half of West Virginians with arthritis reported being limited due to arthritis (55.2%) which ranked West Virginia 6th highest in the nation.
- Over a third of West Virginians with arthritis reported that arthritis affected work (38.9%) which ranked West Virginia 12th highest in the nation.
- Approximately a quarter of West Virginians with arthritis reported that arthritis affected social activities (25.2%) which ranked West Virginia 8th highest in the nation.

Disability

- Over one-fourth of West Virginia adults were disabled because of a physical, mental, or emotional problem (27.6%), which was the highest nationwide.
- Nearly half of adults with an annual household income of less than $15,000 were disabled (49.8%).
- The prevalence of disability was highest in the southern counties.
- About 11.7% of West Virginia adults use special equipment such as a cane, a wheelchair, a special bed, or a special telephone, which ranks West Virginia the highest in the nation.
- Among those who are disabled, 33.9% use special equipment.
- The prevalence of difficulty concentrating, remembering or making decisions was 15.0% among West Virginians, compared to 10.7% nationally.
- Over one-fifth of West Virginians had serious difficulty walking or climbing stairs (21.4%).
- Approximately 5.5% of West Virginia adults had difficulty bathing or dressing.
- The prevalence of having difficulty doing errands alone among West Virginians was 11.1%, significantly higher than the national prevalence of 6.8%.

Kidney Disease

- The prevalence of kidney disease in West Virginia was 3.3% and was the 7th highest in the nation.

- Kidney disease prevalence was highest among seniors, those with low educational attainment and those with low income.

Visual Impairment

- Approximately 6.9% of West Virginia adults had vision impairment which is defined as vision problems in one or both eyes even when wearing glasses.
- The prevalence of vision impairment was highest among those with low educational attainment and those with low annual household income.

Depression

- About 22.0% of West Virginia adults had depression which was significantly higher than the U.S. prevalence of 17.7%.
- The prevalence of depression was significantly higher among women than men.
- The prevalence of depression was highest among those with less than a high school education and with an income less than $15,000.

HIV

- Nearly one-third of adults in West Virginia have been tested for HIV (32.7%).
- The prevalence of HIV testing was significantly higher among Black, Non-Hispanics than among White, Non-Hispanics.
- The prevalence of HIV testing was significantly higher among those aged 25-44 than all other age groups.
- The prevalence of HIV testing was highest among those with some post high school education and with an income less than $15,000.

Comorbidities

- Almost 1 in 5 West Virginia adults (18.2%) were both disabled and had arthritis.
- About 16.4% of adults experienced fair/poor health and were disabled.
- Approximately 14.7% of adults had arthritis and did not exercise.
- About 1 in 8 West Virginia adults (12.6%) were obese and did not exercise.
- Approximately 8.9% of adults were current smokers and had no health care coverage.
- About 7.8% of West Virginia adults were obese and had diabetes.
- Approximately 4.5% of West Virginia adults had both cardiovascular disease and diabetes.

ESTIMATED NUMBER OF PERSONS WITH DISEASE OR RISK FACTOR

Table ES.1 below shows selected risk factor rates and the corresponding numbers of West Virginians who are estimated to have the risk factor or disease. Data are shown for the latest available year.

Table ES.1 Percentage and Number of Persons Estimated with Disease or Risk Factor (Among Adults Aged 18 and Older or Appropriate Subset): WVBRFSS 2013

Risk Factor/Chronic Disease/Health-Related Factor	Percentage Prevalence Estimate (%)	Estimated Number of Adults
General health is fair or poor	25.7	378,393
No health care coverage (ages 18-64)	23.7	270,933
Unable to afford needed medical care	18.4	270,547
No personal doctor or health care provider	23.3	343,734
No routine medical checkup in past year	25.6	373,455
No leisure-time exercise	31.4	452,580
Eating less than five servings of fruits and vegetables	90.2	1,223,797
Daily consumption of sugar-sweetened beverages	40.1	563,374
Reduced sodium intake	46.4	654,030
Overweight (BMI 25.0-29.9)	33.7	475,488
Obesity (BMI 30.0+)	35.1	496,332
Overweight or Obese (BMI 25.0+)	68.8	971,819
Current cigarette smoking	27.3	398,837
Smokeless tobacco use	9.4	138,199
Hypertension	41.0	602,044
High Cholesterol	42.9	503,183
Binge drinking	11.2	161,024
Heavy drinking	3.9	55,401
No flu vaccination in past year	54.3	778,892
Never had a pneumonia vaccination (ages 65 and older)	30.5	94,656
Have had a heart attack	7.8	114,371
Have had a stroke	3.9	58,051
Have any form of cardiovascular disease	13.7	200,330
Diabetes	13.0	192,017
Cancer	13.0	191,478
Current asthma	9.0	131,424
Chronic Obstructive Pulmonary Disease (COPD)	10.6	155,378
Arthritis	36.2	530,376
Disability	27.6	405,141
Kidney disease	3.3	48,746
Vision impairment	6.9	101,323
Depression	22.0	322,930

DEFINITIONS OF COMMON TERMS

Risk Factor

A risk factor is a health-related behavior or practice that has been shown to increase the probability of developing a condition or disease. This report presents West Virginia prevalence estimates for selected risk factors.

Prevalence

Prevalence is the percentage of the population having a particular condition or characteristic or practicing a certain health-related behavior. This report presents the results of the Behavioral Risk Factor Surveillance System (BRFSS) in West Virginia as a series of prevalence estimates for selected risk factors. Prevalence can also be calculated as a rate or frequency.

Confidence Intervals

Confidence intervals (CIs) reflect sampling error. They are presented as upper and lower boundary values surrounding the prevalence estimate; the true value of the estimate can be expected to fall within this range with a confidence of 95%.

Significant

Significant is the term used to describe prevalence estimates that have been tested and found to be statistically different. In this report, a difference is said to be significant when the 95% confidence intervals (CIs) associated with each of the prevalence estimates do not overlap. In other words, it can be stated with 95% certainty that the difference found between the two prevalence estimates is not a random occurrence. Identifying differences as significant can detect changes in prevalence over time and direct attention to characteristics associated with a particular health condition or risk behavior. In this report, adjectives such as slight, minor, and little may be used to describe less reliable differences, those for which the confidence intervals do overlap. See Methodology on page 5 for additional discussion.

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INTRODUCTION

Personal health practices have been shown to be important determinants of overall health. Unhealthy behaviors such as smoking, overeating, or lack of exercise can lead to the chronic diseases that cause more than 50% of all deaths in the United States. Other practices, such as getting vaccinated or wearing seatbelts, have a positive effect by preventing disease and unintentional injury. It is clear that the adoption of healthier lifestyles can reduce the suffering, disability, and economic burden imposed by illness and extend life expectancy in West Virginia and the nation.

The Behavioral Risk Factor Surveillance System (BRFSS) was established by the U.S. Centers for Disease Control and Prevention (CDC) based in Atlanta in order to permit states to determine the prevalence of certain health risk factors and health conditions among their adult populations. West Virginia, through the West Virginia Bureau for Public Health (WVBPH) of the West Virginia Department of Health and Human Resources, became 1 of the 15 initial participants in 1984. Since then, the system has expanded to include all 50 states, the District of Columbia, Guam, Puerto Rico, and the Virgin Islands.

The technique of interviewing a random sample of state residents by telephone offers quality control advantages and is a faster, more cost-effective way of obtaining this information than in-person interviews. Over time, trends that occur in risk factors can be monitored. Participation in the BRFSS has the additional benefit of permitting states to compare their data to each other and to the nation with estimates derived using the same methodologies. The data can be used by public health professionals and researchers to identify high-risk groups, establish health policy and priorities, and monitor the impact of health promotion efforts.

Twenty-three reports have been published by the WVBPH presenting survey results of the State's participation in the BRFSS since 1984. This report focuses on the 2013 risk factor prevalence estimates and compares them to the years 1984 through 2012. Table I.1 on the following page shows topics that have been included in the last 10 years of surveillance, many of which are examined in the present report.

WHAT'S NEW FOR 2013

In 2013, the health care access module was included in the questionnaire. Topics such as delayed needed medical care, not taking prescribed medication because of cost, health care satisfaction, and paying off medical bills over time were added to the health care access chapter of this report. Additionally, there were questions added to the demographics section of the core questionnaire that included questions about various daily living activities such as: difficulty walking, dressing and bathing, and running errands alone, which were added to the disability chapter of this report.

This is the first year that cancer prevalence has been analyzed at the county level. Due to the small population in many West Virginia counties, five years of data were needed to obtain reliable estimates on cancer prevalence. These results have been included as part of the Behavioral Risk Factor and Health Conditions by County in Appendix B.

Table I.1 Topics Administered in the Survey: WVBRFSS, 2004-2013

Topic	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Seatbelt use			X		X		X	X	X	X
Hypertension		X		X		X		X		X
Cholesterol		X		X		X		X		X
Leisure-time physical activity	X	X	X	X	X	X	X	X	X	X
Obesity	X	X	X	X	X	X	X	X	X	X
Cigarette use	X	X	X	X	X	X	X	X	X	X
Smokeless tobacco use	X				X		X	X	X	X
Alcohol consumption	X	X	X	X	X	X	X	X	X	X
Weight control						X		X		
Fruits & vegetables		X		X		X		X		X
Diabetes	X	X	X	X	X	X	X	X	X	X
Routine checkup		X	X	X	X	X	X	X	X	X
Breast cancer screening	X		X		X		X		X	
Cervical cancer screening	X		X		X		X		X	
Prostate cancer screening	X		X		X		X		X	
Excess sun exposure	X									
AIDS/HIV	X	X	X	X	X	X	X	X	X	X
Cancer survivors						X	X	X	X	X
Immunization	X	X	X	X	X	X	X	X	X	X
Health insurance	X	X	X	X	X	X	X	X	X	X
Health status	X	X	X	X	X	X	X	X	X	X
Colorectal cancer screening	X		X		X		X		X	
Oral health	X		X		X		X		X	
Emotional support/ Life satisfaction		X	X	X	X	X	X			
Asthma	X	X	X	X	X	X	X	X	X	X
Sleep						X	X			X
Disability	X	X	X	X	X	X	X	X	X	X
Cardiovascular disease	X	X	X	X	X	X	X	X	X	X
Veteran status	X	X	X	X	X	X	X	X	X	X
Osteoporosis	X				X				X	
Arthritis	X	X		X		X	X	X	X	X
Intimate partner violence			X	X						
Sexual violence					X					
Falls			X		X		X		X	
Drinking and driving			X		X		X		X	
HPV vaccine					X		X		X	

METHODOLOGY

The survey is conducted by the method known as Computer Assisted Telephone Interviewing (CATI) and represents a collaborative effort between the WVHSC and CDC. The WVHSC provides telephones, office space, interviewers, and supervision of the data collection. Financial assistance, a standardized set of core questions and survey protocols, computer-assisted telephone interviewing software, data processing services, and analytic consultation are provided by the CDC.

A prepared introductory statement and the core questions were developed and tested in the field by the CDC. The interviews take approximately 15-20 minutes. In addition to behavioral risk factors and certain health conditions, they cover standard demographic characteristics and selected preventive health practices. A very limited number of questions of topical interest may be added by individual states to the survey.

Phone calls and interviews are conducted by the WVHSC for approximately a two- to three-week period each month. The monthly interview schedule reduces the possibility of bias because of seasonal variations in certain lifestyles. To assure maximum response rates, calls are made weekdays from noon to 9:00 p.m., Saturdays from 10:00 a.m. to 7:00 p.m., and Sundays from 2:00 p.m. to 6:00 p.m.

SAMPLE SELECTION

The sample was selected by random digit dialing (RDD). Telephone directories are not relied upon since they do not include unlisted or new numbers. From 1984 through 1998, sampling was conducted in a multistage cluster design based on the Mitofsky-Waksberg Sampling Method for Random Digit Dialing. Since 1999, the sampling method known as Disproportionate Stratified Sampling (DSS) has been used. Both methods eliminate many unassigned and business phone numbers from the selection process.

According to 2011 state-level estimates from the National Health Interview Survey, 97.5% of West Virginia households have telephones, with 59.6% of households having landline telephones. In addition, a growing number of adults (25.7%) live in wireless-only households. In order to better represent these latter residents, the 2013 West Virginia dataset includes data from interviews conducted by cell phone. The addition of cell phone only households improves coverage of certain population groups including the young and those with lower socioeconomic status. CDC provides banks of telephone numbers (landline and cell phone) that are presumed to contain household numbers. Calls were made until each number resulted in a completed interview or a refusal or was disqualified. A number was disqualified if it was nonresidential or nonworking, if there was no eligible respondent available during the survey, if the selected respondent was unable to communicate, or if the number had been called at least 15 times without success (encompassing a minimum of three attempts each during afternoons, evenings, and weekends). Within each household, the actual respondent was chosen randomly to avoid possible biases related to the time of day and household telephone answering preferences. Since the number of adult residents and the number of telephone lines may differ from household to household, resulting in different probabilities of being selected, data were weighted to compensate for this bias.

DEMOGRAPHIC CHARACTERISTICS OF THE WV BRFSS SAMPLE

The demographic characteristics of the samples in 2013, both unweighted and weighted to the West Virginia population, are presented in Table M.1. Data were weighted according to the process described later in this chapter in order to more accurately estimate the actual prevalence of behavioral risk factors in the adult population of West Virginia.

Table M.1 Demographic Summary: WVBRFSS, 2013

Demographic characteristic	Number of Interviews	Percent of Unweighted Sample	Percent of Weighted Sample
Total	**5,899**	**100.0**	**100.0**
Sex			
Male	2,461	41.7	48.9
Female	3,438	58.3	51.1
Race/Ethnicity			
White, Non-Hispanic	5,520	94.1	93.1
Black, Non-Hispanic	120	2.0	3.4
Other, Non-Hispanic	46	0.8	0.9
Multiracial, Non-Hispanic	124	2.1	1.0
Hispanic	57	1.0	1.6
Age			
18-24	305	5.2	11.9
25-34	583	10.0	14.7
35-44	786	13.4	15.4
45-54	1,033	17.7	17.5
55-64	1,366	23.3	18.5
65+	1,781	30.4	22.0
Education			
< High School (HS)	749	12.7	16.9
HS or GED	2,278	38.7	40.0
Some College	1,413	24.0	26.6
College Degree	1,443	24.5	16.4
Household Income			
<$15,000	797	16.1	15.3
$15,000-$24,999	1,055	21.3	21.7
$25,000-$34,999	643	13.0	12.3
$35,000-$49,999	700	14.1	14.8
$50,000-$74,999	740	14.9	15.0
$75,000+	1,026	20.7	20.8
Marital Status			
Married	3,082	52.4	53.5
Divorced	964	16.4	12.4
Widowed	843	14.3	9.2
Separated	125	2.1	2.2
Never Married	732	12.4	19.0
Unmarried Couple	140	2.4	3.8
Employment Status			
Employed for wages	2364	40.2	44.6
Self-Employed	294	5.0	5.3
Unemployed (>1 year)	140	2.4	3.0
Unemployed (<1 year)	142	2.4	3.6
Homemaker	483	8.2	8.0
Student	117	2.0	3.4
Retired	1,574	26.7	19.9
Unable to Work	774	13.2	12.3

LIMITATIONS

The target population consists of civilian, non-institutionalized persons 18 years of age and older who reside in households with telephones, including those with landlines and/or cell phones. Some questions in the questionnaire also pertain to children who live in such households. State residents who do not fit the target population are not represented in prevalence estimates.

Self-reported behavior obtained by telephone must be interpreted with caution. The validity of survey results depends on the accuracy of the responses given by the persons interviewed. This may be affected by the ability to recall past behavior. For example, individuals may not accurately recall fruit and vegetable intake or exercise levels. In addition, respondents may have a tendency to understate behaviors known to be unhealthy, socially unacceptable, or illegal. For example, a person may not accurately report their weight. These biases may vary depending on the specific risk factor.

Other sources of bias may result from greater difficulty in contacting some persons, from higher refusal rates, or from lower telephone coverage (including either landlines or cell phones). Given the possibility that persons not interviewed for these reasons may behave differently from the general population, estimates for the population based on the survey sample may be biased. Weighting of the data is conducted in order to correct for over- or underrepresentation of these groups.

Finally, breaking down the data into smaller categories decreases the sample size of the individual strata, thereby decreasing the power to determine statistically significant differences. Prevalence rates based on denominators of fewer than 50 responses are considered statistically unreliable.

ESTIMATES, CONFIDENCE INTERVALS, SIGNIFICANCE, AND RELIABILITY

The prevalence rates presented in this report are derived from surveying a sample of adults rather than all adults in the population; therefore, the rates are estimates of the true values. For this reason, estimates are presented together with their associated confidence intervals (CIs). A confidence interval is a range of values around an estimate, which reflects sampling error and represents the uncertainty of the estimate. This report presents 95% confidence intervals (95% CI)[1]. Therefore, one can be 95% confident that the confidence interval contains the true value that is being estimated.

Significant is the term used in this report to describe when prevalence estimates have been tested and found to be significantly different from each other. Statistically significant differences between estimates are traditionally determined using statistical tests such as a t-test or chi-square test. However, this report uses the following more conservative method for determining significance. Two prevalence estimates are said to be "significantly" different when the 95% confidence intervals associated with each of the estimates do not overlap.

Reliability refers to the precision of an estimate. If an estimate is termed reliable, there is confidence that the same, or a very similar, estimate would be obtained if the survey were to be repeated within the same time period. Estimates that are determined to be unreliable may not reflect the true prevalence and should be reported and interpreted with caution. Throughout this report, unreliable estimates are noted with this message: "Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 5."

[1] Confidence intervals were derived from the surveyfreq procedure in SAS, a commonly used statistical software package. This procedure estimates sample variances (which are used to calculate confidence intervals) for complex sample designs.

Based on CDC recommendations, estimates in this report were termed unreliable if any of the three following conditions were met:

1) The estimate is based on responses from fewer than 50 respondents in the subsample or denominator of the prevalence estimate calculation.
2) The 95% confidence interval of the estimate has a width or range greater than 20 (e.g., 95% CI = 10.0-30.5).
3) The estimate has a relative standard error (RSE) of 30.0% or higher. The RSE is obtained by dividing the standard error of the estimate by the estimate itself. It is calculated by the SAS software.

WEIGHTING OF 2013 DATA RESULTS

Beginning in 2011, CDC changed the weighting procedures for the BRFSS. Prior to 2011, weights for the BRFSS data were calculated based on the sex and age distribution of the West Virginia population using a method known as post-stratification. For 2011 and future years, BRFSS weights will be calculated using a method known as iterative proportional fitting or raking. This weighting method takes into account additional demographic factors allowing for a better fit to West Virginia's socio-demographic profile. The additional factors used in the raking method include age group by sex, detailed race/ethnicity, education, marital status, tenure (rent or own home), gender by race/ethnicity, age group by race/ethnicity, and telephone sample source (landline or cell phone). Due to the addition of cell phone data and the new weighting methodology, 2011 and later results are not comparable to previous years of data. Although time trend graphs for state prevalence estimates are included in this report, they should be interpreted with caution as no direct comparison can be made between 1984-2010 and 2011-2013 data. Any changes between 2011 and previous years' data cannot be directly interpreted due to unknown comparability ratios. This is noted in time trend graphs in this report as a break in the line between 2010 and 2011 data.

COUNTY-LEVEL DATA

County prevalence rates were calculated by using five (5) years of aggregated BRFSS data. The data were reweighted to be representative of West Virginia's Census 2010 age and sex population distribution by county. In previous years, some counties were grouped due to small sample sizes, however, beginning in 2011 all counties have an individual prevalence estimate. In this report, county estimates were compared to the total West Virginia estimate for the same time period. This method better identifies disparities between counties. It also clearly identifies counties in need of health promotion interventions. The county maps included in this report classify counties according to the degree of difference from the West Virginia prevalence. County estimates, rankings, and statistical comparison to overall West Virginia estimates can be found in Appendix B.

PRESENTATION OF RESULTS

In the sections that follow, the prevalence data are presented in a variety of ways, including by state rank, yearly state and national prevalence, and demographic variables. It should be stressed that the risk factor prevalence estimates for the demographic variables (age, sex, race/ethnicity, education, and income) show the percentages of persons **within the group** – not in the total survey sample – who report the behavior being examined. This method of presenting risk factor prevalence facilitates identification of at-risk populations for health promotion efforts. Each table shows the number of respondents (# Resp.) who answered the question, the weighted prevalence estimate (%), and the 95% confidence interval for the prevalence (95% CI).

Prevalence estimates were calculated by excluding unknown and/or refused responses from the denominators. Consequently, estimates may be slightly higher than would have been the case had the unknown/refused responses been included. In editions of this report before 2003, many estimates representing the years 1984 through 1996 were calculated by including unknown responses. In the present report, all such rates have been re-calculated to exclude unknown responses. Therefore, discrepancies may exist between the time trends and appendices in this report and those in older editions.

The risk factor sections also include West Virginia's rank among the BRFSS participants. For example, if diabetes-related questions were administered by all 53 BRFSS participants, ranking 1st in diabetes would mean having the highest prevalence of diabetes among all the U.S. states and territories while ranking 53rd would mean having the lowest prevalence. Some questions are not asked of all BRFSS participants. In these cases, the rankings are not presented. In addition, readers should note that differences between states often are less than one percentage point and that statistical significance was not tested when determining rankings. The prevalence estimates and rankings by state were calculated by WVHSC staff using the U.S. dataset provided by the CDC. State and county prevalence estimates and rankings for many risk factors are presented in Appendices A and B.

CHAPTER 1: HEALTH STATUS

General Health

Definition

Responding "Fair" or "Poor" to the question "Would you say that in general your health is: Excellent, Very Good, Good, Fair, or Poor?"

Prevalence

WV: 25.7% (95% CI: 24.4-27.0)
U.S.: 18.2% (95% CI: 17.9-18.4)
West Virginia's prevalence was significantly higher than the U.S. prevalence. West Virginia ranked the 2nd highest among 53 BRFSS participants.

Gender

Men: 25.4% (95% CI: 23.5-27.4)
Women: 25.9% (95% CI: 24.2-27.7)
There was no gender difference in the prevalence of fair or poor general health status.

Race/Ethnicity

White, Non-Hispanic: 25.9% (95% CI: 24.6-27.3)
Black, Non-Hispanic: 22.9% (95% CI: 14.7-31.1)
Other, Non-Hispanic: *21.1% (95% CI: 6.4-35.8)
Multiracial, Non-Hispanic: 28.1% (95% CI: 18.0-38.1)
Hispanic: *20.2% (95% CI: 8.3-32.2)
There was no race/ethnicity difference in the prevalence of fair or poor health status.
* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 5.

Age

The prevalence of fair or poor health significantly increased with increasing age. The prevalence ranged from a low of 7.8% among the youngest adults to a high of 38.0% among the elderly.

Education

Adults with less than a high school education had the highest prevalence of fair or poor health, with a prevalence of over 50%. Those with more education had a much lower prevalence, with the prevalence for college graduates of 9.5%. Significant differences in prevalence were found between each educational bracket.

Household Income

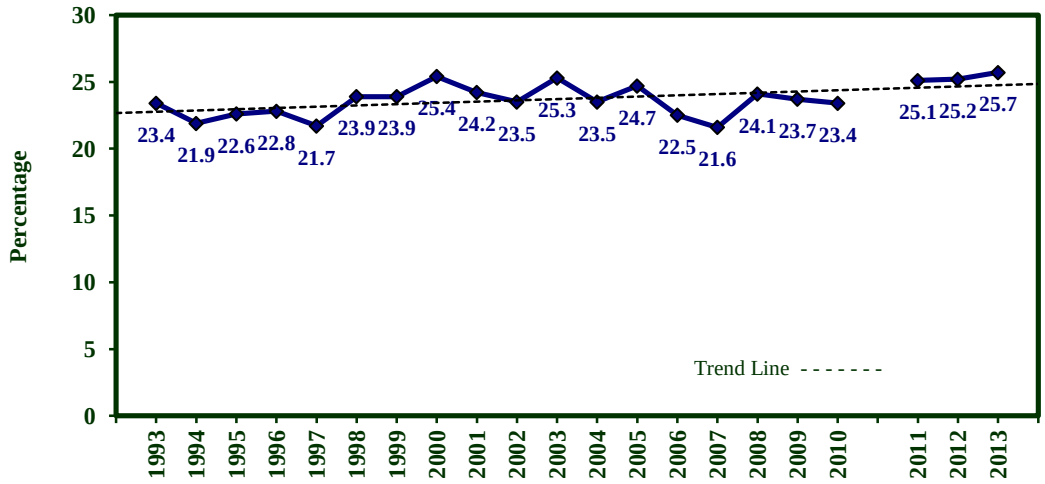
The prevalence of fair or poor health was over 50% in the lowest income group (less than $15,000 annually). The lowest prevalence of fair or poor health (7.6%) was among those in the highest income bracket ($75,000 or more annually). There were significant differences in the prevalence of fair or poor health between almost every income group.

Table 1.1 Fair or Poor Health by Demographic Characteristics: WVBRFSS, 2013

Characteristic	Men			Women			Total		
	# Resp.	%	95% CI	# Resp.	%	95% CI	# Resp.	%	95% CI
TOTAL	2,455	**25.4**	23.5-27.4	3,430	**25.9**	24.2-27.7	5,885	**25.7**	24.4-27.0
Age									
18-24	136	***3.9**	0.9-6.8	169	**12.0**	6.3-17.6	305	**7.8**	4.6-11.0
25-34	236	**11.7**	7.2-16.2	347	**14.7**	10.5-18.9	583	**13.2**	10.1-16.3
35-44	343	**22.6**	17.5-27.8	443	**23.5**	18.8-28.1	786	**23.1**	19.6-26.5
45-54	465	**28.1**	23.5-32.7	565	**27.1**	23.0-31.3	1,030	**27.6**	24.5-30.7
55-64	583	**35.9**	31.5-40.3	778	**30.8**	27.1-34.6	1,361	**33.3**	30.4-36.2
65+	678	**39.7**	35.4-44.0	1,099	**36.6**	33.3-39.9	1,777	**38.0**	35.3-40.6
Education									
Less than H.S.	350	**47.4**	41.3-53.6	394	**54.6**	48.6-60.6	744	**50.7**	46.4-55.0
H.S. or G.E.D.	941	**25.9**	22.9-28.9	1,334	**29.4**	26.6-32.1	2,275	**27.6**	25.6-29.7
Some Post-H.S.	527	**18.1**	14.6-21.5	883	**16.1**	13.5-18.7	1,410	**17.0**	14.9-19.1
College Graduate	632	**9.5**	7.1-11.8	809	**9.6**	7.4-11.7	1,441	**9.5**	7.9-11.1
Income									
Less than $15,000	269	**51.9**	44.6-59.1	523	**50.6**	45.4-55.8	792	**51.1**	46.8-55.4
$15,000 - 24,999	432	**33.0**	27.9-38.1	621	**31.8**	27.6-36.0	1,053	**32.4**	29.1-35.6
$25,000 - 34,999	301	**29.6**	23.9-35.3	342	**21.8**	16.9-26.8	643	**26.1**	22.3-30.0
$35,000 - 49,999	331	**19.0**	14.1-23.8	368	**20.4**	15.4-25.3	699	**19.6**	16.2-23.1
$50,000 - 74,999	302	**14.9**	10.4-19.4	437	**13.3**	9.5-17.1	739	**14.0**	11.1-17.0
$75,000+	498	**8.7**	5.9-11.4	527	**6.2**	3.9-8.5	1,025	**7.6**	5.7-9.4

* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 5.

Figure 1.1 Fair or Poor Health by Year: WVBRFSS, 1993-2013

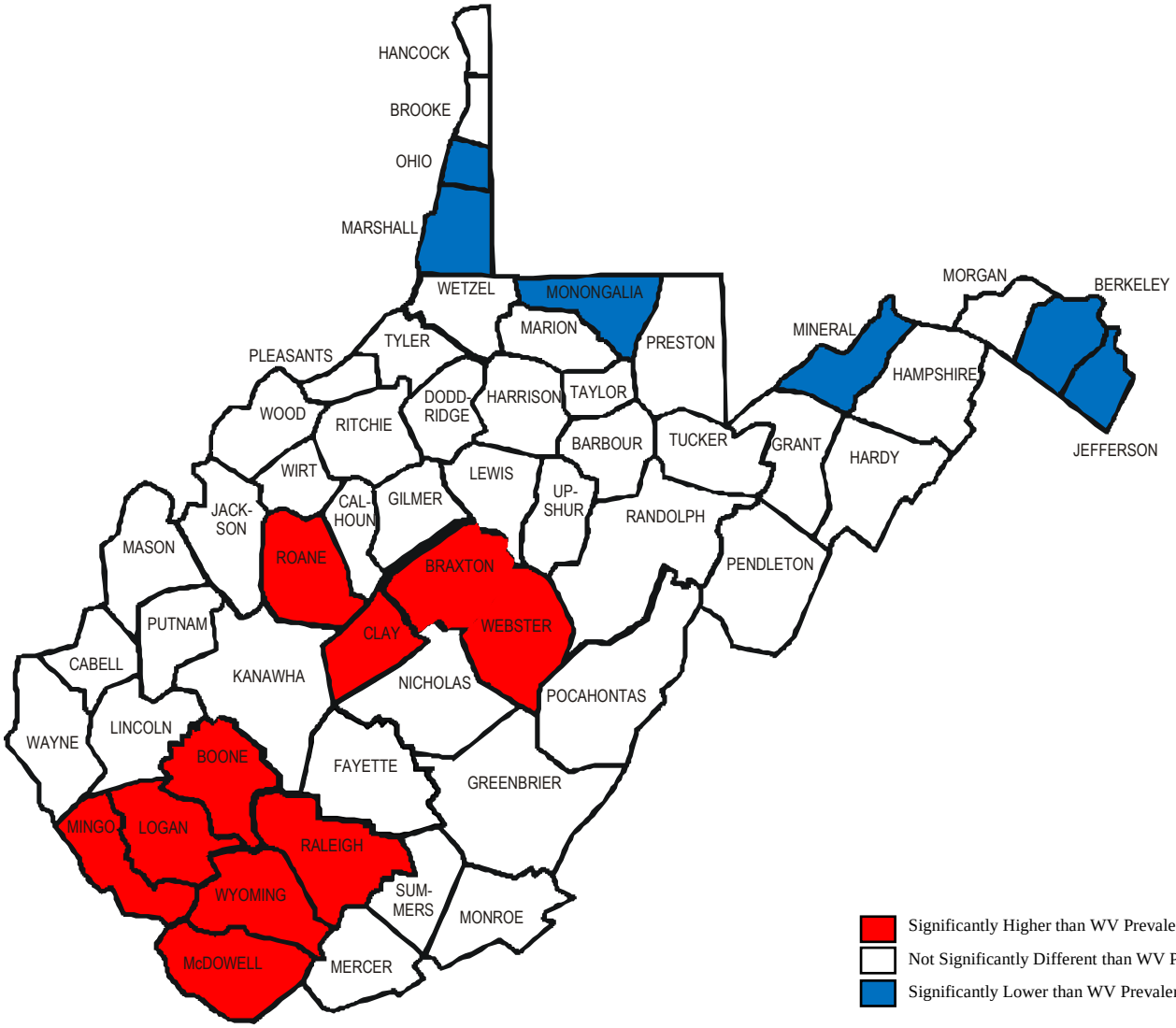


*Due to changes in sample composition and weighting methodology, 2011-2013 results are not directly comparable to previous years.

Figure 1.2 Fair or Poor Health by County: WVBRFSS, 2009-2013

U.S. Prevalence (2011) – 18.2%

WV Prevalence (2009-2013) – 24.6%
(Significantly Higher than U.S.)



County prevalence estimates are listed in Appendix B.
See an explanation of the county-level data under County-Level Data on page 6.

Physical Health

Definition

Responding at least "14 days" or more to the question "Now thinking about your physical health, which includes physical illness and injury, for how many days during the past 30 days was your physical health not good?"

Prevalence

WV: 17.5% (95% CI: 16.4-18.6)
U.S.: 12.2% (95% CI: 12.0-12.4)
West Virginia ranked the highest among 53 BRFSS participants. West Virginia's prevalence was significantly higher than the U.S. prevalence of poor physical health.

Gender

Men: 16.5% (95% CI: 14.9-18.2)
Women: 18.4% (95% CI: 16.9-19.9)
There was no gender difference in the prevalence of poor physical health status.

Race/Ethnicity

White, Non-Hispanic: 17.8% (95% CI: 16.7-19.0)
Black, Non-Hispanic: 12.2% (95% CI: 5.7-18.7)
Other, Non-Hispanic: *14.8% (95% CI: 3.2-26.3)
Multiracial, Non-Hispanic: 16.5% (95% CI: 7.9-25.1)
Hispanic: *11.0% (95% CI: 1.7-20.2)
There was no race/ethnicity difference in the prevalence of poor physical health status.
* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 5.

Age

The prevalence of poor physical health generally increased with advancing age with a statistically significant difference between the 35-44 and 55-64 age groups. The prevalence ranged from a low of 4.4% among those aged 18-24 to a high of 23.3% among those aged 55-64.

Education

Adults with less than a high school education had the highest prevalence of poor physical health, with a prevalence of 32.5%. Those with more education had a lower prevalence, with the prevalence for college graduates of 7.8%. Differences were significant between every educational bracket.

Household Income

The prevalence of poor physical health was highest among adults in the lowest income group of less than $15,000 annually (38.7%) and was lowest among those in the highest income bracket of $75,000 or more (6.5%). There was a statistically significant difference in the prevalence of poor physical health between these two income groups.

Table 1.2 Poor Physical Health by Demographic Characteristics: WVBRFSS, 2013

Characteristic	Men			Women			Total		
	# Resp.	%	95% CI	# Resp.	%	95% CI	# Resp.	%	95% CI
TOTAL	2,426	**16.5**	14.9-18.2	3,372	**18.4**	16.9-19.9	5,798	**17.5**	16.4-18.6
Age									
18-24	134	***1.5**	0.0-3.6	168	**7.5**	3.6-11.3	302	**4.4**	2.2-6.6
25-34	235	**7.7**	3.9-11.5	343	**12.5**	8.5-16.6	578	**10.1**	7.3-12.9
35-44	340	**17.6**	12.8-22.4	440	**16.4**	12.4-20.4	780	**17.0**	13.9-20.1
45-54	461	**19.3**	15.2-23.5	558	**21.8**	18.0-25.7	1,019	**20.6**	17.8-23.4
55-64	582	**22.4**	18.6-26.3	765	**24.1**	20.6-27.7	1,347	**23.3**	20.7-25.9
65+	662	**24.5**	20.5-28.4	1,068	**21.9**	19.0-24.7	1,730	**23.0**	20.7-25.4
Education									
Less than H.S.	346	**29.6**	24.1-35.0	376	**36.1**	30.4-41.8	722	**32.5**	28.5-36.5
H.S. or G.E.D.	926	**16.7**	14.1-19.2	1,308	**19.7**	17.3-22.1	2,234	**18.2**	16.4-19.9
Some Post-H.S.	525	**12.0**	9.0-14.9	873	**13.8**	11.3-16.2	1,398	**13.0**	11.1-14.9
College Graduate	625	**7.2**	5.3-9.2	808	**8.3**	6.3-10.4	1,433	**7.8**	6.4-9.2
Income									
Less than $15,000	264	**37.8**	30.8-44.7	510	**39.4**	34.2-44.5	774	**38.7**	34.5-42.9
$15,000 - 24,999	427	**22.6**	18.2-27.0	611	**20.5**	17.0-24.1	1,038	**21.5**	18.7-24.3
$25,000 - 34,999	296	**17.6**	12.8-22.5	338	**14.6**	10.5-18.7	634	**16.3**	13.0-19.5
$35,000 - 49,999	326	**10.4**	6.4-14.3	365	**14.8**	10.5-19.1	691	**12.5**	9.5-15.4
$50,000 - 74,999	302	**9.8**	6.2-13.3	435	**11.1**	7.5-14.8	737	**10.5**	7.9-13.0
$75,000+	495	**5.7**	3.3-8.1	526	**7.5**	4.9-10.0	1,021	**6.5**	4.7-8.3

* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 5.

Mental Health

Definition

Responding at least "14 days" or more to the question "Now thinking about your mental health, which includes stress, depression, and problems with emotions, for how many days during the past 30 days was your mental health not good?"

Prevalence

WV: 15.0% (95% CI: 13.9-16.1)
U.S.: 11.5% (95% CI: 11.3-11.7)
The WV prevalence of poor mental health was significantly higher than the U.S. prevalence. West Virginia ranked the highest among 53 BRFSS participants.

Gender

Men: 12.8% (95% CI: 11.2-14.3)
Women: 17.2% (95% CI: 15.7-18.8)
The prevalence of poor mental health was significantly higher among females than males.

Race/Ethnicity

White, Non-Hispanic: 15.1% (95% CI: 14.0-16.2)
Black, Non-Hispanic: 16.1% (95% CI: 9.2-23.0)
Other, Non-Hispanic: *21.2% (95% CI: 7.6-34.8)
Multiracial, Non-Hispanic: 14.5% (95% CI: 7.9-21.1)
Hispanic: *8.0% (95% CI: 1.3-14.8)
There was no race/ethnicity difference in the prevalence of poor mental health status.
* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 5.

Age

The prevalence of poor mental health varied with age. The prevalence of poor mental health was highest among those aged 45-54 (20.4%) and lowest among those aged 65 and older (8.6%). The prevalence of poor mental health was significantly lower among those aged 65 and older than among all other age groups except for those in the 18-24 age bracket.

Education

Adults with less than a high school education had the highest prevalence of poor mental health, with a prevalence of 24.8%, and was significantly higher than all other education groups. Those with more education had a lower prevalence, with the prevalence among college graduates of 7.7% which was significantly lower than all other education groups.

Household Income

Poor mental health was experienced by almost one of every three adults (32.4%) in the lowest income group (less than $15,000 annually) and the prevalence was significantly higher than all other income brackets. The lowest prevalence occurred for those in the highest income bracket of $75,000 or more (6.0%), significantly lower than all other income brackets except those earning $50,000-74,999.

Table 1.3 Poor Mental Health by Demographic Characteristics: WVBRFSS, 2013

Characteristic	Men			Women			Total		
	# Resp.	%	95% CI	# Resp.	%	95% CI	# Resp.	%	95% CI
TOTAL	2,426	**12.8**	11.2-14.3	3,372	**17.2**	15.7-18.8	5,798	**15.0**	13.9-16.1
Age									
18-24	133	**9.9**	4.4-15.4	165	**15.6**	9.8-21.4	298	**12.6**	8.6-16.6
25-34	234	**12.2**	7.8-16.7	347	**15.9**	11.6-20.2	581	**14.0**	10.9-17.2
35-44	340	**17.4**	12.8-22.0	438	**21.2**	16.8-25.6	778	**19.3**	16.1-22.5
45-54	462	**16.7**	12.9-20.6	558	**24.1**	20.1-28.1	1,020	**20.4**	17.6-23.2
55-64	577	**14.9**	11.7-18.2	756	**18.3**	15.1-21.6	1,333	**16.6**	14.3-18.9
65+	666	**5.8**	3.8-7.7	1,077	**10.8**	8.6-13.0	1,743	**8.6**	7.1-10.1
Education									
Less than H.S.	344	**18.7**	14.0-23.4	384	**32.0**	26.5-37.6	728	**24.8**	21.1-28.4
H.S. or G.E.D.	925	**13.5**	11.0-15.9	1,308	**16.9**	14.6-19.3	2,233	**15.2**	13.5-16.9
Some Post-H.S.	523	**12.3**	9.2-15.5	866	**14.3**	11.7-16.9	1,389	**13.4**	11.4-15.4
College Graduate	629	**4.8**	3.0-6.6	804	**10.2**	7.8-12.5	1,433	**7.7**	6.1-9.2
Income									
Less than $15,000	263	**29.1**	22.7-35.4	511	**34.8**	29.7-39.9	774	**32.4**	28.4-36.4
$15,000 - 24,999	426	**16.5**	12.3-20.7	613	**20.7**	16.9-24.5	1,039	**18.7**	15.8-21.5
$25,000 - 34,999	295	**10.4**	6.7-14.2	336	**15.0**	10.8-19.3	631	**12.5**	9.7-15.3
$35,000 - 49,999	330	**8.5**	4.9-12.0	364	**13.7**	9.6-17.8	694	**10.9**	8.2-13.6
$50,000 - 74,999	302	**6.8**	3.8-9.9	433	**13.0**	9.1-17.0	735	**10.1**	7.6-12.7
$75,000+	498	**6.3**	3.4-9.2	525	**5.6**	3.3-7.8	1,023	**6.0**	4.1-7.9

Poor Health Limitations

Definition

Responding to the question "During the past 30 days, for about how many days did poor physical or mental health keep you from doing your usual activities, such as self-care, work, or recreation?"

Prevalence

At least 14 days

WV: 22.3% (95% CI: 20.6-24.1)
U.S.: 15.5% (95% CI: 15.2-15.8)
West Virginia ranked the 2nd highest among 53 BRFSS participants and was significantly higher than the U.S. prevalence.

Every day

WV: 12.3% (95% CI: 11.0-13.7)
U.S.: 8.0% (95% CI: 7.8-8.2)
West Virginia ranked the 2nd highest among 53 BRFSS participants and was significantly higher than the U.S. prevalence.

Gender

At least 14 days

Men: 23.8% (95% CI: 20.9-26.6)
Women: 21.2% (95% CI: 19.1-23.3)
There was no gender difference in the prevalence of poor health limitations for at least 14 days in the past 30 days.

Every day

Men: 13.3% (95% CI: 11.1-15.5)
Women: 11.6% (95% CI: 9.9-13.2)
There was no gender difference in the prevalence of poor health limitations every day in the past 30 days.

Race/Ethnicity

At least 14 days

Race/ethnicity differences in the prevalence of poor health limitations for at least 14 days in the past 30 days could not be analyzed due to unreliable estimates.

Every day

Race/ethnicity differences in the prevalence of poor health limitations every day in the past 30 days could not be analyzed due to unreliable estimates.

Age

The prevalence of poor health limitations increased significantly with age for both the every day indicator and the 14 day indicator.

Education

In general, the prevalence of poor health limitations was highest among those with the least amount of education and lowest among those with the most education for both the 14 day and every day indicators.

Household Income

The prevalence of poor health limitations declined with increasing annual household income for both the 14 day and every day indicators.

Table 1.4 Poor Health Limitations at Least 14 Days in the Past 30 Days by Demographic Characteristics: WVBRFSS, 2013

Characteristic	Men			Women			Total		
	# Resp.	%	95% CI	# Resp.	%	95% CI	# Resp.	%	95% CI
TOTAL	1,162	**23.8**	20.9-26.6	1,924	**21.2**	19.1-23.3	3,086	**22.3**	20.6-24.1
Age									
18-24	63	***0.0**	0.0-0.0	101	**10.9**	4.8-17.1	164	**6.2**	2.6-9.7
25-34	108	**16.4**	8.4-24.3	203	**12.9**	8.0-17.9	311	**14.4**	10.0-18.8
35-44	165	**24.2**	16.5-31.8	271	**19.5**	13.9-25.2	436	**21.6**	16.9-26.2
45-54	226	**26.1**	19.5-32.8	335	**28.4**	23.0-33.7	561	**27.4**	23.2-31.6
55-64	300	**32.1**	26.1-38.1	441	**25.8**	21.1-30.5	741	**28.7**	25.0-32.5
65+	296	**31.2**	24.8-37.7	567	**23.4**	19.3-27.4	863	**26.6**	23.0-30.2
Education									
Less than H.S.	197	**36.3**	28.6-44.0	268	**35.5**	28.9-42.2	465	**35.9**	30.9-41.0
H.S. or G.E.D.	462	**22.6**	18.4-26.9	757	**22.9**	19.6-26.3	1,219	**22.8**	20.1-25.5
Some Post-H.S.	249	**20.8**	15.4-26.2	495	**15.4**	12.0-18.8	744	**17.5**	14.5-20.5
College Graduate	250	**11.3**	7.5-15.2	398	**10.0**	6.9-13.1	648	**10.6**	8.2-13.0
Income									
Less than $15,000	197	**38.9**	30.7-47.1	385	**37.5**	31.8-43.2	582	**38.1**	33.3-42.8
$15,000 - 24,999	232	**30.0**	23.2-36.8	372	**21.6**	17.0-26.3	604	**25.4**	21.4-29.4
$25,000 - 34,999	150	**25.3**	17.4-33.2	191	**20.4**	13.9-26.9	341	**23.0**	17.8-28.2
$35,000 - 49,999	130	**16.6**	9.1-24.1	191	**15.4**	9.3-21.6	321	**16.0**	11.2-20.8
$50,000 - 74,999	117	**14.8**	7.9-21.7	225	**9.2**	4.3-14.0	342	**11.4**	7.4-15.3
$75,000+	179	***9.0**	3.7-14.3	237	**7.5**	3.7-11.2	416	**8.2**	5.0-11.4

* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 5.

Table 1.5 Poor Health Limitations Every Day in the Past 30 Days by Demographic Characteristics: WVBRFSS, 2013

Characteristic	Men			Women			Total		
	# Resp.	%	95% CI	# Resp.	%	95% CI	# Resp.	%	95% CI
TOTAL	1,162	**13.3**	11.1-15.5	1,924	**11.6**	9.9-13.2	3,086	**12.3**	11.0-13.7
Age									
18-24	63	***0.0**	0.0-0.0	101	***8.0**	2.5-13.4	164	***4.5**	1.4-7.6
25-34	108	***10.1**	4.0-16.3	203	***4.1**	1.1-7.0	311	**6.6**	3.5-9.7
35-44	165	**14.7**	8.0-21.5	271	**8.1**	4.0-12.1	436	**11.0**	7.2-14.8
45-54	226	**13.5**	8.7-18.3	335	**17.1**	12.5-21.7	561	**15.5**	12.1-18.8
55-64	300	**17.7**	12.8-22.5	441	**12.1**	8.6-15.6	741	**14.7**	11.8-17.6
65+	296	**17.1**	11.9-22.4	567	**16.0**	12.5-19.6	863	**16.5**	13.5-19.5
Education									
Less than H.S.	197	**19.1**	12.9-25.2	268	**20.9**	15.4-26.3	465	**20.0**	15.9-24.1
H.S. or G.E.D.	462	**11.8**	8.6-14.9	757	**13.7**	10.9-16.5	1,219	**12.8**	10.7-14.9
Some Post-H.S.	249	**13.9**	9.2-18.6	495	**6.5**	4.2-8.8	744	**9.4**	7.1-11.7
College Graduate	250	**6.4**	3.4-9.4	398	**4.0**	2.1-5.9	648	**5.0**	3.3-6.7
Income									
Less than $15,000	197	**23.9**	16.8-31.1	385	**25.1**	19.9-30.4	582	**24.6**	20.4-28.9
$15,000 - 24,999	232	**16.6**	11.3-21.9	372	**9.3**	6.2-12.5	604	**12.6**	9.6-15.6
$25,000 - 34,999	150	**11.6**	5.9-17.4	191	**10.4**	5.1-15.6	341	**11.0**	7.1-15.0
$35,000 - 49,999	130	***7.9**	2.4-13.4	191	**7.8**	3.3-12.2	321	**7.8**	4.3-11.3
$50,000 - 74,999	117	**7.9**	3.2-12.5	225	***4.0**	1.2-6.7	342	**5.5**	3.0-7.9
$75,000+	179	***5.2**	0.6-9.7	237	***2.7**	0.3-5.0	416	**3.9**	1.3-6.4

* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 5.

CHAPTER 2: HEALTH CARE ACCESS

No Health Care Coverage (among adults 18 to 64)

Definition

Responding "No" to the question "Do you have any kind of health care coverage, including health insurance, prepaid plans such as HMOs, or government plans such as Medicare, or Indian Health Service?" The results reported for this indicator have been limited to adults aged 18-64.

Prevalence

WV: 23.7% (95% CI: 22.1-25.4)
U.S.: 21.0% (95% CI: 20.7-21.3)
The prevalence of no health care coverage among those aged 18-64 was significantly higher in West Virginia than in the U.S. West Virginia ranked the 15th highest among 53 BRFSS participants.

Gender

Men: 25.1% (95% CI: 22.6-27.7)
Women: 22.3% (95% CI: 20.3-24.4)
There was no gender difference for no health care coverage.

Race/Ethnicity

White, Non-Hispanic: 23.2% (95% CI: 21.5-24.8)
Black, Non-Hispanic: *30.4% (95% CI: 19.4-41.5)
Other, Non-Hispanic: *19.8% (95% CI: 5.2-34.5)
Multiracial, Non-Hispanic: *35.3% (95% CI: 20.9-49.6)
Hispanic: *36.0% (95% CI: 19.1-52.8)
There was no race/ethnicity difference in the prevalence of no health care coverage for those aged 18-64.
* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 5.

Age

The prevalence of no health care coverage was significantly higher among those aged 18-44 compared with those aged 55-64.

Education

Those with less than a high school education had the highest prevalence of no health coverage (36.0%), significantly higher than all other educational attainment levels, while those with a college degree had the lowest prevalence of no health coverage (9.8%), significantly lower than all other educational attainment levels.

Household Income

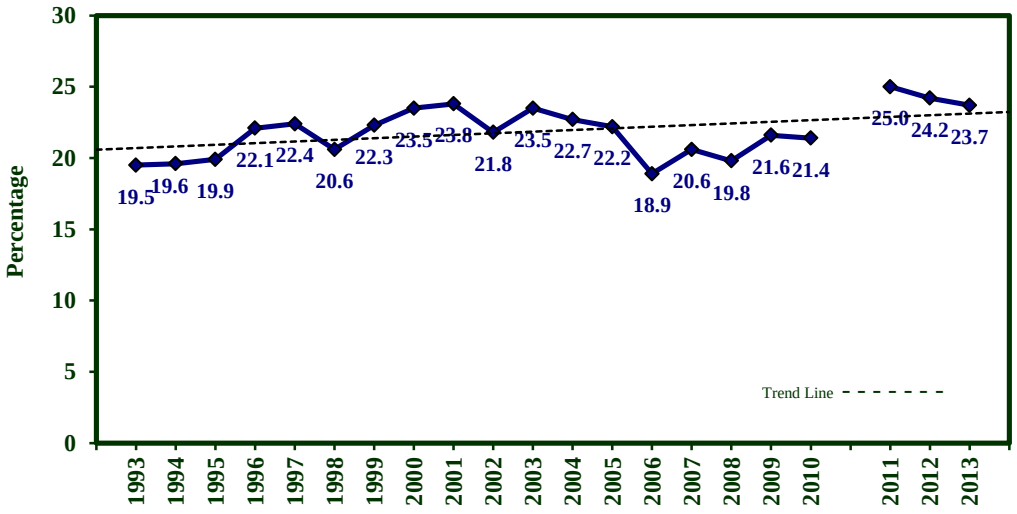
The prevalence of no health care coverage was significantly higher among low income groups than among those with high income. Over 40% of those with incomes less than $25,000 per year had no health care coverage, while less than a third of those earning $25,000-$49,999 per year had no health care coverage. In contrast, only 4.6% of those making more than $75,000 per year had no health care coverage.

Table 2.1 No Health Care Coverage Among Adults Aged 18-64 by Demographic Characteristics: WVBRFSS, 2013

Characteristic	Men			Women			Total		
	# Resp.	%	95% CI	# Resp.	%	95% CI	# Resp.	%	95% CI
TOTAL	1,767	**25.1**	22.6-27.7	2,301	**22.3**	20.3-24.4	4,068	**23.7**	22.1-25.4
Age									
18-24	136	**37.4**	28.4-46.4	168	**25.5**	17.9-33.2	304	**31.7**	25.7-37.6
25-34	236	**33.1**	26.2-39.9	347	**27.5**	22.3-32.8	583	**30.3**	26.0-34.7
35-44	342	**26.9**	21.5-32.2	442	**28.0**	23.3-32.6	784	**27.4**	23.9-31.0
45-54	466	**22.8**	18.2-27.3	565	**20.2**	16.5-23.9	1,031	**21.5**	18.6-24.4
55-64	587	**11.2**	8.3-14.2	779	**13.7**	11.0-16.5	1,366	**12.5**	10.5-14.5
Education									
Less than H.S.	211	38.5	30.5-46.4	213	32.9	25.0-40.8	424	36.0	30.3-41.6
H.S. or G.E.D.	713	27.0	23.1-31.0	803	27.5	23.9-31.1	1,516	27.2	24.5-30.0
Some Post-H.S.	399	22.4	17.6-27.1	645	20.1	16.7-23.5	1,044	21.1	18.3-23.9
College Graduate	443	10.4	7.0-13.9	639	9.3	6.7-11.8	1,082	9.8	7.7-11.9
Income									
Less than $15,000	213	43.1	34.9-51.2	354	41.5	35.3-47.7	567	42.2	37.2-47.2
$15,000 - 24,999	295	48.5	41.8-55.1	362	43.1	37.1-49.1	657	45.8	41.3-50.4
$25,000 - 34,999	173	34.0	25.3-42.7	190	29.1	20.9-37.2	363	31.8	25.7-37.9
$35,000 - 49,999	230	17.4	11.5-23.4	268	16.1	10.8-21.4	498	16.8	12.8-20.8
$50,000 - 74,999	229	8.3	3.8-12.7	348	4.7	2.3-7.1	577	6.3	3.9-8.8
$75,000+	425	5.3	1.7-8.8	477	3.7	1.7-5.7	902	4.6	2.4-6.7

* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 5.

Figure 2.1 No Health Care Coverage Among Adults Aged 18-64 by Year: WVBRFSS, 1993-2013

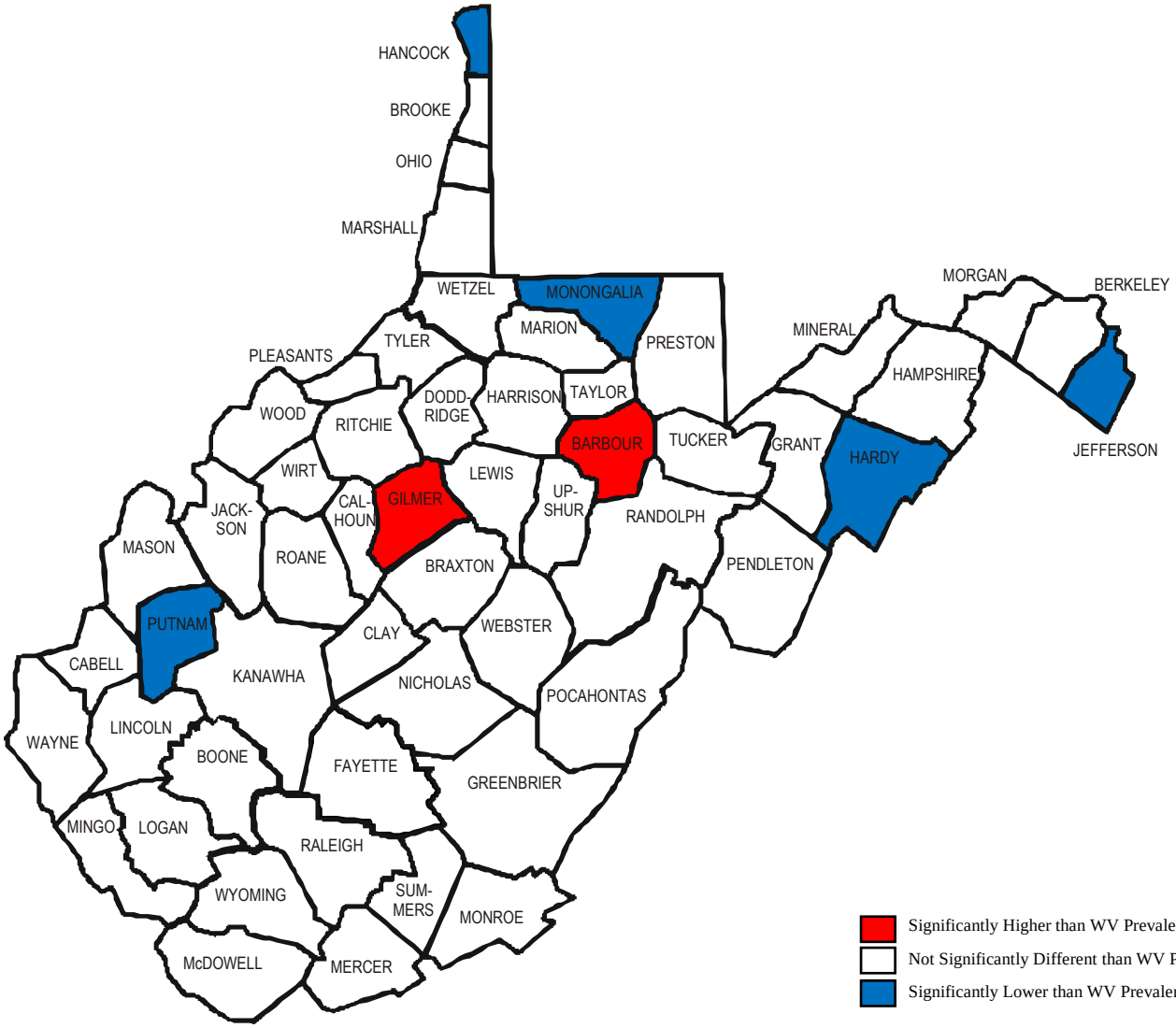


*Due to changes in sample composition and weighting methodology, 2011-2013 results are not directly comparable to previous years.

Figure 2.2 No Health Care Coverage Among Adults Aged 18-64 by County: WVBRFSS, 2009-2013

U.S. Prevalence (2011) – 21.8%

WV Prevalence (2009-2013) – 23.2%
(Significantly Higher than U.S.)



County prevalence estimates are listed in Appendix B.
See an explanation of the county-level data under County-Level Data on page 6.

Could Not Afford Needed Medical Care

Definition

Responding "Yes" to the question "Was there a time in the past 12 months when you needed to see a doctor but could not because of cost?"

Prevalence

WV: 18.4% (95% CI: 17.1-19.6)
U.S.: 15.9% (95% CI: 15.7-16.1)
The West Virginia prevalence of could not afford needed medical care was significantly higher than the national prevalence. West Virginia ranked the 11th highest among 53 BRFSS participants.

Gender

Men: 16.6% (95% CI: 14.7-18.4)
Women: 20.1% (95% CI: 18.5-21.8)
The prevalence of could not afford needed medical care was significantly higher among women than men.

Race/Ethnicity

White, Non-Hispanic: 18.0% (95% CI: 16.7-19.2)
Black, Non-Hispanic: *31.3% (95% CI: 20.9-41.7)
Other, Non-Hispanic: *8.4% (95% CI: 0.00-17.5)
Multiracial, Non-Hispanic: *24.5% (95% CI: 13.2-35.7)
Hispanic: *17.9% (95% CI: 6.2-29.6)
Black, Non-Hispanics had a significantly higher prevalence of could not afford medical care than White, Non-Hispanics and Other, Non-Hispanics.
* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 5.

Age

The 35-44 age group experienced the highest prevalence of could not afford needed medical care (28.4%) and those aged 65 and older had the lowest prevalence (4.7%). The difference between these two age groups was statistically significant.

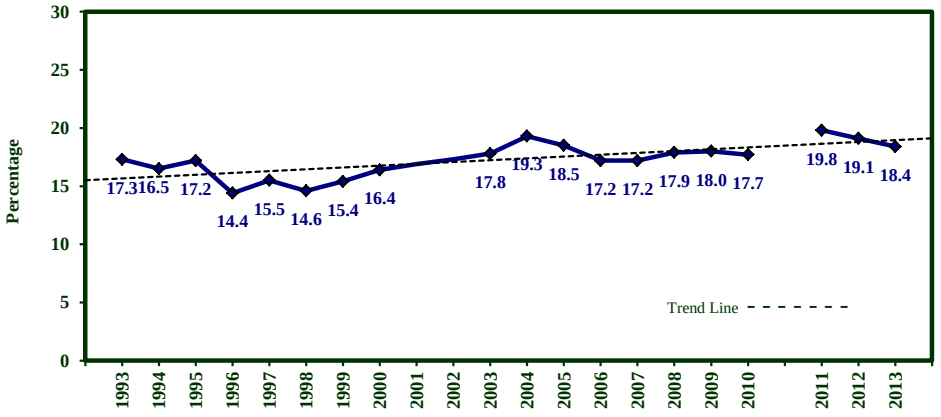
Education

Adults with less than a high school education had a significantly higher prevalence of could not afford needed medical care (24.0%) than college graduates (9.7%). Additionally, college graduates had a significantly lower prevalence of having problems affording needed health care than those with other education levels.

Household Income

The prevalence of could not afford needed medical care became steadily higher as household income declined. The prevalence of could not afford needed medical care was 5.2% for those earning $75,000 per year or more and 37.3% for those earning less than $15,000 per year.

Figure 2.3 Could Not Afford Needed Medical Care by Year: WVBRFSS, 1993-2013



NOTE: Data not available for the years 2001-2002.

*Due to changes in sample composition and weighting methodology, 2011-2013 results are not directly comparable to previous years.

Table 2.2 Could Not Afford Needed Medical Care in Past Year by Demographic Characteristics: WVBRFSS, 2013

Characteristic	Men			Women			Total		
	# Resp.	%	95% CI	# Resp.	%	95% CI	# Resp.	%	95% CI
TOTAL	2,458	**16.6**	14.7-18.4	3,432	**20.1**	18.5-21.8	5,890	**18.4**	17.1-19.6
Age									
18-24	136	**17.1**	10.6-23.5	169	**24.1**	17.3-31.0	305	**20.5**	15.8-25.2
25-34	235	**25.6**	19.3-32.0	346	**28.8**	23.4-34.2	581	**27.2**	23.0-31.4
35-44	343	**25.0**	19.8-30.2	442	**31.7**	26.7-36.7	785	**28.4**	24.7-32.0
45-54	466	**20.3**	16.1-24.6	567	**24.8**	20.8-28.8	1,033	**22.6**	19.7-25.5
55-64	585	**11.0**	8.0-13.9	776	**17.0**	13.9-20.1	1,361	**14.0**	11.9-16.2
65+	679	**4.0**	2.2-5.9	1102	**5.2**	3.7-6.7	1,781	**4.7**	3.5-5.9
Education									
Less than H.S.	351	**22.0**	16.9-27.2	396	**26.5**	21.2-31.7	747	**24.0**	20.4-27.7
H.S. or G.E.D.	942	**16.7**	13.9-19.5	1333	**20.1**	17.5-22.7	2,275	**18.4**	16.5-20.3
Some Post-H.S.	529	**17.6**	13.6-21.6	882	**21.9**	18.7-25.2	1,411	**20.0**	17.5-22.5
College Graduate	632	**7.9**	5.3-10.4	810	**11.3**	8.8-13.9	1,442	**9.7**	7.9-11.5
Income									
Less than $15,000	269	**36.5**	29.4-43.6	525	**38.0**	32.8-43.1	794	**37.3**	33.1-41.6
$15,000 - 24,999	433	**29.8**	24.5-35.1	622	**29.6**	25.2-34.0	1,055	**29.7**	26.3-33.1
$25,000 - 34,999	301	**13.6**	8.9-18.3	342	**22.8**	17.1-28.5	643	**17.7**	14.0-21.4
$35,000 - 49,999	331	**8.7**	5.0-12.4	368	**16.7**	12.0-21.5	699	**12.5**	9.5-15.5
$50,000 - 74,999	303	**8.3**	4.2-12.5	436	**10.9**	7.3-14.5	739	**9.7**	7.0-12.4
$75,000+	498	**3.9**	1.9-5.9	527	**6.8**	4.2-9.5	1,025	**5.2**	3.6-6.9

No Personal Doctor or Health Care Provider

Definition

Responding "No" to the question "Do you have one person you think of as your personal doctor or health care provider?"

Prevalence

WV: 23.3% (95% CI: 21.9-24.7)
U.S.: 23.7% (95% CI: 23.4-24.0)
West Virginia ranked the 26th highest among 53 BRFSS participants. There was no significant different between the West Virginia prevalence of no personal doctor or health care provider and the U.S. prevalence.

Gender

Men: 29.0% (95% CI: 26.7-31.3)
Women: 17.9% (95% CI: 16.3-19.6)
The prevalence of not having a personal doctor or health care provider was significantly higher among men than among women.

Race/Ethnicity

White, Non-Hispanic: 22.8% (95% CI: 21.3-24.2)
Black, Non-Hispanic: *29.4% (95% CI: 19.3-39.5)
Other, Non-Hispanic: *22.2% (95% CI: 7.6-36.8)
Multiracial, Non-Hispanic: *35.5% (95% CI: 23.8-47.2)
Hispanic: *35.6% (95% CI: 19.9-51.3)
There was no race/ethnicity difference in the prevalence of not having a personal doctor or health care provider.
* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 5.

Age

In general, the prevalence of no personal doctor declined as age increased. The youngest age group, those aged 18-24, had the highest prevalence of no personal doctor (43.6%). The oldest age group (65 and older) had a relatively low prevalence of no personal doctor (7.1%).

Education

There was a significant difference in the prevalence of no doctor between those with less than a high school education (26.5%) and those with a college degree (17.4%).

Household Income

Those earning less than $15,000 per year had a higher prevalence of not having doctor (29.9%) than those earning $50,000 or more per year .

Table 2.3 No Personal Doctor or Health Care Provider by Demographic Characteristics: WVBRFSS, 2013

Characteristic	Men			Women			Total		
	# Resp.	%	95% CI	# Resp.	%	95% CI	# Resp.	%	95% CI
TOTAL	2,459	**29.0**	26.7-31.3	3,433	**17.9**	16.3-19.6	5,892	**23.3**	21.9-24.7
Age									
18-24	136	**51.9**	42.4-61.3	167	**34.7**	26.6-42.8	303	**43.6**	37.3-49.9
25-34	236	**53.0**	46.0-60.0	346	**32.5**	27.0-38.0	582	**42.9**	38.3-47.5
35-44	343	**33.5**	28.0-39.0	443	**22.8**	18.4-27.2	786	**28.2**	24.6-31.7
45-54	465	**27.7**	23.0-32.4	567	**14.9**	11.7-18.2	1,032	**21.3**	18.4-24.2
55-64	586	**13.4**	10.2-16.5	779	**10.5**	8.0-13.1	1,365	**11.9**	9.9-14.0
65+	679	**8.5**	6.2-10.8	1,101	**6.1**	4.5-7.6	1,780	**7.1**	5.8-8.5
Education									
Less than H.S.	352	**30.1**	24.3-35.9	397	**22.2**	16.6-27.8	749	**26.5**	22.4-30.6
H.S. or G.E.D.	943	**31.8**	28.2-35.5	1,334	**17.3**	14.8-19.7	2,277	**24.6**	22.3-26.8
Some Post-H.S.	529	**29.0**	24.2-33.8	882	**18.4**	15.2-21.5	1,411	**23.1**	20.3-25.9
College Graduate	630	**20.2**	16.3-24.0	809	**14.9**	11.9-17.8	1,439	**17.4**	15.0-19.8
Income									
Less than $15,000	269	**38.8**	31.5-46.0	526	**23.3**	18.8-27.9	795	**29.9**	25.8-34.0
$15,000 - 24,999	433	**37.8**	32.3-43.4	620	**18.3**	14.4-22.2	1,053	**27.8**	24.3-31.3
$25,000 - 34,999	301	**27.0**	20.7-33.2	342	**23.9**	17.6-30.3	643	**25.6**	21.2-30.1
$35,000 - 49,999	331	**25.2**	19.0-31.4	368	**18.0**	13.1-22.9	699	**21.8**	17.8-25.8
$50,000 - 74,999	303	**21.2**	15.6-26.9	436	**13.8**	10.0-17.7	739	**17.3**	13.9-20.6
$75,000+	498	**21.1**	16.1-26.0	528	**10.4**	7.5-13.4	1,026	**16.2**	13.2-19.3

No Routine Checkup in Past Year

Definition

Responding "More than a year ago" to the question "About how long has it been since you last visited a doctor for a routine checkup? A routine checkup is a general physical exam, not an exam for a specific injury, illness, or condition."

Prevalence

WV: 25.6% (95% CI: 24.2-27.0)
U.S.: 31.2% (95% CI: 30.9-31.5)
The West Virginia prevalence of no checkup in the past year was significantly lower than the national prevalence. West Virginia ranked the 10th lowest among 53 BRFSS participants.

Gender

Men: 30.5% (95% CI: 28.3-32.8)
Women: 20.9% (95% CI: 19.2-22.6)
The prevalence of no routine checkup in the past year was significantly higher for men than for women.

Race/Ethnicity

White, Non-Hispanic: 25.5% (95% CI: 24.0-26.9)
Black, Non-Hispanic: *23.9% (95% CI: 14.2-33.6)
Other, Non-Hispanic: *27.5% (95% CI: 11.7-43.3)
Multiracial, Non-Hispanic: *32.2% (95% CI: 20.7-43.6)
Hispanic: *32.9% (95% CI: 17.6-48.2)
There was no race/ethnicity difference in the prevalence of no checkup in the past year.
* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 5.

Age

Those 65 and older had a relatively low prevalence of no checkup in the past year (8.8%) while those aged 18-24 had the highest prevalence (38.1%).

Education

The prevalence of no routine checkup in the past year was significantly higher among those with a high school education (27.2%) than among those with a college degree (22.2%).

Household Income

Those earning less than $25,000 per year had a higher prevalence of no routine checkup in the past year than those earning $50,000 or more per year.

Table 2.4 No Routine Checkup in Past Year by Demographic Characteristics: WVBRFSS, 2013

Characteristic	Men			Women			Total		
	# Resp.	%	95% CI	# Resp.	%	95% CI	# Resp.	%	95% CI
TOTAL	2,434	**30.5**	28.3-32.8	3,399	**20.9**	19.2-22.6	5,833	**25.6**	24.2-27.0
Age									
18-24	133	**47.9**	38.4-57.4	167	**27.6**	19.6-35.6	300	**38.1**	31.8-44.3
25-34	230	**52.8**	45.7-60.0	342	**35.1**	29.5-40.8	572	**44.1**	39.4-48.7
35-44	341	**36.2**	30.5-41.9	438	**27.1**	22.4-31.7	779	**31.7**	28.0-35.3
45-54	461	**32.6**	27.7-37.4	559	**24.9**	21.0-28.9	1,020	**28.7**	25.6-31.9
55-64	582	**17.2**	13.7-20.7	774	**14.2**	11.4-17.1	1,356	**15.7**	13.4-17.9
65+	673	**9.3**	6.8-11.9	1,090	**8.3**	6.4-10.2	1,763	**8.8**	7.2-10.3
Education									
Less than H.S.	349	**29.3**	23.5-35.1	391	**22.9**	17.2-28.5	740	**26.4**	22.3-30.5
H.S. or G.E.D.	932	**32.9**	29.2-36.6	1,318	**21.6**	18.9-24.3	2,250	**27.2**	24.9-29.6
Some Post-H.S.	523	**30.0**	25.4-34.7	873	**21.0**	17.7-24.2	1,396	**25.0**	22.2-27.8
College Graduate	625	**27.2**	23.1-31.3	807	**17.9**	14.8-21.0	1,432	**22.2**	19.7-24.8
Income									
Less than $15,000	269	**37.9**	30.7-45.1	517	**28.4**	23.4-33.3	786	**32.4**	28.2-36.7
$15,000 - 24,999	425	**38.2**	32.6-43.8	617	**25.0**	20.7-29.3	1,042	**31.4**	27.8-34.9
$25,000 - 34,999	297	**29.0**	22.5-35.5	340	**23.6**	17.4-29.8	637	**26.6**	22.0-31.1
$35,000 - 49,999	329	**27.3**	21.1-33.6	366	**20.2**	15.1-25.2	695	**24.0**	19.9-28.1
$50,000 - 74,999	302	**25.0**	19.2-30.9	435	**16.3**	12.2-20.4	737	**20.4**	16.9-23.9
$75,000+	493	**24.9**	20.1-29.6	525	**15.1**	11.6-18.6	1,018	**20.4**	17.3-23.5

* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 5.

Delayed Medical Care

Definition

Responding "Yes" to the question "Have you delayed getting needed medical care, for a reason other than cost, in the past 12 months?"

Prevalence

WV: 18.7% (95% CI: 17.5-19.9)
Because this is part of a state added optional module and complete national data are not available, a U.S. comparison was not conducted.

Gender

Men: 16.2% (95% CI: 14.5-17.9)
Women: 21.0% (95% CI: 19.4-22.7)
The prevalence of delaying needed medical care in the past year was significantly higher for women than for men.

Race/Ethnicity

White, Non-Hispanic: 18.7% (95% CI: 17.5-20.0)
Black, Non-Hispanic: 16.5% (95% CI: 9.8-23.3)
Other, Non-Hispanic: *19.2% (95% CI: 7.5-30.9)
Multiracial, Non-Hispanic: *28.1% (95% CI: 15.4-40.9)
Hispanic: *13.7% (95% CI: 3.2-24.3)
There was no race/ethnicity difference in the prevalence of delaying needed medical care in the past year.
* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 5.

Age

Those 65 and older had a relatively low prevalence of delaying needed medical care in the past year (12.6%) while those aged 25-34 had the highest prevalence (22.3%). The prevalence of delaying needed medical care in the past year among those 65 and over was significantly lower than all other age groups except those 18-24.

Education

The prevalence of delaying needed medical care in the past year was highest among those with less than a high school education (22.9%) and lowest among those with a college degree (14.8%), a significant difference.

Household Income

Those earning less than $15,000 per year (30.9%) had a higher prevalence of delaying needed care treatment in the past year than all other income brackets.

Table 2.5 Delayed Medical Care in Past Year by Demographic Characteristics: WVBRFSS, 2013

Characteristic	Men			Women			Total		
	# Resp.	%	95% CI	# Resp.	%	95% CI	# Resp.	%	95% CI
TOTAL	2,414	**16.2**	14.5-17.9	3,385	**21.0**	19.4-22.7	5,799	**18.7**	17.5-19.9
Age									
18-24	127	**13.2**	7.5-18.9	161	**21.7**	14.6-28.9	288	**17.4**	12.8-22.0
25-34	221	**17.5**	12.0-23.0	339	**26.9**	21.5-32.3	560	**22.3**	18.4-26.1
35-44	334	**17.3**	12.8-21.7	433	**24.9**	20.4-29.4	767	**21.1**	17.9-24.3
45-54	460	**21.2**	16.9-25.6	557	**21.2**	17.4-25.0	1,017	**21.2**	18.3-24.1
55-64	582	**18.2**	14.6-21.8	768	**21.6**	18.3-24.9	1,350	**19.9**	17.5-22.4
65+	677	**10.0**	7.5-12.5	1,097	**14.7**	12.3-17.1	1,774	**12.6**	10.9-14.4
Education									
Less than H.S.	341	**18.4**	13.8-23.0	397	**28.0**	22.8-33.2	738	**22.9**	19.4-26.4
H.S. or G.E.D.	930	**16.1**	13.4-18.9	1,322	**21.3**	18.7-23.9	2,252	**18.7**	16.8-20.6
Some Post-H.S.	515	**15.8**	12.4-19.3	857	**20.5**	17.2-23.7	1,372	**18.4**	16.0-20.8
College Graduate	624	**14.4**	11.1-17.6	798	**15.3**	12.5-18.0	1,422	**14.8**	12.7-16.9
Income									
Less than $15,000	263	**25.7**	19.5-31.9	519	**34.8**	29.7-39.8	782	**30.9**	27.0-34.9
$15,000 - 24,999	423	**19.5**	15.1-24.0	611	**23.9**	19.8-27.9	1,034	**21.8**	18.8-24.8
$25,000 - 34,999	295	**14.4**	9.8-19.0	339	**16.1**	11.5-20.6	634	**15.2**	11.9-18.4
$35,000 - 49,999	326	**13.2**	8.8-17.5	366	**19.4**	14.3-24.5	692	**16.1**	12.8-19.5
$50,000 - 74,999	301	**13.5**	8.8-18.2	431	**13.7**	10.0-17.3	732	**13.6**	10.6-16.5
$75,000+	489	**14.3**	10.6-18.0	515	**18.0**	13.9-22.0	1,004	**16.0**	13.2-18.7

Not Taking Prescribed Medication Because of Cost

Definition

Responding "Yes" to the question "Was there a time in the past 12 months when you did not take your medication as prescribed because of the cost?"

Prevalence

WV: 13.7% (95% CI: 12.5-14.8)
Because this is part of a state added optional module and complete national data are not available, a U.S. comparison was not conducted.

Gender

Men: 12.7% (95% CI: 10.9-14.4)
Women: 14.5% (95% CI: 13.1-16.0)
There was no gender difference in not taking prescribed medication because of cost.

Race/Ethnicity

White, Non-Hispanic: 13.3% (95% CI: 12.1-14.4)
Black, Non-Hispanic: *23.1% (95% CI: 12.6-33.6)
Other, Non-Hispanic: *17.2% (95% CI: 1.1-33.3)
Multiracial, Non-Hispanic: *30.9% (95% CI: 16.3-45.5)
Hispanic: *6.8% (95% CI: 0.0-14.9)
The prevalence of not taking prescribed medication because of cost was significantly higher among Multiracial, Non-Hispanics than among White, Non-Hispanics or Hispanics.
* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 5.

Age

Those 65 and older had a relatively low prevalence of not taking prescribed medication because of cost (6.0%) while those aged 45-54 had the highest prevalence (19.3%). The prevalence of those 65 and over not taking medication because of cost was significantly lower than all other age groups.

Education

The prevalence of not taking prescribed medication because of cost was highest among those with less than a high school education (17.7%) and lowest among those with a college degree (7.3%), significantly lower that all other educational attainment levels.

Household Income

Those earning less than $15,000 per year (26.1%) had a higher prevalence of not taking prescribed medication because of cost than all other income brackets making over $25,000 per year.

Table 2.6 Not Taking Prescribed Medication Because of Cost by Demographic Characteristics: WVBRFSS, 2013

Characteristic	Men			Women			Total		
	# Resp.	%	95% CI	# Resp.	%	95% CI	# Resp.	%	95% CI
TOTAL	2,127	**12.7**	10.9-14.4	3,115	**14.5**	13.1-16.0	5,242	**13.7**	12.5-14.8
Age									
18-24	85	***12.1**	4.7-19.5	138	**13.8**	7.9-19.6	223	**13.0**	8.4-17.6
25-34	160	**20.1**	12.9-27.3	286	**13.1**	8.9-17.2	446	**16.3**	12.3-20.3
35-44	290	**14.8**	10.4-19.1	385	**23.0**	18.1-27.8	675	**18.9**	15.6-22.2
45-54	400	**17.9**	13.6-22.1	497	**20.7**	16.7-24.6	897	**19.3**	16.4-22.2
55-64	527	**11.2**	8.0-14.4	728	**15.0**	12.0-18.1	1,255	**13.2**	11.0-15.4
65+	653	**5.1**	3.2-7.0	1,058	**6.8**	5.1-8.4	1,711	**6.0**	4.8-7.3
Education									
Less than H.S.	306	**16.3**	11.4-21.1	368	**19.3**	14.6-24.0	674	**17.7**	14.3-21.1
H.S. or G.E.D.	815	**12.6**	10.0-15.2	1,222	**13.8**	11.6-16.1	2,037	**13.2**	11.5-15.0
Some Post-H.S.	453	**14.2**	10.2-18.2	789	**16.9**	13.9-19.9	1,242	**15.7**	13.3-18.1
College Graduate	548	**6.5**	4.0-8.9	726	**8.1**	5.9-10.2	1,274	**7.3**	5.7-9.0
Income									
Less than $15,000	233	**27.6**	20.5-34.7	476	**25.1**	20.4-29.8	709	**26.1**	22.1-30.1
$15,000 - 24,999	373	**20.7**	15.6-25.7	555	**19.6**	15.7-23.5	928	**20.1**	16.9-23.2
$25,000 - 34,999	256	**12.9**	7.9-18.0	314	**15.5**	10.5-20.5	570	**14.1**	10.6-17.7
$35,000 - 49,999	289	**7.1**	3.5-10.7	338	**14.4**	9.9-18.8	627	**10.6**	7.8-13.5
$50,000 - 74,999	261	**8.4**	4.0-12.7	404	**8.9**	5.4-12.4	665	**8.6**	5.9-11.4
$75,000+	435	**5.1**	2.3-7.9	472	**6.0**	3.4-8.6	907	**5.5**	3.6-7.5

* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 5.

Health Care Satisfaction

Definition

Responding "Very Satisfied" to the question "In general, how satisfied are you with the health care you received?"
Responding "Somewhat Satisfied" to the question "In general, how satisfied are you with the health care you received?"
Responding "Not at All Satisfied" to the question "In general, how satisfied are you with the health care you received?"

Prevalence

Very Satisfied: **56.3%** (95% CI: 54.7-57.9)
Somewhat Satisfied: **38.4%** (95% CI: 36.9-40.0)
Not at All Satisfied: **5.3%** (95% CI: 4.5-6.1)
Because this is part of a state added optional module and complete national data are not available, a U.S. comparison was not conducted.

Gender

Very Satisfied:
Men: 53.2% (95% CI: 50.8-55.7)
Women: 59.1% (95% CI: 57.1-61.1)
Somewhat Satisfied:
Men: 39.7 % (95% CI: 37.3-42.1)
Women: 37.3% (95% CI: 35.3-39.2)
Not at All Satisfied:
Men: 7.1% (95% CI: 5.6-8.5)
Women: 3.6% (95% CI: 2.8-4.4)
Women had a significantly higher prevalence of being very satisfied with health care. There was no gender difference for somewhat satisfied with health care. Men had a significantly higher prevalence of not at all satisfied with health care than women.

Age

Those 65 and over had the highest prevalence of being very satisfied with health care (68.8%), significantly higher than all other age groups. Those 18-24 had the highest prevalence of not at all satisfied with health care (8.3%), significantly higher than those over 65.

Education

The prevalence of very satisfied with health care was significantly higher among those with a college degree (67.2%) than all other educational attainment levels. The prevalence of not at all satisfied with health care was significantly higher among those with less than a high school education (10.0%) than among all other educational attainment levels.

Household Income

The prevalence of very satisfied with health care was significantly higher among those with income of more than $75,000 (65.6%) than among those with an income less than $35,000. The prevalence of not at all satisfied with health care was significantly higher among those with an income less than $15,000 (10.7%) than among all income brackets making $25,000 or more.

Table 2.7 Health Care Satisfaction by Demographic Characteristics: WVBRFSS, 2013

Characteristic		Very Satisfied		Somewhat Satisfied		Not at All Satisfied	
	# Resp.	%	95% CI	%	95% CI	%	95% CI
TOTAL	5,630	**56.3**	54.7-57.9	**38.4**	36.9-40.0	**5.3**	4.5-6.1
Males	2,325	**53.2**	50.8-55.7	**39.7**	37.3-42.1	**7.1**	5.6-8.5
Females	3,305	**59.1**	57.1-61.1	**37.3**	35.3-39.2	**3.6**	2.8-4.4
Age							
18-24	277	**52.2**	45.5-58.9	**39.5**	32.9-46.1	**8.3**	4.5-12.2
25-34	529	**46.7**	41.9-51.6	**45.4**	40.7-50.2	**7.8**	4.8-10.8
35-44	731	**51.1**	47.1-55.2	**41.4**	37.4-45.5	**7.4**	5.2-9.6
45-54	985	**51.3**	47.8-54.8	**42.4**	38.9-45.9	**6.3**	4.6-8.1
55-64	1,319	**59.7**	56.7-62.8	**36.6**	33.6-39.6	**3.7**	2.5-4.9
65+	1,750	**68.8**	66.3-71.3	**29.8**	27.4-32.3	**1.4**	0.8-2.0
Education							
Less than H.S.	706	**51.6**	47.2-56.1	**38.4**	34.1-42.7	**10.0**	7.0-12.9
H.S. or G.E.D.	2,174	**54.7**	52.2-57.2	**40.0**	37.5-32.4	**5.3**	4.0-6.6
Some Post-H.S.	1,350	**54.6**	51.5-57.8	**41.4**	38.3-44.5	**4.0**	2.7-5.3
College Graduate	1,386	**67.2**	64.4-70.0	**30.2**	27.5-33.0	**2.6**	1.7-3.5
Income							
Less than $15,000	751	**44.0**	39.7-48.4	**45.3**	40.9-49.7	**10.7**	7.5-13.9
$15,000 - 24,999	945	**50.3**	46.5-54.0	**43.1**	39.4-46.9	**6.6**	4.5-8.6
$25,000 - 34,999	616	**56.5**	51.7-61.3	**38.5**	33.7-43.3	**5.0**	2.6-7.3
$35,000 - 49,999	669	**59.0**	54.6-63.5	**37.2**	32.8-41.6	**3.7**	1.9-5.6
$50,000 - 74,999	720	**62.2**	58.0-66.3	**35.7**	31.6-39.8	**2.2**	1.0-3.4
$75,000+	988	**65.6**	62.0-69.3	**31.3**	27.8-34.9	**3.0**	1.4-4.7

Long-Term Medical Bills

Definition

Responding "Yes" to the question "Do you currently have any medical bills that are being paid off over time?"

Prevalence

WV: 30.8% (95% CI: 29.3-32.2)
Because this is part of a state added optional module and complete national data are not available, a U.S. comparison was not conducted.

Gender

Men: 27.0% (95% CI: 24.8-29.1)
Women: 34.4% (95% CI: 32.4-36.3)
Women had a significantly higher prevalence of paying off medical bills over time than men.

Race/Ethnicity

White, Non-Hispanic: 30.7% (95% CI: 29.3-32.2)
Black, Non-Hispanic: *33.6% (95% CI: 22.9-44.2)
Other, Non-Hispanic: *19.8% (95% CI: 6.5-33.0)
Multiracial, Non-Hispanic: *42.3% (95% CI: 29.3-55.3)
Hispanic: *29.4% (95% CI: 14.4-44.4)
There were no racial/ethnic differences in the prevalence of paying off medical bills over time.
* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 5.

Age

Those aged 35-44 had the highest prevalence of paying off medical bills over time (44.1%), significantly higher than all older age groups and those 18-24.

Education

The prevalence of paying off medical bills over time was highest in those with some college education (34.8%), significantly higher than those with a college degree (25.8%).

Household Income

The prevalence of paying off bills over time decreased as income levels increased with the highest prevalence being among those earning less than $15,000 annually (39.4%) and the lowest prevalence being among those earning more than $75,000 annually (25.0%), a significant difference.

Table 2.8 Long-Term Medical Bills by Demographic Characteristics: WVBRFSS, 2013

Characteristic	Men			Women			Total		
	# Resp.	%	95% CI	# Resp.	%	95% CI	# Resp.	%	95% CI
TOTAL	2,412	**27.0**	24.8-29.1	3,389	**34.4**	32.4-36.3	5,801	**30.8**	29.3-32.2
Age									
18-24	127	**26.8**	18.6-35.1	160	**33.5**	25.5-41.6	287	**30.1**	24.3-35.9
25-34	224	**30.7**	24.0-37.3	338	**47.4**	41.5-53.3	562	**39.0**	34.5-43.5
35-44	335	**38.5**	32.7-44.2	435	**49.7**	44.4-54.9	770	**44.1**	40.2-48.0
45-54	456	**30.6**	25.7-35.5	562	**40.5**	35.9-45.0	1,018	**35.6**	32.3-38.9
55-64	585	**26.2**	22.2-30.2	773	**30.7**	27.0-34.5	1,358	**28.5**	25.7-31.2
65+	671	**12.7**	9.6-15.8	1,094	**16.5**	13.9-19.2	1,765	**14.8**	12.8-16.9
Education									
Less than H.S.	342	**29.5**	23.8-35.2	394	**32.8**	27.3-38.3	736	**31.0**	27.1-35.0
H.S. or G.E.D.	932	**27.5**	24.1-30.8	1324	**32.6**	29.6-35.6	2,256	**30.0**	27.8-32.3
Some Post-H.S.	514	**28.0**	23.4-32.6	864	**40.3**	36.4-44.1	1,378	**34.8**	31.9-37.8
College Graduate	620	**21.0**	17.2-24.8	796	**30.2**	26.4-34.0	1,416	**25.8**	23.1-28.5
Income									
Less than $15,000	264	**35.8**	28.7-43.0	520	**42.1**	36.9-47.3	784	**39.4**	35.2-43.7
$15,000 - 24,999	425	**30.4**	25.1-35.6	612	**39.9**	35.2-44.6	1,037	**35.3**	31.7-38.8
$25,000 - 34,999	297	**29.6**	23.5-35.8	337	**34.5**	28.4-40.6	634	**31.8**	27.5-36.2
$35,000 - 49,999	328	**26.1**	20.6-31.6	366	**37.4**	31.6-43.2	694	**31.4**	27.4-35.5
$50,000 - 74,999	297	**23.1**	17.6-28.7	432	**35.6**	30.4-40.8	729	**29.9**	26.1-33.7
$75,000+	487	**20.8**	16.3-25.2	516	**30.1**	25.4-34.8	1,003	**25.0**	21.7-28.3

* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 5.

CHAPTER 3: PHYSICAL ACTIVITY

No Leisure-Time Physical Activity or Exercise

Definition

Responding "No" to the question "During the past month, other than your regular job, did you participate in any physical activities or exercise such as running, calisthenics, golf, gardening, or walking for exercise?"

Prevalence

WV: 31.4% (95% CI: 30.0-32.9)
U.S.: 26.6% (95% CI: 26.3-26.8)
The prevalence of physical inactivity was significantly higher in West Virginia than in the U.S. West Virginia ranked the 9th highest among 53 BRFSS participants.

Gender

Men: 29.4% (95% CI: 27.2-31.6)
Women: 33.4% (95% CI: 31.5-35.3)
There was no gender difference in the prevalence of physical inactivity.

Race/Ethnicity

White, Non-Hispanic: 31.9% (95% CI: 30.4-33.4)
Black, Non-Hispanic: 26.4% (95% CI: 16.5-36.4)
Other, Non-Hispanic: *14.8% (95% CI: 2.5-27.1)
Multiracial, Non-Hispanic: 30.4% (95% CI: 18.8-41.9)
Hispanic: *26.8% (95% CI: 12.2-41.3)
White, Non-Hispanics had a significantly higher prevalence of physical inactivity than Other, Non-Hispanics.
* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 5.

Age

In general, the prevalence of physical inactivity increased with age. The prevalence of physical inactivity among persons aged 65 and older was significantly higher than the prevalence among those aged less than 45.

Education

The prevalence of physical inactivity was significantly different for all education groups. About half of those lacking a high school education (47.5%) engaged in no physical activity whereas only 18.6% of college graduates were physically inactive.

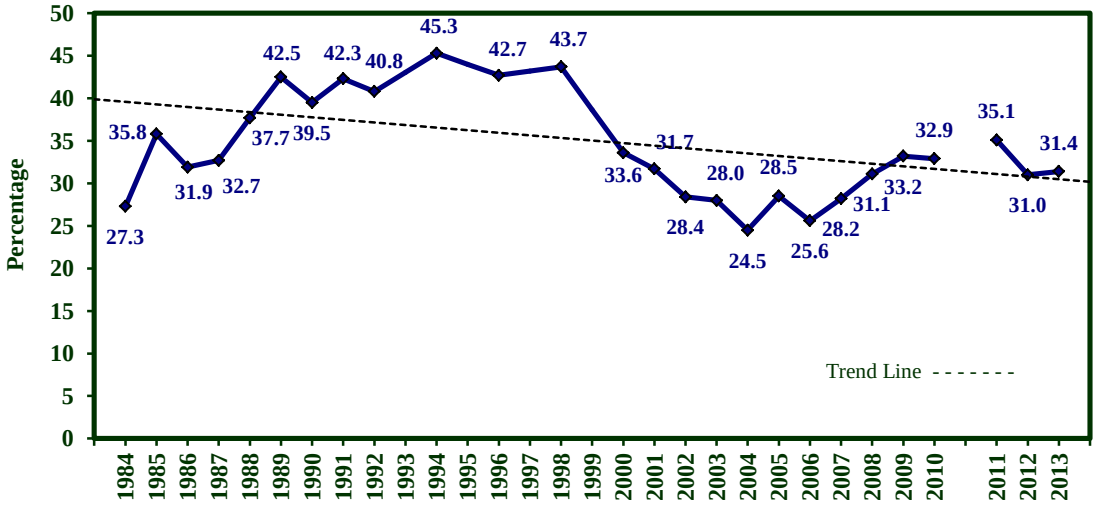
Household Income

In general, the prevalence of physical inactivity declined with increasing income levels. The prevalence of physical inactivity was significantly higher among adults with incomes of less than $15,000 (38.8%) than among persons with incomes in excess of $75,000 (21.9%).

Table 3.1 No Leisure-Time Physical Activity or Exercise by Demographic Characteristics: WVBRFSS, 2013

Characteristic	Men			Women			Total		
	# Resp.	%	95% CI	# Resp.	%	95% CI	# Resp.	%	95% CI
TOTAL	2,408	**29.4**	27.2-31.6	3,361	**33.4**	31.5-35.3	5,769	**31.4**	30.0-32.9
Age									
18-24	129	**16.8**	9.8-23.7	163	**20.7**	13.5-27.9	292	**18.7**	13.7-23.7
25-34	231	**27.2**	20.7-33.7	338	**21.9**	17.1-26.7	569	**24.6**	20.5-28.7
35-44	335	**29.2**	23.7-34.7	432	**29.6**	24.8-34.4	767	**29.4**	25.7-33.0
45-54	454	**32.4**	27.5-37.3	554	**36.9**	32.4-41.4	1,008	**34.6**	31.3-38.0
55-64	580	**35.5**	31.0-39.9	767	**35.6**	31.7-39.5	1,347	**35.5**	32.6-38.5
65+	668	**30.8**	26.6-35.0	1,078	**44.4**	41.1-47.8	1,746	**38.4**	35.7-41.1
Education									
Less than H.S.	345	**44.5**	38.3-50.7	386	**51.2**	45.1-57.2	731	**47.5**	43.2-51.9
H.S. or G.E.D.	920	**31.8**	28.3-35.2	1,298	**36.0**	33.1-38.9	2,218	**33.9**	31.6-36.2
Some Post-H.S.	520	**22.7**	18.7-26.7	868	**27.4**	24.1-30.7	1,388	**25.3**	22.7-27.9
College Graduate	619	**15.2**	12.1-18.3	799	**21.7**	18.4-25.0	1,418	**18.6**	16.3-20.9
Income									
Less than $15,000	265	**36.2**	29.2-43.1	517	**40.8**	35.7-45.8	782	**38.8**	34.7-43.0
$15,000 - 24,999	421	**35.3**	29.9-40.8	607	**38.7**	34.1-43.2	1,028	**37.1**	33.5-40.6
$25,000 - 34,999	299	**31.0**	24.9-37.1	336	**31.7**	25.6-37.8	635	**31.3**	26.9-35.6
$35,000 - 49,999	325	**28.7**	22.9-34.5	363	**29.8**	24.4-35.2	688	**29.2**	25.2-33.2
$50,000 - 74,999	299	**27.7**	21.8-33.6	427	**27.5**	22.7-32.3	726	**27.6**	23.9-31.4
$75,000+	493	**21.5**	17.1-25.9	521	**22.3**	18.1-26.6	1,014	**21.9**	18.8-24.9

Figure 3.1 No Leisure-Time Physical Activity or Exercise by Year: WVBRFSS, 1984-2013



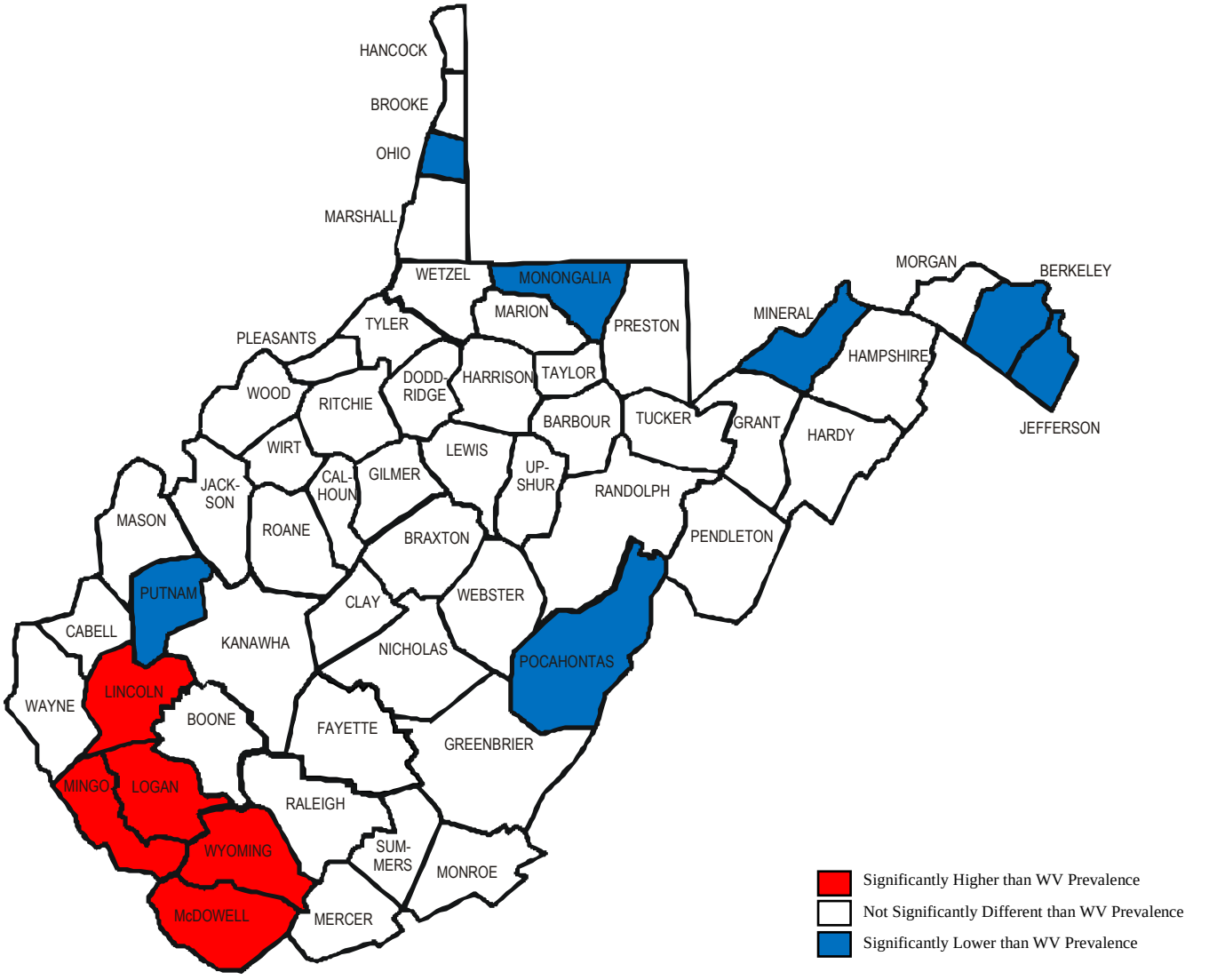
NOTE: Data are not available for the years 1993, 1995, 1997, and 1999.

*Due to changes in sample composition and weighting methodology, 2011-2013 results are not directly comparable to previous years.

Figure 3.2 No Leisure-Time Physical Activity or Exercise by County: WVBRFSS, 2009-2013

U.S. Prevalence (2011) – 25.7%

WV Prevalence (2009-2013) – 32.7%
(Significantly Higher than U.S.)



County prevalence estimates are listed in Appendix B.
See an explanation of the county-level data under County-Level Data on page 6.

Physical Activity Levels

Definition

Highly active is defined as doing enough physical activity to meet the 300 minute aerobic recommendation.
Active is defined as doing 150-300 minutes of aerobic physical activity.
Insufficiently active is defined as doing insufficient physical activity (11-149 minutes).
Inactive is defined as doing no physical activity.

Prevalence

Highly Active: **31.3%** (95% CI: 29.8-32.8)
Active: **15.9%** (95% CI: 14.7-17.0)
Insufficiently Active: **19.2%** (95% CI: 17.9-20.5)
Inactive: **33.6%** (95% CI: 32.1-35.1)
U.S. comparison was not conducted on physical activity levels.

Gender

Highly Active:
Men: 35.0% (95% CI: 32.6-37.3)
Women: 27.8% (95% CI: 25.9-29.6)
Men had a significantly higher prevalence of being highly active than women.
Active:
Men: 14.8% (95% CI: 13.1-16.5)
Women: 16.9% (95% CI: 15.3-18.5)
There was no gender difference in the prevalence of the active level.
Insufficiently Active:
Men: 18.7% (95% CI: 16.8-20.7)
Women: 19.7% (95% CI: 18.0-21.3)
There was no gender difference in the prevalence of the inactive level.
Inactive:
Men: 31.5% (95% CI: 29.2-33.8)
Women: 35.6% (95% CI: 33.7-37.6)
There was no gender difference in the prevalence of the inactive level.

Age

The prevalence of highly active, active, and insufficiently active were highest among those aged 18-24 and lowest among those aged 65 and older. The prevalence of inactive was highest among those aged 65 and older and lowest among those aged 18-24.

Education

The prevalence of highly active, active, and insufficiently active were highest among those with a college degree and lowest among those with less than a high school education. The prevalence of inactive was highest among those with less than a high school education and lowest among those with a college degree.

Household Income

In general, the prevalence of highly active, active, and insufficiently active increased with increasing annual household income and the prevalence of inactive decreased with increasing income.

Table 3.2 Physical Activity Levels by Demographic Characteristics: WVBRFSS, 2013

Characteristic		Highly Active		Active		Insufficiently Active		Inactive	
	# Resp.	%	95% CI	%	95% CI	%	95% CI	%	95% CI
TOTAL	5,549	**31.3**	29.8-32.8	**15.9**	14.7-17.0	**19.2**	17.9-20.5	**33.6**	32.1-35.1
Sex									
Males	2,331	**35.0**	32.6-37.3	**14.8**	13.1-16.5	**18.7**	16.8-20.7	**31.5**	29.2-33.8
Females	3,218	**27.8**	25.9-29.6	**16.9**	15.3-18.5	**19.7**	18.0-21.3	**35.6**	33.7-37.6
Age									
18-24	282	**34.8**	28.4-41.3	**20.5**	15.2-25.8	**24.4**	18.8-30.0	**20.2**	15.0-25.5
25-34	545	**31.7**	27.2-36.2	**17.5**	14.1-20.9	**23.8**	19.8-27.8	**27.0**	22.7-31.3
35-44	749	**30.7**	27.0-34.4	**16.1**	13.2-19.0	**22.2**	18.9-25.6	**30.9**	27.2-34.7
45-54	981	**31.3**	28.1-34.6	**14.2**	11.8-16.6	**18.0**	15.4-20.7	**36.4**	33.0-39.8
55-64	1,310	**28.7**	26.0-31.5	**14.5**	12.3-16.6	**19.2**	16.8-21.7	**37.6**	34.6-40.6
65+	1,674	**31.9**	29.3-34.4	**14.8**	12.9-16.8	**12.3**	10.5-14.1	**41.0**	38.3-43.8
Education									
Less than H.S.	695	**24.6**	20.6-28.7	**9.8**	7.1-12.5	**14.9**	11.9-17.9	**50.6**	46.2-55.1
H.S. or G.E.D.	2,131	**32.5**	30.1-35.0	**14.7**	12.9-16.5	**17.0**	15.0-18.9	**35.8**	33.5-38.2
Some Post-H.S.	1,334	**32.4**	29.4-35.2	**17.5**	15.1-20.0	**22.5**	19.7-25.3	**27.6**	24.9-30.3
College Graduate	1,376	**33.8**	30.8-36.4	**22.3**	19.8-24.9	**23.8**	21.1-26.5	**20.2**	17.8-22.6
Income									
Less than $15,000	757	**27.4**	23.4-31.4	**10.7**	8.1-13.2	**20.3**	16.6-24.0	**41.6**	37.3-45.8
$15,000 - 24,999	981	**27.5**	24.1-30.8	**14.3**	11.6-17.0	**18.5**	15.5-21.5	**39.7**	36.1-43.3
$25,000 - 34,999	610	**33.4**	28.8-37.9	**14.1**	10.8-17.4	**18.4**	14.8-22.0	**34.2**	29.6-38.8
$35,000 - 49,999	665	**34.3**	30.0-38.5	**16.4**	13.2-19.6	**18.8**	15.1-22.4	**30.5**	26.5-34.6
$50,000 - 74,999	710	**29.9**	26.0-33.8	**20.7**	17.1-24.2	**20.5**	17.1-23.8	**29.0**	25.1-32.8
$75,000+	987	**35.4**	31.6-39.2	**19.4**	16.5-22.3	**21.4**	18.3-24.5	**23.8**	20.6-27.0

Physical Activity Guidelines

Definition

Met aerobic activity guideline only is defined as doing 150 minutes or more of aerobic activity per week but doing less than two days of muscle strengthening activities.
Met muscle strengthening guideline only is defined as doing physical activity or exercises to strengthen the muscles two or more days per week but less than 150 minutes of aerobic activity per week.
Met both aerobic and muscle strengthening guidelines is defined as doing 150 minutes or more of aerobic activity and doing muscle strengthening activities two or more days per week.
Did not meet aerobic or muscle strengthening activity recommendation is defined as doing less than 150 minutes of aerobic activity and doing muscle strengthening activities less than two days per week

Prevalence

Met aerobic guidelines only:
34.9% (95% CI: 33.4-36.4)
Met muscle strengthening guidelines only:
6.2% (95% CI: 5.3-7.0)
Met both aerobic and muscle strengthening guidelines:
12.7% (95% CI: 11.6-13.9)
Did not meet either aerobic or muscle strengthening recommendations:
46.2% (95% CI: 44.6-47.8)
U.S. comparison was not conducted on physical activity recommendations.

Gender

Met aerobic guideline only:
Men: 35.1% (95% CI: 32.8-37.4)
Women: 34.8% (95% CI: 32.8-36.8)
There was no gender difference in meeting aerobic guidelines only.
Met muscle strengthening guideline only:
Men: 7.5% (95% CI: 6.0-8.9)
Women: 4.9% (95% CI: 4.0-5.8)
Men had a significantly higher prevalence of meeting muscle strengthening guideline only than women.
Met both aerobic and muscle strengthening guidelines:
Men: 15.0% (95% CI: 13.1-16.9)
Women: 10.5% (95% CI: 9.3-11.8)
Men had a significantly higher prevalence of meeting both aerobic and muscle strengthening guidelines than women.
Did not meet either aerobic or muscle strengthening guidelines:
Men: 42.5% (95% CI: 40.1-44.9)
Women: 49.8% (95% CI: 47.7-51.8)
Women had a significantly higher prevalence of not meeting either aerobic or muscle strengthening activity recommendations than men.

Age

The prevalence of meeting both aerobic and muscle strengthening guidelines and meeting muscle strengthening guidelines only decreased with age. The prevalence of didn't meet either aerobic or muscle strengthening guidelines increased with age. The prevalence of meeting muscle strengthening guidelines only was significantly higher in those 18-24 (11.1%) than among those 55 and over.

Education

The prevalence of meeting both aerobic and muscle strengthening guidelines, meeting aerobic guideline only, and meeting muscle strengthening guideline only all increased with increasing education attainment levels. Conversely, the prevalence of didn't meet either aerobic or muscle strengthening guidelines decreased significantly with nearly each higher educational attainment level.

Household Income

The prevalence of met both aerobic and muscle strengthening guidelines increased with income. Generally, the prevalence of met aerobic strengthening guideline only and met muscle strengthening guideline only increased with income level. The prevalence of didn't meet either aerobic or muscle strengthening guidelines decreased with income level.

Table 3.3 Physical Activity Guidelines by Demographic Characteristics WVBRFSS, 2013

Characteristic		Met Aerobic Guidelines Only		Met Muscle Strengthening Guidelines Only		Met Both Aerobic and Muscle Strengthening Guidelines		Didn't Meet Either Aerobic or Muscle Strengthening Guidelines	
	# Resp.	%	95% CI	%	95% CI	%	95% CI	%	95% CI
TOTAL	5,566	**34.9**	33.4-36.4	**6.2**	5.3-7.0	**12.7**	11.6-13.9	**46.2**	44.6-47.8
Sex									
Male	2,338	**35.1**	32.8-37.4	**7.5**	6.0-8.9	**15.0**	13.1-16.9	**42.5**	40.0-44.9
Female	3,228	**34.8**	32.8-36.8	**4.9**	4.0-5.8	**10.5**	9.3-11.8	**49.8**	47.7-51.8
Age									
18-24	285	**32.6**	26.4-38.7	**11.1**	6.7-15. 6	**23.3**	17.5-29.2	**33.0**	27.0-39.0
25-34	548	**30.6**	26.2-35.0	**9.1**	6.4-11.9	**19.2**	15.5-22.8	**41.1**	36.4-45.8
35-44	751	**36.2**	32.3-40.0	**6.3**	4.4-8.3	**10.9**	8.5-13.3	**46.5**	42.6-50.5
45-54	987	**35.8**	32.4-39.1	**5.4**	3.9-7.0	**10.4**	8.3-12.5	**48.4**	44.9-51.9
55-64	1,314	**33.6**	30.7-36.5	**4.3**	3.1-5.5	**10.0**	8.2-11.8	**52.1**	49.0-55.2
65+	1,674	**38.8**	36.1-41.5	**3.6**	2.6-4.5	**8.3**	6.8-9.7	**49.3**	46.6-52.1
Education									
Less than H.S.	695	**27.9**	23.8-31.9	**4.0**	2.1-5.8	**7.2**	4.3-10.0	**61.0**	56.5-65.5
H.S. or G.E.D.	2,138	**36.9**	34.5-39.4	**5.0**	3.8-6.2	**10.7**	8.9-12.6	**47.3**	44.8-49.8
Some Post-H.S.	1,338	**34.5**	31.6-37.5	**7.8**	5.9-9.8	**15.7**	13.3-18.1	**41.9**	38.8-45.0
College Graduate	1,383	**38.0**	35.0-40.9	**8.5**	6.7-10.3	**18.4**	16.1-20.8	**35.0**	32.2-38.0
Income									
Less than $15,000	761	**30.7**	26.6-34.7	**5.4**	3.1-7.7	**7.7**	5.3-10.1	**56.2**	51.9-60.6
$15,000 - 24,999	982	**32.4**	28.9-35.9	**5.8**	4.0-7.6	**9.8**	7.5-12.1	**52.1**	48.3-55.9
$25,000 - 34,999	616	**37.8**	33.2-42.7	**4.7**	2.4-7.0	**10.3**	7.4-13.2	**47.2**	42.4-51.9
$35,000 - 49,999	670	**36.5**	32.3-40.7	**5.2**	3.1-7.3	**14.7**	11.2-18.2	**43.6**	39.2-48.0
$50,000 - 74,999	709	**36.0**	31.9-40.0	**6.7**	4.6-8.9	**15.0**	11.8-18.1	**42.4**	38. 2-46.5
$75,000+	993	**36.7**	33.1-40.4	**8.4**	6.2-10.6	**18.6**	15.3-21.9	**36. 3**	32.7-39.9

CHAPTER 4: NUTRITION

Fruit and Vegetable Consumption

Definition

Consuming fewer than five servings of fruits and vegetables on a daily basis in the past month.

Prevalence

WV: 90.2% (95% CI: 89.2-91.1)
U.S.: 82.9% (95% CI: 82.6-83.1)
The prevalence consuming fewer than five servings of fruits and vegetables daily was significantly higher in West Virginia than in the U.S. West Virginia ranked the 3rd highest among 53 BRFSS participants.

Gender

Men: 91.5% (95% CI: 90.1-92.8)
Women: 88.9% (95% CI: 87.6-90.3)
There were no gender differences in the prevalence of consuming fewer than 5 servings of fruits and vegetables daily.

Race/Ethnicity

White, Non-Hispanic 90.3% (95% CI: 89.3-91.3)
Black, Non-Hispanic: 89.8% (95% CI: 82.8-97.0)
Other, Non-Hispanic: *85.2% (95% CI: 74.4-96.0)
Multiracial, Non-Hispanic: *82.4% (95% CI: 70.2-94.6)
Hispanic: *90.8% (95% CI: 83.4-98.2)
There was no race/ethnicity difference in the prevalence of consuming fewer than five servings of fruits and vegetables daily.
* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 5.

Age

There were no age differences in the prevalence of consuming fewer than 5 servings of fruits and vegetables daily.

Education

The prevalence of consuming fewer than 5 servings of fruits and vegetables was highest among those with less than a high school degree (93.9%), significantly higher than those with some post high school education or greater.

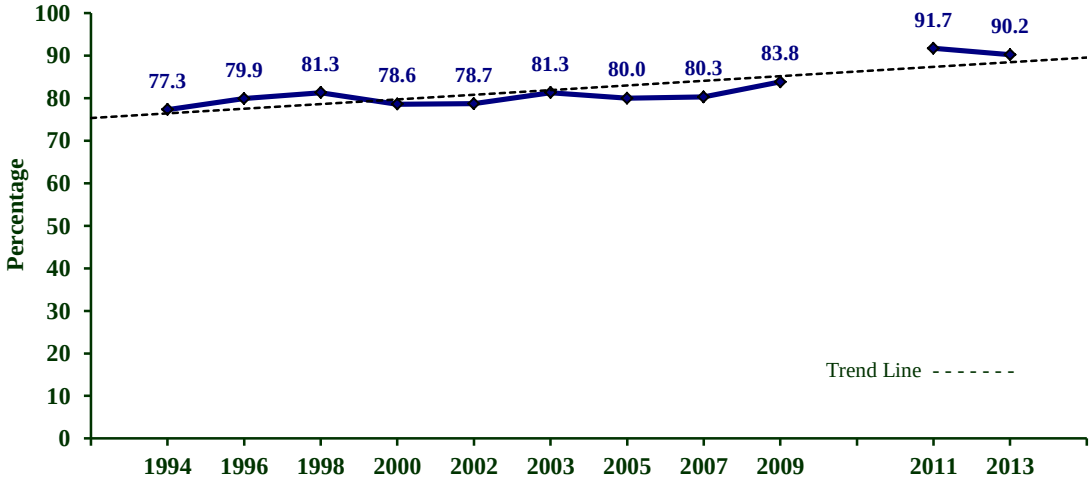
Household Income

In general, the prevalence of consuming fewer than 5 servings of fruits and vegetables daily declined with increasing income levels. The prevalence of physical inactivity was significantly higher among adults with incomes of less than $15,000 (93.1%) than among persons with incomes in of $50,000-$74,999 (87.0%).

Table 4.1 Consumption of Fewer than Five Servings of Fruits and Vegetables by Demographic Characteristics: WVBRFSS, 2013

Characteristic	Men			Women			Total		
	# Resp.	%	95% CI	# Resp.	%	95% CI	# Resp.	%	95% CI
TOTAL	2,253	**91.5**	90.1-92.8	3,151	**88.9**	87.6-90.3	5,404	**90.2**	89.2-91.1
Age									
18-24	122	**90.0**	84.5-95.6	154	**86.6**	80.4-92.9	276	**88.4**	84.2-92.5
25-34	224	**92.2**	88.6-95.7	325	**87.0**	83.0-91.0	549	**89.6**	87.0-92.3
35-44	324	**91.1**	87.8-94.3	413	**90.2**	86.9-93.4	737	**90.6**	88.3-92.9
45-54	429	**91.9**	88.7-95.0	537	**90.1**	87.2-93.0	966	**91.0**	88.9-93.1
55-64	549	**91.6**	89.0-94.3	728	**89.3**	86.8-91.8	1,277	**90.5**	88.7-92.3
65+	597	**91.6**	89.0-94.2	971	**89.2**	86.9-91.5	1,568	**90.2**	88.5-92.0
Education									
Less than H.S.	305	**93.8**	91.0-96.7	342	**94.0**	90.7-97.3	647	**93.9**	91.8-96.1
H.S. or G.E.D.	849	**92.3**	90.1-94.5	1,215	**91.3**	89.4-93.2	2,064	**91.8**	90.3-93.2
Some Post-H.S.	503	**90.3**	87.3-93.3	827	**85.6**	82.7-88.5	1,330	**87.7**	85.6-89.8
College Graduate	593	**88.8**	86.1-91.6	762	**85.0**	82.1-87.9	1,355	**86.8**	84.8-88.8
Income									
Less than $15,000	243	**93.6**	90.0-97.3	474	**92.7**	89.8-95.7	717	**93.1**	90.8-95.4
$15,000 - 24,999	388	**93.7**	90.8-96.5	575	**91.1**	88.3-93.9	963	**92.3**	90.3-94.3
$25,000 - 34,999	283	**91.3**	87.2-95.5	325	**87.6**	82.9-92.3	608	**89.7**	86.6-92.8
$35,000 - 49,999	306	**90.1**	86.2-94.0	350	**90.1**	86.2-94.1	656	**90.1**	87.4-92.9
$50,000 - 74,999	289	**90.5**	86.4-94.6	410	**83.9**	80.0-87.9	699	**87.0**	84.2-89.9
$75,000+	475	**90.6**	87.6-93.6	511	**86.6**	83.1-90.0	986	**88.7**	86.4-91.0

Figure 4.1 Consumption of Fewer than Five Servings of Fruits and Vegetables by Year: WVBRFSS, 1984-2013



NOTE: Data are not available for the years 1993, 1995, 1997, and 1999.

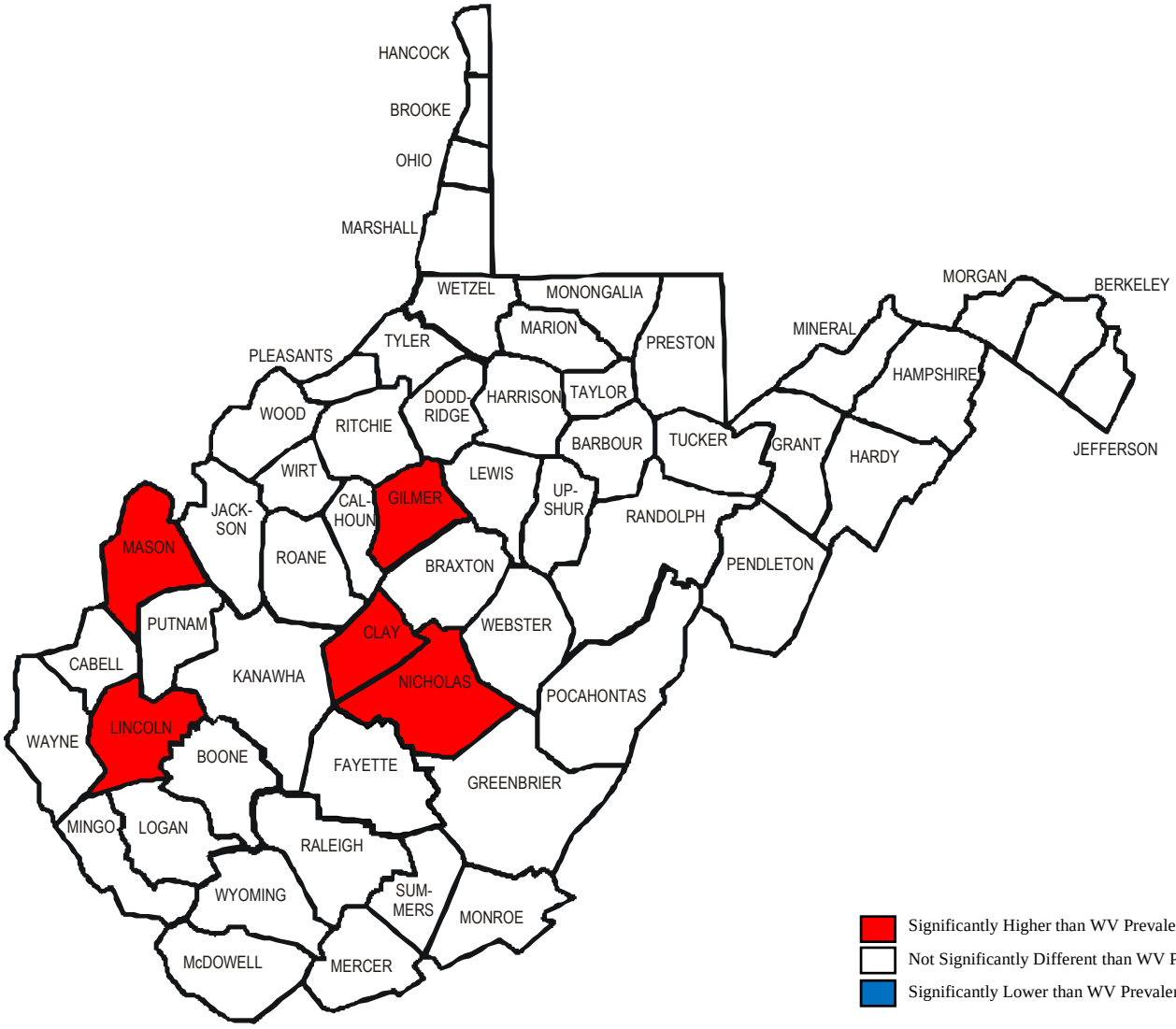
*Due to changes in sample composition and weighting methodology, 2011-2013 results are not directly comparable to previous years.

Figure 4.2 Consumption of Fewer than Five Servings of Fruits and Vegetables by County: WVBRFSS, 2005, 2007, 2009, 2011, 2013

U.S. Prevalence (2009) – 76.3%

WV Prevalence (2005, 2007, 2009, 2011, 2013) – 85.1%

(Significantly Higher than U.S.)



County prevalence estimates are listed in Appendix B.
See an explanation of the county-level data under County-Level Data on page 6.

Sugar Sweetened Beverage Consumption-Soda or Pop

Definition

Consuming one or more regular sodas or pops that contain sugar daily in the past 30 days (does not include diet soda or diet pop).

Prevalence

WV: 27.7% (95% CI: 26.3-29.2)
Because this question is part of a state selected optional module and complete national data are not available, a U.S. comparison was not conducted.

Gender

Men: 31.5% (95% CI: 29.2-33.8)
Women: 24.2% (95% CI: 22.3-26.1)
Men had a significantly higher prevalence of drinking one or more pops/sodas daily than women were.

Race/Ethnicity

White, Non-Hispanic: 27.8%% (95% CI: 26.3-29.3)
Black, Non-Hispanic: *28.5% (95% CI: 17.3-39.6)
Other, Non-Hispanic: *14.6% (95% CI: 2.6-26.7)
Multiracial, Non-Hispanic: *39.4% (95% CI: 26.5-52.3)
Hispanic: *23.5% (95% CI: 9.1-37.8)
There were no race/ethnicity differences in the prevalence of pop/soda consumption.
* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 5.

Age

The prevalence of drinking one or more pops/sodas daily was highest in those aged 25-34 (42.3%) and decreased significantly with each successive age group beyond those aged 35-44. The prevalence of drinking one or more pops/sodas daily was lowest for those 65 and older (12.6%), significantly lower than all other age groups.

Education

The prevalence of drinking one or more pop/sodas daily was highest among those with less than a high school education (34.1%) and lowest among those with a college degree (14.8%), significantly lower than all other educational attainment levels.

Household Income

The prevalence of drinking one or more pops/sodas daily was highest among those with an income less than $15,000 and lowest among those with an income of $50,000 or more, a significant difference.

Table 4.2 Consumption of One or More Sugar Sweetened Sodas/Pops Daily by Demographic Characteristics: WVBRFSS, 2013

Characteristic	Men			Women			Total		
	# Resp.	%	95% CI	# Resp.	%	95% CI	# Resp.	%	95% CI
TOTAL	2,366	**31.5**	29.2-33.8	3,296	**24.2**	22.3-26.1	5,662	**27.7**	26.3-29.2
Age									
18-24	123	**37.7**	28.5-47.0	153	**41.3**	32.3-50.3	276	**39.4**	32.9-46.0
25-34	218	**47.7**	40.3-55.1	325	**36.9**	31.0-42.8	543	**42.3**	37.6-47.1
35-44	326	**45.9**	39.9-51.9	425	**32.2**	27.1-37.2	751	**39.0**	35.1-43.0
45-54	450	**30.8**	25.8-35.7	550	**26.0**	21.8-30.2	1,000	**28.4**	25.1-31.6
55-64	577	**20.9**	17.1-24.6	758	**15.3**	12.4-18.3	1,335	**18.1**	15.7-20.4
65+	661	**15.7**	12.5-18.9	1,060	**10.1**	8.0-12.3	1,721	**12.6**	10.7-14.4
Education									
Less than H.S.	340	**32.8**	27.0-38.6	382	**35.6**	29.4-41.8	722	**34.1**	29.8-38.3
H.S. or G.E.D.	905	**37.3**	33.5-41.1	1,281	**25.1**	22.1-28.0	2,186	**31.2**	28.8-33.6
Some Post-H.S.	509	**30.5**	25.7-35.2	843	**23.5**	20.1-26.9	1,352	**26.6**	23.8-29.5
College Graduate	609	**16.6**	13.1-20.2	781	**13.2**	10.1-16.2	1,390	**14.8**	12.5-17.1
Income									
Less than $15,000	258	**38.8**	31.5-46.2	503	**33.1**	27.9-38.4	761	**35.6**	31.2-39.9
$15,000 - 24,999	415	**39.3**	33.5-45.0	593	**31.4**	26.7-36.1	1,008	**35.2**	31.5-39.0
$25,000 - 34,999	295	**27.0**	21.1-32.9	332	**19.9**	13.9-25.8	627	**23.8**	19.6-28.0
$35,000 - 49,999	322	**33.5**	27.2-39.8	357	**23.1**	17.7-28.6	679	**28.7**	24.4-32.9
$50,000 - 74,999	296	**26.1**	20.1-32.1	425	**16.3**	12.2-20.5	721	**20.9**	17.3-24.5
$75,000+	483	**24.9**	20.0-29.9	513	**19.3**	14.9-23.6	996	**22.4**	19.0-25.7

Sugar Sweetened Beverage Consumption-Fruit Drinks

Definition

Consuming one or more sweetened fruit drinks daily in the past 30 days (i.e. Kool aid, cranberry juice cocktail, lemonade, etc.).

Prevalence

WV: 21.6% (95% CI: 20.2-23.0)
Because this question is part of a state selected optional module and complete national data are not available, a U.S. comparison was not conducted.

Gender

Men: 25.2% (95% CI: 23.0-27.5)
Women: 18.1% (95% CI: 16.4-19.8)
Men had a significantly higher prevalence of drinking one or more sweetened fruit drinks daily than women.

Race/Ethnicity

White, Non-Hispanic 21.5% (95% CI: 20.0-22.9)
Black, Non-Hispanic: *24.1% (95% CI: 13.0-35.1)
Other, Non-Hispanic: *13.4% (95% CI: 2.6-24.2)
Multiracial, Non-Hispanic: *30.0% (95% CI: 16.6-43.4)
Hispanic: *22.6% (95% CI: 7.8-37.4)
There were no race/ethnicity differences in the prevalence of pop/soda consumption.
* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 5.

Age

The prevalence of drinking one or more sweetened fruit drinks daily was highest in those aged 18-24 (37.9%) and significantly decreased with age.

Education

The prevalence of drinking one or more sweetened fruit drinks daily was highest among those with less than a high school education (23.8%) and lowest among those with a college degree (14.2%), significantly lower than all other educational attainment levels.

Household Income

There was no difference in the prevalence of drinking one or more sweetened fruit drinks daily by household income.

Table 4.3 Consumption of One or More Sweetened Fruit Drinks Daily by Demographic Characteristics: WVBRFSS, 2013

Characteristic	Men			Women			Total		
	# Resp.	%	95% CI	# Resp.	%	95% CI	# Resp.	%	95% CI
TOTAL	2,362	**25.2**	23.0-27.5	3,302	**18.1**	16.4-19.8	5,664	**21.6**	20.2-23.0
Age									
18-24	124	**45.9**	36.2-55.7	153	**29.1**	20.9-37.2	277	**37.9**	31.4-44.4
25-34	217	**36.8**	29.8-43.9	328	**25.5**	20.0-31.0	545	**31.2**	26.7-35.6
35-44	326	**30.8**	25.2-36.4	422	**18.4**	14.3-22.5	748	**24.6**	21.1-28.1
45-54	450	**23.7**	19.1-28.2	551	**20.2**	16.4-24.0	1,001	**22.0**	19.0-24.9
55-64	576	**13.5**	10.3-16.6	761	**13.5**	10.7-16.3	1,337	**13.5**	11.4-15.6
65+	658	**13.0**	9.9-16.1	1,062	**10.9**	8.7-13.0	1,720	**11.8**	10.0-13.6
Education									
Less than H.S.	338	**24.1**	18.7-29.4	383	**23.5**	18.1-28.8	721	**23.8**	20.0-27.6
H.S. or G.E.D.	909	**28.4**	24.8-32.0	1,282	**18.5**	15.9-21.2	2,191	**23.5**	21.2-25.7
Some Post-H.S.	507	**26.2**	21.2-31.2	846	**18.6**	15.4-21.8	1,353	**22.0**	19.1-24.8
College Graduate	605	**17.1**	13.4-20.8	781	**11.6**	9.0-14.2	1,386	**14.2**	11.9-16.4
Income									
Less than $15,000	255	**25.6**	18.9-32.3	504	**22.4**	17.4-27.3	759	**23.7**	19.7-27.7
$15,000 - 24,999	415	**25.6**	20.3-30.9	596	**21.5**	17.3-25.7	1,011	**23.5**	20.1-26.9
$25,000 - 34,999	295	**28.6**	22.1-35.2	331	**15.9**	11.2-20.6	626	**22.9**	18.7-27.2
$35,000 - 49,999	319	**26.4**	20.3-32.6	358	**19.0**	14.0-23.9	677	**22.9**	18.9-27.0
$50,000 - 74,999	296	**20.4**	14.8-26.0	425	**18.3**	13.9-22.7	721	**19.3**	15.8-22.8
$75,000+	483	**23.0**	18.3-27.8	512	**11.6**	8.4-14.9	995	**17.8**	14.8-20.9

Sugar Sweetened Beverage Consumption-Pops/Sodas/Sweetened Fruit Drinks

Definition

Consuming one or more sugar sweetened pops/sodas or sweetened fruit drinks daily in the past 30 days (i.e. Kool Aid, cranberry juice cocktail, lemonade, etc.).

Prevalence

WV: 40.1% (95% CI: 38.5-41.7)
Because this question is part of a state selected optional module and complete national data are not available, a U.S. comparison was not conducted.

Gender

Men: 45.0% (95% CI: 42.6-47.5)
Women: 35.4% (95% CI: 33.4-37.5)
Men had a significantly higher prevalence of drinking one or more sugar sweetened pop/soda or sweetened fruit drinks daily than women.

Race/Ethnicity

White, Non-Hispanic 40.3% (95% CI: 38.7-41.9)
Black, Non-Hispanic: *37.1% (95% CI: 25.5-48.7)
Other, Non-Hispanic: *25.8% (95% CI: 11.2-40.4)
Multiracial, Non-Hispanic: *49.5% (95% CI: 37.1-61.9)
Hispanic: *38.2% (95% CI: 21.6-54.7)
There were no race/ethnicity differences in the prevalence of pop/soda consumption.
* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 5.

Age

The prevalence of drinking one or more sugar sweetened pops/sodas or sweetened fruit drinks daily was highest in those aged 18-24 (60.2%) and decreased significantly with each age group over the age of 44 with the lowest prevalence among those 65 and over.

Education

The prevalence of drinking one or more sugar sweetened pops/sodas or sweetened fruit drink daily was highest among those with less than a high school education (47.0%) and lowest among those with a college degree (24.8%), significantly lower than all other educational attainment levels.

Household Income

The prevalence of drinking one or more sweetened sugar sweetened pops/sodas or fruit drinks daily was highest among those with an income of $25,000-$34,999 (47.6%) which was significantly higher than those with an income of $50,000 or more.

Table 4.4 Consumption of One or More Sugar Sweetened Pops/Sodas or Sweetened Fruit Drinks Daily by Demographic Characteristics: WVBRFSS, 2013

Characteristic	Men			Women			Total		
	# Resp.	%	95% CI	# Resp.	%	95% CI	# Resp.	%	95% CI
TOTAL	2,357	**45.0**	42.6-47.5	3,291	**35.4**	33.4-37.5	5,648	**40.1**	38.5-41.7
Age									
18-24	123	**65.6**	56.4-74.9	153	**54.2**	45.4-63.1	276	**60.2**	53.7-66.6
25-34	218	**60.9**	53.7-68.1	327	**48.3**	42.3-54.3	545	**54.6**	49.9-59.3
35-44	326	**57.1**	51.2-63.0	422	**44.7**	39.3-50.0	748	**50.9**	46.9-54.9
45-54	449	**45.1**	39.8-50.3	551	**38.7**	34.2-43.3	1,000	**41.9**	38.4-45.4
55-64	575	**30.4**	26.2-34.6	758	**26.0**	22.4-29.5	1,333	**28.2**	25.4-30.9
65+	655	**26.2**	22.2-30.2	1,055	**19.3**	16.5-22.0	1,710	**22.3**	20.0-24.7
Education									
Less than H.S.	336	**46.9**	40.7-53.0	382	**47.2**	41.1-53.3	718	**47.0**	42.6-51.4
H.S. or G.E.D.	905	**52.0**	48.2-55.8	1,277	**36.8**	33.6-40.0	2182	**44.4**	41.9-46.9
Some Post-H.S.	508	**43.3**	38.1-48.4	845	**35.2**	31.4-39.0	1,353	**38.8**	35.7-42.0
College Graduate	605	**27.7**	23.4-32.0	778	**22.3**	18.7-25.9	1,383	**24.8**	22.1-27.6
Income									
Less than $15,000	256	**49.8**	42.3-57.3	502	**44.5**	39.1-49.9	758	**46.7**	42.3-51.2
$15,000 - 24,999	414	**52.3**	46.6-58.0	593	**43.1**	38.2-48.0	1,007	**47.6**	43.8-51.3
$25,000 - 34,999	295	**43.2**	36.4-50.0	332	**30.4**	24.0-36.7	627	**37.5**	32.7-42.2
$35,000 - 49,999	319	**48.6**	42.1-55.1	358	**36.9**	31.0-42.9	677	**43.1**	38.6-47.7
$50,000 - 74,999	296	**36.9**	30.4-43.4	425	**29.3**	24.2-34.4	721	**32.8**	28.7-36.9
$75,000+	483	**38.4**	33.0-43.9	511	**27.6**	22.9-32.4	994	**33.5**	29.8-37.2

Watching or Reducing Sodium or Salt Intake

Definition

Responding "Yes" to the question "Are you currently watching or reducing your sodium or salt intake?"

Prevalence

WV: 46.4% (95% CI: 44.8-47.9)
Because this question is part of a state selected optional module and complete national data are not available, a U.S. comparison was not conducted.

Gender

Men: 44.6% (95% CI: 42.3-47.0)
Women: 48.0% (95% CI: 46.0-50.0)
There was no gender difference in the prevalence of watching or reducing sodium or salt intake.

Race/Ethnicity

White, Non-Hispanic 46.0%% (95% CI: 44.5-47.6)
Black, Non-Hispanic: *53.9% (95% CI: 42.5-65.3)
Other, Non-Hispanic: *60.0% (95% CI: 43.6-76.4)
Multiracial, Non-Hispanic: *43.0% (95% CI: 31.1-54.8)
Hispanic: *45.6% (95% CI: 29.7-61.6)
There were no race/ethnicity differences in the prevalence of watching or reducing sodium or salt intake.
* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 5.

Age

The prevalence of watching or reducing sodium or salt intake increased with age with the highest prevalence among those 65 and older (64.9%), significantly higher than all other age groups.

Education

The prevalence of watching or reducing sodium or salt intake decreased with increasing educational attainment levels. It was highest in those with less than a high school education (52.0%), significantly higher than those with some post high school education (44.0%) or those with a college degree (43.4%).

Household Income

The prevalence of watching or reducing sodium or salt intake was highest in those with an income of $25,000-$34,999 (51.6%), significantly higher than those with an income of $75,000 or more.

Table 4.5 Watching or Reducing Sodium or Salt Intake by Demographic Characteristics: WVBRFSS, 2013

Characteristic	Men			Women			Total		
	# Resp.	%	95% CI	# Resp.	%	95% CI	# Resp.	%	95% CI
TOTAL	2,364	**44.6**	42.3-47.0	3,318	**48.0**	46.0-50.0	5,682	**46.4**	44.8-47.9
Age									
18-24	123	**16.0**	9.0-23.0	155	**25.0**	17.1-33.0	278	**20.4**	15.0-25.7
25-34	217	**35.3**	28.2-42.4	327	**30.7**	25.1-36.3	544	**33.0**	28.5-37.5
35-44	324	**34.8**	29.1-40.5	424	**38.0**	32.8-43.3	748	**36.4**	32.5-40.3
45-54	450	**49.4**	44.2-54.6	553	**50.7**	46.0-55.3	1,003	**50.0**	46.5-53.5
55-64	576	**52.6**	48.0-57.2	762	**56.8**	52.8-60.8	1,338	**54.7**	51.7-57.8
65+	663	**64.4**	60.2-68.6	1,071	**65.2**	62.0-68.4	1,734	**64.9**	62.3-67.4
Education									
Less than H.S.	340	**48.7**	42.5-54.8	386	**55.8**	49.7-61.8	726	**52.0**	47.6-56.3
H.S. or G.E.D.	910	**43.0**	39.3-46.8	1,292	**50.5**	47.3-53.6	2,202	**46.7**	44.3-49.2
Some Post-H.S.	506	**43.5**	38.5-48.5	846	**44.4**	40.5-48.2	1,352	**44.0**	40.9-47.0
College Graduate	606	**46.1**	41.6-50.6	785	**41.0**	37.1-44.9	1,391	**43.4**	40.4-46.3
Income									
Less than $15,000	257	**44.9**	37.6-52.2	508	**51.0**	45.7-56.3	765	**48.4**	44.1-52.8
$15,000 - 24,999	415	**45.8**	40.2-51.4	595	**55.0**	50.2-59.9	1,010	**50.5**	46.8-54.3
$25,000 - 34,999	295	**52.4**	45.6-59.1	332	**50.8**	44.3-57.3	627	**51.6**	46.9-56.4
$35,000 - 49,999	320	**45.2**	38.9-51.6	360	**44.1**	38.1-50.1	680	**44.7**	40.3-49.1
$50,000 - 74,999	297	**50.8**	44.2-57.4	425	**45.5**	40.1-50.8	722	**48.0**	43.8-52.2
$75,000+	482	**36.4**	31.3-41.6	514	**37.9**	33.1-42.7	996	**37.1**	33.6-40.7

Advised by a Health Professional to Watch or Reduce Sodium or Salt Intake

Definition

Responding "Yes" to the question "Has a doctor or other health professional ever advised you to reduce sodium or salt intake?"

Prevalence

WV: 24.7% (95% CI: 23.4-25.9)
Because this question is part of a state selected optional module and complete national data are not available, a U.S. comparison was not conducted.

Gender

Men: 25.9% (95% CI: 23.9-27.9)
Women: 23.5% (95% CI: 21.9-25.1)
There was no gender difference in the prevalence of being advised by a health care professional to reduce sodium or salt intake.

Race/Ethnicity

White, Non-Hispanic 24.8%% (95% CI: 23.4-26.1)
Black, Non-Hispanic: 25.9% (95% CI: 16.9-35.0)
Other, Non-Hispanic: *31.0% (95% CI: 14.8-47.1)
Multiracial, Non-Hispanic: 20.4% (95% CI: 12.4-28.3)
Hispanic: *13.8% (95% CI: 5.4-22.2)
The prevalence of being advised by a health care professional to reduce sodium or salt intake was significantly higher in White, Non-Hispanics than among Hispanics.
* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 5.

Age

The prevalence of being advised by a health care professional to reduce sodium or salt intake increased with age with the highest prevalence in those 65 and older (39.8%), significantly higher than all other age groups.

Education

The prevalence being advised by a health care professional to reduce sodium or salt intake decreased with increasing educational attainment levels. The prevalence of being advised by a health care professional to reduce sodium or salt intake was highest in those with less than a high school education (35.1%), significantly higher than all other educational attainment levels.

Household Income

The prevalence of being advised by a health care professional to reduce sodium or salt intake decreased with increasing income. The prevalence of being advised by a health care professional to reduce sodium or salt intake was highest in those with an income of less than $15,000 (32.5%), significantly higher than those with an income of $35,000 or more.

Table 4.6 Advised by a Health Professional to Watch or Reduce Sodium or Salt Intake by Demographic Characteristics: WVBRFSS, 2013

Characteristic	Men			Women			Total		
	# Resp.	%	95% CI	# Resp.	%	95% CI	# Resp.	%	95% CI
TOTAL	2,355	**25.9**	23.9-27.9	3,306	**23.5**	21.9-25.1	5,661	**24.7**	23.4-25.9
Age									
18-24	124	***7.6**	2.7-12.5	155	***7.3**	2.5-12.2	279	**7.5**	4.0-11.0
25-34	219	**12.5**	7.6-17.3	328	**8.4**	5.2-11.6	547	**10.4**	7.5-13.4
35-44	327	**20.4**	15.6-25.2	426	**15.9**	11.9-19.9	753	**18.2**	15.0-21.3
45-54	448	**30.0**	25.2-34.8	550	**24.0**	20.0-27.9	998	**27.0**	23.9-30.1
55-64	574	**34.0**	29.6-38.4	759	**29.2**	25.6-32.9	1,333	**31.6**	28.7-34.5
65+	653	**40.0**	35.6-44.4	1,063	**39.7**	36.3-43.0	1,716	**39.8**	37.1-42.5
Education									
Less than H.S.	339	**33.6**	27.8-39.4	385	**36.8**	31.2-42.5	724	**35.1**	31.0-39.1
H.S. or G.E.D.	905	**24.1**	21.1-27.2	1,287	**25.3**	22.7-27.8	2,192	**24.7**	22.7-26.7
Some Post-H.S.	505	**25.1**	21.0-29.2	841	**18.9**	16.1-21.7	1,346	**21.7**	19.3-24.1
College Graduate	603	**22.8**	19.2-26.3	783	**14.9**	12.2-17.5	1,386	**18.6**	16.4-20.8
Income									
Less than $15,000	258	**33.6**	26.9-40.4	504	**31.6**	26.9-36.3	762	**32.5**	28.5-36.4
$15,000 - 24,999	413	**28.6**	23.6-33.7	598	**29.1**	24.9-33.2	1,011	**28.9**	25.6-32.1
$25,000 - 34,999	290	**29.0**	23.0-34.9	330	**27.9**	22.5-33.3	620	**28.5**	24.4-32.6
$35,000 - 49,999	322	**25.4**	20.0-30.8	359	**19.9**	15.6-24.3	681	**22.8**	19.3-26.4
$50,000 - 74,999	294	**28.6**	22.8-34.4	423	**16.9**	12.9-20.9	717	**22.4**	18.9-25.8
$75,000+	479	**17.7**	13.9-21.4	513	**13.0**	9.8-16.3	992	**15.6**	13.0-18.1

* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 5.

CHAPTER 5: WEIGHT STATUS

Overweight

Definition

Body Mass Index (BMI) is a calculation that standardizes the meaning of the terms obesity and overweight, thereby improving the accuracy of comparisons. BMI is body weight in kilograms divided by height in meters squared (BMI=kg/m^2). Overweight is defined as a BMI of 25.0-29.9.

Prevalence

WV: 33.7% (95% CI: 32.2-35.1)
U.S.: 35.6% (95% CI: 35.3-35.8)
The U.S. prevalence of overweight was significantly higher than the West Virginia prevalence. West Virginia ranked the 5th lowest among 53 BRFSS participants.

Gender

Men: 38.7% (95% CI: 36.4-41.0)
Women: 28.6% (95% CI: 26.7-30.4)
Men had a significantly higher prevalence of overweight than women.

Race/Ethnicity

White, Non-Hispanic: 33.9% (95% CI: 32.4-35.5)
Black, Non-Hispanic: 31.1% (95% CI: 21.1-41.0)
Other, Non-Hispanic: *20.9% (95% CI: 7.2-34.7)
Multiracial, Non-Hispanic: *36.6% (95% CI: 25.1-48.2)
Hispanic: *35.2% (95% CI: 18.9-51.5)
There was no race/ethnicity difference in the prevalence of overweight.
* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 5.

Age

In general, the prevalence of overweight increased with age. The prevalence of overweight was lowest among those aged 18-24 (23.9%) and highest among the 55-64 age group (39.0%).

Education

There was no difference in the prevalence of overweight by educational attainment.

Household Income

There was some variability in the prevalence of overweight status among income brackets. The prevalence of overweight was highest among those earning $35,000-$49,999 per year (40.8%) and lowest among those with incomes less than $15,000 (30.3%).

Table 5.1 Overweight but not Obese by Demographic Characteristics: WVBRFSS, 2013

Characteristic	Men			Women			Total		
	# Resp.	%	95% CI	# Resp.	%	95% CI	# Resp.	%	95% CI
TOTAL	2,429	**38.7**	36.4-41.0	3,207	**28.6**	26.7-30.4	5,636	**33.7**	32.2-35.1
Age									
18-24	132	**27.9**	19.9-35.9	158	**19.5**	12.8-26.1	290	**23.9**	18.6-29.2
25-34	233	**37.0**	30.2-43.8	314	**20.7**	15.9-25.5	547	**29.3**	25.0-33.7
35-44	336	**37.7**	32.0-43.4	413	**28.8**	24.0-33.6	749	**33.4**	29.6-37.1
45-54	464	**40.7**	35.6-45.7	530	**26.9**	22.7-31.1	994	**33.9**	30.6-37.3
55-64	581	**42.6**	38.0-47.1	722	**35.2**	31.2-39.2	1,303	**39.0**	35.9-42.0
65+	674	**42.5**	38.2-46.8	1,054	**33.3**	30.1-36.6	1,728	**37.5**	34.8-40.1
Education									
Less than H.S.	343	**36.9**	31.0-42.8	379	**26.0**	20.9-31.0	722	**31.9**	28.0-35.9
H.S. or G.E.D.	931	**38.6**	35.0-42.2	1,243	**30.2**	27.3-33.1	2,174	**34.6**	32.2-36.9
Some Post-H.S.	526	**37.6**	32.9-42.4	819	**27.1**	23.6-30.6	1,345	**31.9**	29.0-34.8
College Graduate	625	**42.6**	38.2-47.0	759	**29.4**	25.7-33.1	1,384	**35.8**	32.9-38.8
Income									
Less than $15,000	266	**35.0**	28.1-41.9	506	**26.8**	22.2-31.4	772	**30.3**	26.4-34.3
$15,000 - 24,999	427	**35.2**	29.9-40.4	592	**30.4**	26.1-34.6	1,019	**32.8**	29.4-36.1
$25,000 - 34,999	299	**37.2**	30.7-43.7	325	**29.7**	24.1-35.4	624	**34.0**	29.5-38.4
$35,000 - 49,999	331	**47.7**	41.3-54.0	350	**32.7**	26.9-38.6	681	**40.8**	36.4-45.2
$50,000 - 74,999	301	**43.9**	37.5-50.4	413	**25.7**	21.1-30.2	714	**34.4**	30.4-38.4
$75,000+	497	**37.5**	32.4-42.6	496	**27.3**	22.9-31.7	993	**33.0**	29.5-36.4

Note: Overweight is defined as a body mass index of 25.0-29.9.

Obesity

Definition

Body Mass Index (BMI) is a calculation that standardizes the meaning of the terms obesity and overweight, thereby improving the accuracy of comparisons. BMI is body weight in kilograms divided by height in meters squared (BMI=kg/m^2). Obesity is defined as a BMI of 30.0 or higher.

Prevalence

WV: 35.1% (95% CI: 33.6-36.6)
U.S.: 28.3% (95% CI: 28.0-28.5)
The prevalence of obesity in West Virginia was significantly higher than the U.S. prevalence. West Virginia ranked the highest among 53 BRFSS participants.

Gender

Men: 35.4% (95% CI: 33.1-37.7)
Women: 34.9% (95% CI: 32.9-36.8)
There was no significant gender difference in the prevalence of obesity.

Race/Ethnicity

White, Non-Hispanic: 35.1% (95% CI: 33.6-36.7)
Black, Non-Hispanic: *34.9% (95% CI: 24.6-45.2)
Other, Non-Hispanic: *38.6% (95% CI: 21.1-56.1)
Multiracial, Non-Hispanic: *34.7% (95% CI: 23.4-46.1)
Hispanic: *39.1% (95% CI: 24.3-53.9)
There was no race/ethnicity difference in the prevalence of obesity.
* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 5.

Age

The prevalence of obesity increased with age through the age group 35-44, and then decreased with age. The 35-44 age group had the highest prevalence of obesity (42.2%) and was significantly higher than the 18-24 age group (24.5%) and the 65 and older age group (29.1%).

Education

There was no difference in the prevalence of obesity by educational attainment.

Household Income

There was no household income difference in the prevalence of obesity.

Table 5.2 Obesity by Demographic Characteristics: WVBRFSS, 2013

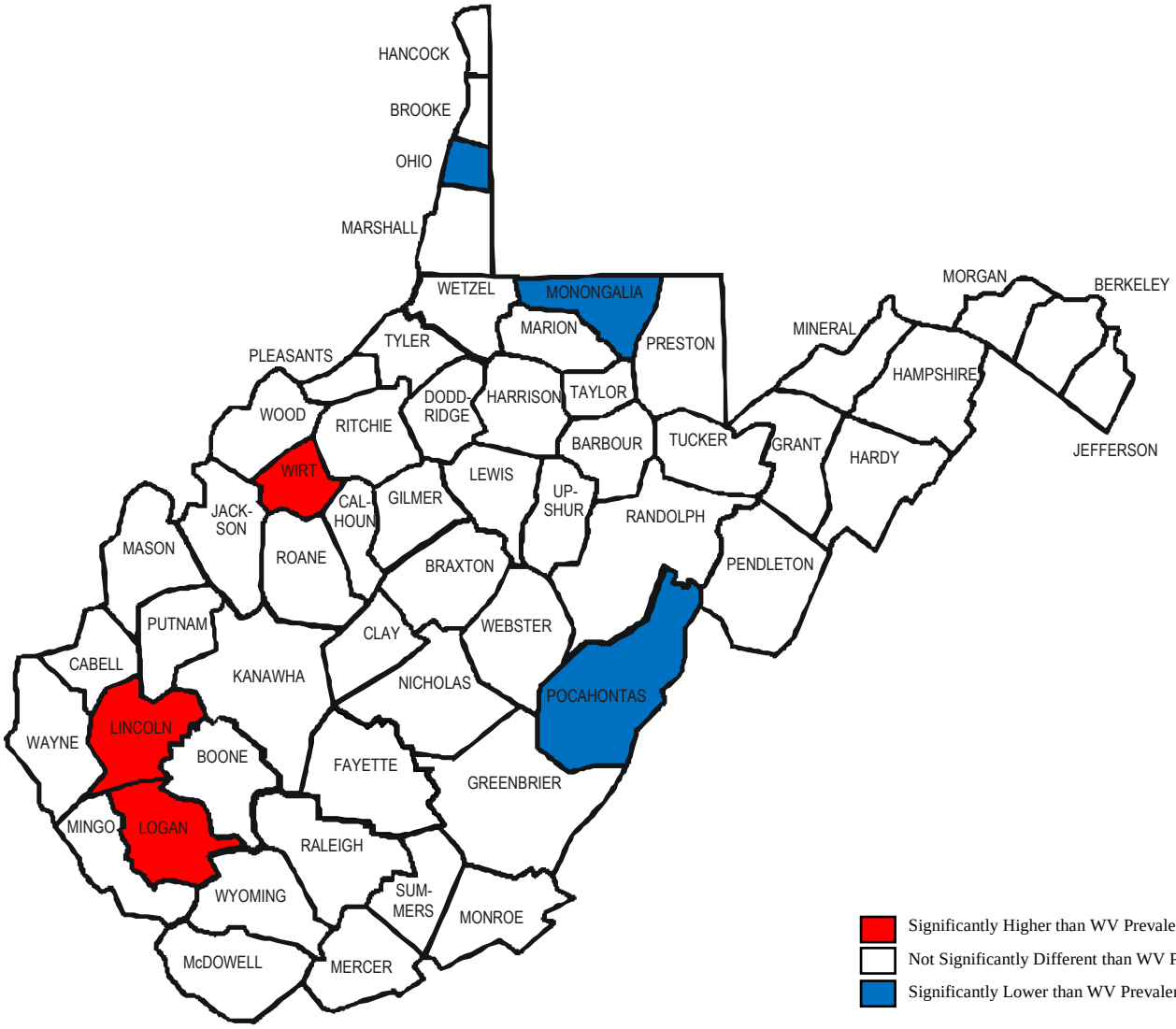
Characteristic	Men			Women			Total		
	# Resp.	%	95% CI	# Resp.	%	95% CI	# Resp.	%	95% CI
TOTAL	2,429	**35.4**	33.1-37.7	3,207	**34.9**	32.9-36.8	5,636	**35.1**	33.6-36.6
Age									
18-24	132	**22.6**	14.5-30.8	158	**26.5**	18.5-34.5	290	**24.5**	18.7-30.2
25-34	233	**35.7**	29.0-42.5	314	**35.7**	29.7-41.6	547	**35.7**	31.2-40.2
35-44	336	**44.9**	39.0-50.8	413	**39.3**	34.0-44.6	749	**42.2**	38.2-46.1
45-54	464	**39.6**	34.6-44.6	530	**41.4**	36.7-46.1	994	**40.5**	37.1-43.9
55-64	581	**37.9**	33.5-42.3	722	**37.7**	33.7-41.7	1,303	**37.8**	34.8-40.8
65+	674	**29.3**	25.3-33.2	1,054	**28.9**	25.8-32.0	1,728	**29.1**	26.6-31.6
Education									
Less than H.S.	343	**30.5**	24.7-36.2	379	**40.2**	34.3-46.2	722	**34.9**	30.7-39.1
H.S. or G.E.D.	931	**36.8**	33.2-40.4	1,243	**35.3**	32.2-38.3	2,174	**36.0**	33.7-38.4
Some Post-H.S.	526	**38.5**	33.7-43.4	819	**34.2**	30.5-38.0	1,345	**36.2**	33.2-39.2
College Graduate	625	**32.9**	28.7-37.0	759	**30.5**	26.7-34.4	1,384	**31.7**	28.8-34.5
Income									
Less than $15,000	266	**30.1**	23.6-36.6	506	**38.3**	33.3-43.3	772	**34.7**	30.7-38.8
$15,000 - 24,999	427	**35.9**	30.6-41.3	592	**34.6**	30.2-39.1	1,019	**35.3**	31.8-38.8
$25,000 - 34,999	299	**37.3**	30.9-43.7	325	**37.2**	31.1-43.2	624	**37.2**	32.8-41.7
$35,000 - 49,999	331	**29.7**	24.0-35.4	350	**33.5**	27.8-39.2	681	**31.5**	27.4-35.5
$50,000 - 74,999	301	**33.4**	27.2-39.5	413	**39.2**	33.7-44.7	714	**36.4**	32.3-40.5
$75,000+	497	**39.8**	34.5-45.2	496	**30.3**	25.5-35.0	993	**35.6**	31.9-39.3

Note: Obesity is defined as a body mass index of 30.0 or higher.

Figure 5.1 Obesity (Body Mass Index of 30.0 or Higher) by County: WVBRFSS, 2009-2013

U.S. Prevalence (2011) – 27.4%

WV Prevalence (2009-2013) – 33.2%
(Significantly Higher than U.S.)



County prevalence estimates are listed in Appendix B.
See an explanation of the county-level data under County-Level Data on page 6.

Overweight or Obese

Definition

Body Mass Index (BMI) is a calculation that standardizes the meaning of the terms obesity and overweight, thereby improving the accuracy of comparisons. BMI is body weight in kilograms divided by height in meters squared (BMI=kg/m^2). Overweight or obese is defined as a BMI of 25.0 or higher.

Prevalence

WV: 68.8% (95% CI: 67.3-70.3)
U.S.: 63.8% (95% CI: 63.5-64.1)
The prevalence of overweight or obese in West Virginia was significantly higher than the U.S. prevalence. West Virginia ranked the 3rd highest among 53 BRFSS participants.

Gender

Men: 74.1% (95% CI: 71.9-76.3)
Women: 63.4% (95% CI: 61.4-65.4)
Men had a significantly higher prevalence of overweight or obese than women.

Race/Ethnicity

White, Non-Hispanic: 69.0% (95% CI: 67.5-70.5)
Black, Non-Hispanic: *66.0% (95% CI: 54.2-77.7)
Other, Non-Hispanic: *59.5% (95% CI: 42.4-76.7)
Multiracial, Non-Hispanic: *71.3% (95% CI: 59.1-83.6)
Hispanic: *74.4% (95% CI: 61.4-87.4)
There was no race/ethnicity difference in the prevalence of overweight or obese.
* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 5.

Age

There were no consistent age differences in the prevalence of overweight or obese. The 18-24 age group had the lowest prevalence of overweight or obese (48.4%) and was significantly lower than all other age groups.

Education

There was no significant difference in the prevalence of overweight or obese by educational attainment.

Household Income

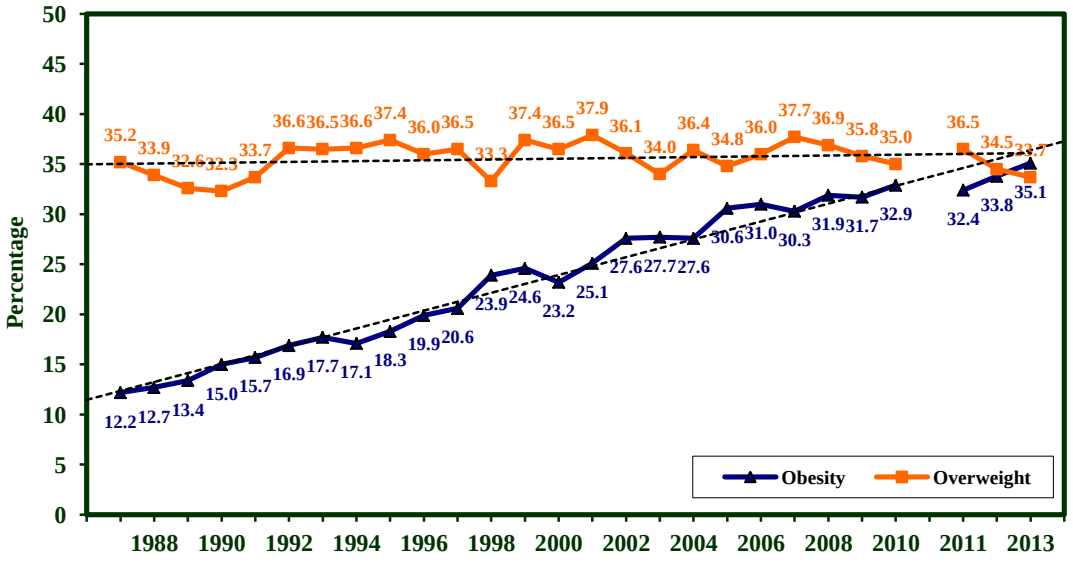
There were no significant differences in the prevalence of overweight or obese between income brackets.

Table 5.3 Overweight or Obese by Demographic Characteristics: WVBRFSS, 2013

Characteristic	Men			Women			Total		
	# Resp.	%	95% CI	# Resp.	%	95% CI	# Resp.	%	95% CI
TOTAL	2,429	**74.1**	71.9-76.3	3,207	**63.4**	61.4-65.4	5,636	**68.8**	67.3-70.3
Age									
18-24	132	**50.5**	41.0-60.1	158	**46.0**	37.3-54.6	290	**48.4**	41.9-54.8
25-34	233	**72.7**	66.2-79.3	314	**56.4**	50.3-62.5	547	**65.0**	60.5-69.6
35-44	336	**82.6**	78.3-87.0	413	**68.0**	63.0-73.1	749	**75.5**	72.1-78.9
45-54	464	**80.3**	76.1-84.5	530	**68.3**	64.0-72.7	994	**74.4**	71.4-77.5
55-64	581	**80.5**	76.8-84.1	722	**72.9**	69.3-76.5	1,303	**76.8**	74.2-79.3
65+	674	**71.8**	67.9-75.6	1,054	**62.3**	59.0-65.6	1,728	**66.5**	64.0-69.1
Education									
Less than H.S.	343	**67.4**	61.4-73.3	379	**66.2**	60.4-72.0	722	**66.8**	62.6-71.0
H.S. or G.E.D.	931	**75.4**	71.9-78.9	1,243	**65.5**	62.4-68.5	2,174	**70.6**	68.2-72.9
Some Post-H.S.	526	**76.1**	71.6-80.6	819	**61.3**	57.4-65.3	1,345	**68.1**	65.1-71.2
College Graduate	625	**75.5**	71.7-79.2	759	**60.0**	55.9-64.0	1,384	**67.5**	64.6-70.3
Income									
Less than $15,000	266	**65.1**	58.0-72.1	506	**65.1**	59.9-70.3	772	**65.1**	60.8-69.3
$15,000 - 24,999	427	**71.1**	65.8-76.5	592	**65.0**	60.4-69.6	1,019	**68.1**	64.5-71.6
$25,000 - 34,999	299	**74.5**	68.6-80.5	325	**66.9**	60.9-73.0	624	**71.2**	66.9-75.5
$35,000 - 49,999	331	**77.4**	71.8-83.0	350	**66.3**	60.5-72.0	681	**72.3**	68.3-76.3
$50,000 - 74,999	301	**77.3**	71.6-83.0	413	**64.9**	59.6-70.1	714	**70.8**	66.9-74.7
$75,000+	497	**77.3**	72.0-82.7	496	**57.6**	52.4-62.8	993	**68.6**	64.8-72.3

Note: Overweight or obese is defined as a body mass index of 25.0 or higher.

Table 5.2 Obesity and Overweight by Year: WVBRFSS, 2013



*Due to changes in sample composition and weighting methodology, 2011-2013 results are not directly comparable to previous years.

Advised to Lose Weight

Definition

Responding "Yes, lose weight" to the question "In the past 12 months, has a doctor, nurse, or other health professional given you advice about your weight?"

Prevalence

WV: 21.6% (95% CI: 20.4-22.9)
Because this was a state added question and complete national data are not available, a U.S. comparison was not conducted.

Gender

Men: 20.1% (95% CI: 18.3-22.0)
Women: 23.1% (95% CI: 21.4-24.8)
There was no gender difference in the prevalence of being advised to lose weight.

Race/Ethnicity

White, Non-Hispanic: 21.9% (95% CI: 20.6-23.2)
Black, Non-Hispanic: 12.8% (95% CI: 7.0-18.7)
Other, Non-Hispanic: *30.8% (95% CI: 14.5-47.2)
Multiracial, Non-Hispanic: 25.7% (95% CI: 16.0-35.5)
Hispanic: *18.9% (95% CI: 7.7-30.1)
The prevalence of being advised to lose weight was significantly lower among Black, Non-Hispanics than all other race/ethnicities.
* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 5.

Age

Generally the prevalence of being advised to lose weight increased with age until the age of 65. The prevalence of being advised to lose weight was highest among those 55-64 (29.5%), significantly higher than among those 34 and under.

Education

There was no significant difference in the prevalence of being advised to lose weight by educational attainment.

Household Income

There were no significant differences in the prevalence of being advised to lose weight between income brackets.

Table 5.4 Advised to Lose Weight by Demographic Characteristics: WVBRFSS, 2013

Characteristic	Men			Women			Total		
	# Resp.	%	95% CI	# Resp.	%	95% CI	# Resp.	%	95% CI
TOTAL	2,362	**20.1**	18.3-22.0	3,308	**23.1**	21.4-24.8	5,670	**21.6**	20.4-22.9
Age									
18-24	123	**5.3**	1.2-9.5	155	**17.5**	10.5-24.4	278	**11.2**	7.1-15.3
25-34	218	**14.5**	9.6-19.3	326	**16.1**	11.8-20.4	544	**15.3**	12.0-18.6
35-44	327	**23.6**	18.5-28.8	423	**23.5**	19.0-28.0	750	**23.6**	20.1-27.0
45-54	447	**26.2**	21.6-30.7	551	**31.7**	27.4-36.0	998	**29.0**	25.8-32.1
55-64	575	**28.1**	24.0-32.2	759	**30.9**	27.1-34.7	1,334	**29.5**	26.7-32.3
65+	661	**17.6**	14.2-20.9	1,068	**17.7**	15.2-20.2	1,729	**17.6**	15.6-19.7
Education									
Less than H.S.	340	**17.9**	13.2-22.6	385	**22.4**	17.3-27.5	725	**20.0**	16.5-23.5
H.S. or G.E.D.	907	**20.4**	17.6-23.2	1,290	**21.2**	18.7-23.7	2,197	**20.8**	18.9-22.7
Some Post-H.S.	506	**20.0**	16.2-23.7	842	**26.5**	23.1-30.0	1,348	**23.6**	21.1-26.2
College Graduate	606	**22.4**	18.6-26.2	782	**22.5**	19.1-25.8	1,388	**22.4**	19.9-25.0
Income									
Less than $15,000	256	**18.3**	12.8-23.9	507	**21.7**	17.6-25.9	763	**20.3**	16.9-23.7
$15,000 - 24,999	413	**19.2**	15.0-23.4	595	**20.0**	16.3-23.7	1,008	**19.6**	16.8-22.4
$25,000 - 34,999	294	**21.4**	16.2-26.5	330	**25.9**	20.5-31.3	624	**23.4**	19.6-27.1
$35,000 - 49,999	322	**15.8**	11.4-20.1	358	**24.3**	19.2-29.3	680	**19.7**	16.4-23.1
$50,000 - 74,999	294	**22.6**	17.2-28.0	425	**27.2**	22.2-32.1	719	**25.0**	21.4-28.7
$75,000+	482	**24.2**	19.9-28.5	509	**24.1**	19.7-28.4	991	**24.1**	21.1-27.2

CHAPTER 6: TOBACCO USE

Current Cigarette Smoking

Definition

Current cigarette smoking is defined as smoking at least 100 cigarettes in one's lifetime and currently smoking every day or some days.

Prevalence

WV: 27.3% (95% CI: 25.8-28.7)
U.S.: 18.1% (95% CI: 17.9-18.4)
The West Virginia prevalence of current cigarette smoking was significantly higher than the national prevalence. West Virginia ranked the highest among the 53 BRFSS participants.

Gender

Men: 28.6% (95% CI: 26.3-30.8)
Women: 26.1% (95% CI: 24.2-27.9)
There was no gender difference in the prevalence of cigarette smoking.

Race/Ethnicity

White, Non-Hispanic: 26.8% (95% CI: 25.4-28.3)
Black, Non-Hispanic: *30.9% (95% CI: 20.5-41.3)
Other, Non-Hispanic: *30.2% (95% CI: 14.4-45.9)
Multiracial, Non-Hispanic: *46.3% (95% CI: 33.9-58.7)
Hispanic: *37.1% (95% CI: 21.0-53.2)
The prevalence of cigarette smoking was significantly higher among Multiracial, Non-Hispanics than among White, Non-Hispanics. There was no other race/ethnicity difference in the prevalence of cigarette smoking.
* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 5.

Age

In general, the prevalence of smoking was higher among those aged 18-54 than those aged 55 and older. The prevalence of smoking was significantly lower among those 55-64 (24.6%) and those aged 65 and older (11.2%) than among any other age group. The prevalence of smoking was highest in the 25-34 age group (36.8%).

Education

The prevalence of smoking was lowest among college graduates (13.9%) and was significantly lower than all other education groups. Adults with less than a high school degree had the highest prevalence of current cigarette smoking (38.8%) and the prevalence was significantly higher than all other education groups.

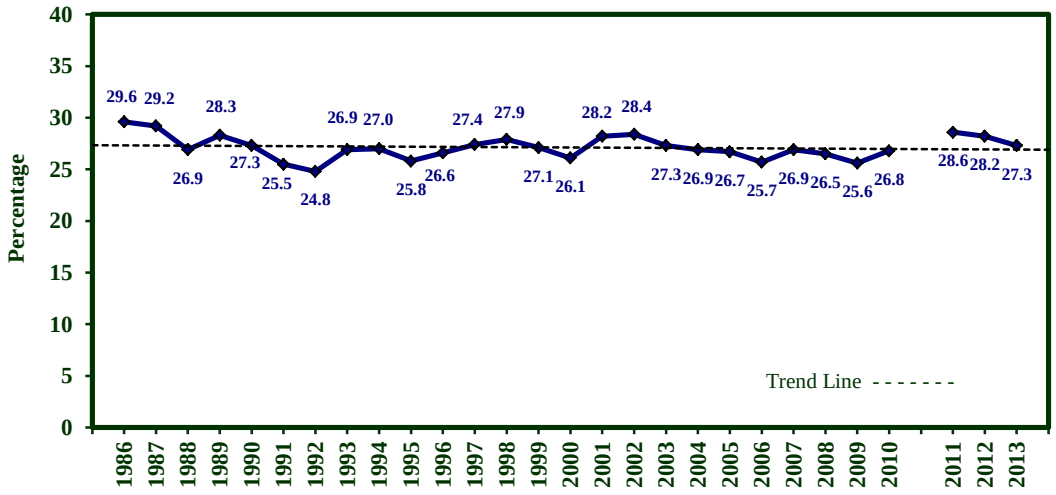
Household Income

The prevalence of current smoking decreased as household income increased. The highest prevalence of smoking was among those earning less than $15,000 per year (47.3%). The lowest prevalence of smoking was among adults earning $75,000 or more per year (16.6%).

Table 6.1 Current Cigarette Smoking by Demographic Characteristics: WVBRFSS, 2013

Characteristic	Men			Women			Total		
	# Resp.	%	95% CI	# Resp.	%	95% CI	# Resp.	%	95% CI
TOTAL	2,441	**28.6**	26.3-30.8	3,400	**26.1**	24.2-27.9	5,841	**27.3**	25.8-28.7
Age									
18-24	135	**34.4**	25.5-43.4	167	**32.5**	24.5-40.5	302	**33.5**	27.5-39.5
25-34	234	**36.6**	29.6-43.6	345	**37.0**	31.3-42.7	579	**36.8**	32.2-41.3
35-44	340	**34.7**	29.0-40.4	441	**34.3**	29.3-39.4	781	**34.5**	30.7-38.3
45-54	461	**32.4**	27.5-37.3	563	**32.4**	28.1-36.7	1,024	**32.4**	29.1-35.7
55-64	583	**26.9**	22.7-31.1	773	**22.3**	19.0-25.7	1,356	**24.6**	21.9-27.3
65+	675	**12.5**	9.6-15.3	1,086	**10.1**	8.1-12.2	1,761	**11.2**	9.4-12.9
Education									
Less than H.S.	350	**38.6**	32.5-44.7	391	**39.0**	33.0-45.0	741	**38.8**	34.5-43.1
H.S. or G.E.D.	937	**31.8**	28.2-35.4	1,322	**27.6**	24.7-30.5	2,259	**29.7**	27.4-32.0
Some Post-H.S.	523	**25.6**	21.2-30.1	876	**23.7**	20.5-26.9	1,399	**24.6**	21.9-27.2
College Graduate	628	**12.3**	9.2-15.4	803	**15.3**	12.2-18.3	1,431	**13.9**	11.7-16.0
Income									
Less than $15,000	268	**51.1**	43.9-58.3	525	**44.5**	39.2-49.7	793	**47.3**	43.0-51.6
$15,000 - 24,999	431	**36.7**	31.2-42.2	614	**34.2**	29.6-38.8	1,045	**35.4**	31.8-39.0
$25,000 - 34,999	299	**24.0**	18.5-29.5	339	**20.8**	15.7-25.9	638	**22.6**	18.8-26.4
$35,000 - 49,999	326	**25.7**	19.7-31.8	366	**23.5**	18.3-28.7	692	**24.7**	20.7-28.7
$50,000 - 74,999	303	**16.8**	11.8-21.8	432	**20.6**	16.2-25.1	735	**18.9**	15.5-22.2
$75,000+	497	**19.7**	14.9-24.4	525	**12.9**	9.5-16.3	1,022	**16.6**	13.5-19.7

Figure 6.1 Current Cigarette Smoking by Year: WVBRFSS, 1986-2013

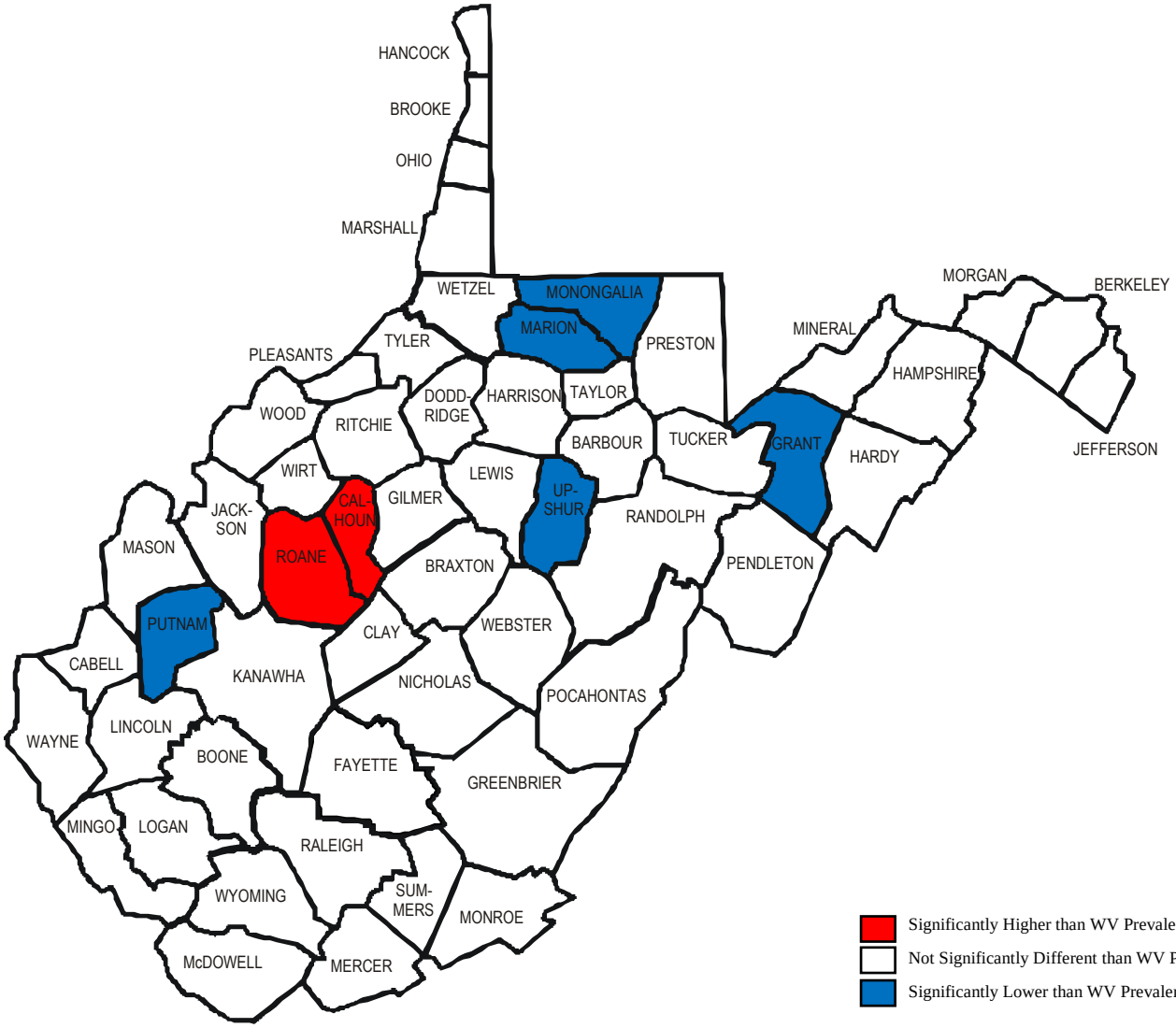


*Due to changes in sample composition and weighting methodology, 2011-2013 results are not directly comparable to previous years.

Figure 6.2 Current Cigarette Smoking by County: WVBRFSS, 2009-2013

U.S. Prevalence (2011) – 20.1%

WV Prevalence (2009-2013) – 27.3%
(Significantly Higher than U.S.)



County prevalence estimates are listed in Appendix B.
See an explanation of the county-level data under County-Level Data on page 6.

Smoking Cessation

Definition

Among current smokers, responding "Yes" to the question "During the past 12 months, have you stopped smoking for one day or longer because you were trying to quit smoking?"

Prevalence

WV: 55.1% (95% CI: 51.9-58.2)
U.S.: 60.0% (95% CI: 59.3-60.7)
The U.S. prevalence of smoking cessation was significantly higher than the West Virginia prevalence. West Virginia ranked the 7th lowest among 53 BRFSS participants.

Gender

Men: 55.2% (95% CI: 50.4-59.9)
Women: 54.9% (95% CI: 50.8-59.1)
There was no gender difference in the prevalence of smoking cessation.

Race/Ethnicity

White, Non-Hispanic: 54.7% (95% CI: 51.4-57.9)
Black, Non-Hispanic: *52.5% (95% CI: 32.2-72.8)
Other, Non-Hispanic: *83.4% (95% CI: 60.0-100.0)
Multiracial, Non-Hispanic: *76.0% (95% CI: 58.8-93.1)
Hispanic: *48.0% (95% CI: 18.9-77.0)
No race/ethnicity analysis was conducted for smoking cessation due to small sample size.

Age

The prevalence of smoking cessation was higher among those aged 18-24 than among those aged 45 and over.

Education

There was no educational attainment difference in the prevalence of smoking cessation.

Household Income

There was no annual household income difference in the prevalence of smoking cessation.

Table 6.2 Trying to Quit Smoking by Demographic Characteristics: WVBRFSS, 2013

Characteristic	Men			Women			Total		
	# Resp.	%	95% CI	# Resp.	%	95% CI	# Resp.	%	95% CI
TOTAL	604	**55.2**	50.4-59.9	779	**54.9**	50.8-59.1	1,383	**55.1**	51.9-58.2
Age									
18-24	46	***73.0**	58.9-87.1	55	***65.5**	51.2-79.9	101	***69.5**	59.4-79.6
25-34	78	***61.0**	48.9-73.2	123	**52.8**	42.9-62.7	201	**56.9**	49.0-64.9
35-44	108	***47.6**	37.2-58.0	141	**58.0**	48.8-67.1	249	**52.8**	45.9-59.7
45-54	139	**49.8**	40.4-59.2	181	**51.8**	43.6-59.9	320	**50.8**	44.6-57.0
55-64	146	**51.7**	42.4-61.0	168	**54.1**	45.5-62.7	314	**52.8**	46.4-59.2
65+	86	***46.4**	34.0-58.8	110	***45.4**	34.7-56.1	196	**45.9**	37.7-54.1
Education									
Less than H.S.	126	***52.7**	42.6-62.9	132	***44.2**	33.8-54.6	258	**48.9**	41.6-56.2
H.S. or G.E.D.	280	**56.1**	49.1-63.0	328	**54.7**	48.5-61.0	608	**55.5**	50.7-60.2
Some Post-H.S.	127	***58.4**	48.3-68.6	205	**61.3**	53.7-68.8	332	**60.0**	53.8-66.2
College Graduate	69	***50.4**	36.7-64.1	114	***63.0**	52.6-73.4	183	**57.7**	49.3-66.2
Income									
Less than $15,000	127	***59.4**	49.3-69.6	200	**47.9**	39.6-56.2	327	**53.2**	46.6-59.8
$15,000 - 24,999	143	**55.5**	45.8-65.2	179	**61.5**	53.1-69.9	322	**58.5**	52.0-64.9
$25,000 - 34,999	74	***40.7**	28.2-53.3	70	***64.7**	52.0-77.4	144	**50.7**	41.2-60.1
$35,000 - 49,999	70	***57.5**	43.5-71.5	76	**42.4**	29.7-55.2	146	**50.9**	41.1-60.6
$50,000 - 74,999	47	***46.9**	30.4-63.5	78	***49.4**	37.0-61.7	125	**48.4**	38.4-58.3
$75,000+	72	***55.0**	41.5-68.4	62	***64.9**	51.8-78.0	134	**58.5**	48.7-68.3

* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 5.

Smokeless Tobacco Use

Definition

Responding "Every day" or "Some days" to the question "Do you currently use chewing tobacco, snuff, or snus every day, some days, or not at all?"

Prevalence

WV: 9.4% (95% CI: 8.4-10.4)
U.S.: 3.7% (95% CI: 3.6-3.8)
The West Virginia prevalence of smokeless tobacco use was significantly higher than the U.S. prevalence. West Virginia ranked highest among 53 BRFSS participants.

Gender

Men: 18.2% (95% CI: 16.3-20.1)
Women: 1.0% (95% CI: 0.6-1.5)
There was a significant gender difference in the prevalence of smokeless tobacco use with men having a significantly higher prevalence than women. No further analysis with the female smokeless tobacco use data could be performed due to small sample size.
* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 5.

Race/Ethnicity

White, Non-Hispanic: 9.7% (95% CI: 8.7-10.8)
Black, Non-Hispanic: *1.0% (95% CI: 0.0-3.0)
Other, Non-Hispanic: *4.1% (95% CI: 0.0-10.4)
Multiracial, Non-Hispanic: *10.6% (95% CI: 3.6-17.6)
Hispanic: *8.2% (95% CI: 0.0-16.4)
The prevalence of smokeless tobacco use was significantly higher among White, Non-Hispanics and Multiracial, Non-Hispanics than among Black, Non-Hispanics. There was no other race/ethnicity difference in the prevalence of smokeless tobacco use.
* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 5.

Age

The prevalence of smokeless tobacco use was highest among those aged 18-24 (14.0%) and lowest among those aged 65 and older (4.1%).

Education

College graduates had the lowest prevalence of smokeless tobacco use (4.4%) and this prevalence was significantly lower than the prevalence among those with less than a high school education (13.4%) and those with a high school degree (11.7%).

Household Income

There was no income difference in the prevalence of smokeless tobacco use.

Table 6.3 Smokeless Tobacco Use by Demographic Characteristics: WVBRFSS, 2013

Characteristic	Men			Total		
	# Resp.	%	95% CI	# Resp.	%	95% CI
TOTAL	2,448	**18.2**	16.3-20.1	5,867	**9.4**	8.4-10.4
Age						
18-24	135	**24.5**	16.5-32.4	302	**14.0**	9.5-18.5
25-34	236	**19.4**	13.9-25.0	582	**10.5**	7.5-13.5
35-44	340	**24.7**	19.6-29.8	782	**12.9**	10.1-15.7
45-54	464	**20.4**	16.0-24.8	1,028	**10.4**	8.0-12.7
55-64	583	**16.2**	12.7-19.8	1,359	**8.4**	6.5-10.3
65+	677	**8.3**	5.9-10.7	1,773	**4.1**	2.9-5.2
Education						
Less than H.S.	352	**22.6**	17.6-27.6	747	**13.4**	10.5-16.4
H.S. or G.E.D.	938	**22.8**	19.5-26.1	2,266	**11.7**	9.9-13.6
Some Post-H.S.	524	**13.4**	10.0-16.7	1,404	**6.5**	4.9-8.1
College Graduate	630	**8.4**	5.8-11.0	1,436	**4.4**	3.1-5.8
Income						
Less than $15,000	269	**16.5**	10.7-22.2	796	**8.6**	5.8-11.3
$15,000 - 24,999	433	**18.7**	14.4-23.0	1,050	**9.7**	7.4-11.9
$25,000 - 34,999	300	**15.4**	10.2-20.5	640	**8.5**	5.5-11.4
$35,000 - 49,999	328	**18.7**	13.7-23.8	695	**10.1**	7.2-12.9
$50,000 - 74,999	302	**16.4**	11.4-21.4	736	**8.1**	5.6-10.6
$75,000+	498	**21.7**	16.6-26.7	1,025	**12.2**	9.2-15.1

Chapter 7: INADEQUATE SLEEP

Inadequate Sleep

Definition

Responding "1-6 hours" to the question "On average, how many hours of sleep do you get in a 24-hour period?"

Prevalence

WV: 40.0% (95% CI: 38.4-41.5)
U.S.: 35.6% (95% CI: 35.3-35.9)
The West Virginia prevalence of inadequate sleep was significantly higher than the U.S. prevalence. West Virginia ranked the 5th highest among 53 BRFSS participants.

Gender

Men: 40.3% (95% CI: 37.9-42.7)
Women: 39.6% (95% CI: 37.6-41.6)
There was no gender difference in the prevalence of inadequate sleep.

Race/Ethnicity

White, Non-Hispanic: 39.6% (95% CI: 38.1-41.2)
Black, Non-Hispanic: *47.2% (95% CI: 35.8-58.7)
Other, Non-Hispanic: *34.2% (95% CI: 19.0-49.5)
Multiracial, Non-Hispanic: *53.2% (95% CI: 41.2-65.2)
Hispanic: *39.8% (95% CI: 24.3-55.3)
There were no racial/ethnic differences in the prevalence of inadequate sleep.
* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 5.

Age

Those aged 35-44 had the highest prevalence of inadequate sleep (49.8%) and the lowest was in those 65 and older (30.4%), a significant difference.

Education

The prevalence of inadequate sleep was highest in those with less than high school education (47.5%), significantly higher than those with some college (40.0%) or those with a college degree (32.6%).

Household Income

The prevalence of inadequate sleep was highest among those with an income less than $15,000 (51.2%) and lowest among those with an income more than $75,000 (37.0%), a significant difference.

Table 7.1 Inadequate Sleep by Demographic Characteristics: WVBRFSS, 2013

Characteristic	Men			Women			Total		
	# Resp.	%	95% CI	# Resp.	%	95% CI	# Resp.	%	95% CI
TOTAL	2,432	**40.3**	37.9-42.7	3,378	**39.6**	37.6-41.6	5,810	**40.0**	38.4-41.5
Age									
18-24	136	**38.2**	29.0-47.3	166	**32.6**	24.9-40.2	302	**35.5**	29.4-41.5
25-34	235	**40.7**	33.7-47.7	343	**41.3**	35.5-47.1	578	**41.0**	36.4-45.6
35-44	340	**51.9**	46.0-57.8	436	**47.8**	42.5-53.0	776	**49.8**	45.9-53.8
45-54	458	**46.9**	41.8-52.1	559	**45.5**	40.9-50.1	1,017	**46.2**	42.7-49.6
55-64	583	**37.7**	33.3-42.1	766	**41.2**	37.2-45.2	1,349	**39.5**	36.5-42.4
65+	668	**29.1**	25.0-33.2	1,080	**31.4**	28.3-34.5	1,748	**30.4**	27.9-32.9
Education									
Less than H.S.	343	**49.5**	43.3-55.8	378	**45.1**	39.1-51.1	721	**47.5**	43.1-51.9
H.S. or G.E.D.	933	**39.0**	35.3-42.7	1,311	**40.8**	37.7-43.9	2,244	**39.9**	37.5-42.3
Some Post-H.S.	524	**40.5**	35.6-45.3	873	**39.7**	35.9-43.4	1,397	**40.0**	37.0-43.0
College Graduate	627	**32.9**	28.6-37.1	805	**32.3**	28.4-36.1	1,432	**32.6**	29.7-35.4
Income									
Less than $15,000	264	**49.0**	41.7-56.2	509	**53.0**	47.7-58.2	773	**51.2**	46.9-55.6
$15,000 - 24,999	428	**46.3**	40.6-51.9	616	**41.3**	36.6-45.9	1,044	**43.7**	40.1-47.4
$25,000 - 34,999	297	**33.4**	27.2-39.6	340	**34.6**	28.6-40.7	637	**34.0**	29.6-38.3
$35,000 - 49,999	330	**39.6**	33.3-45.8	366	**43.0**	37.1-49.0	696	**41.2**	36.9-45.6
$50,000 - 74,999	299	**35.1**	28.8-41.3	435	**38.3**	33.1-43.5	734	**36.8**	32.8-40.8
$75,000+	496	**40.0**	34.5-45.6	527	**33.4**	28.6-38.2	1,023	**37.0**	33.3-40.7

CHAPTER 8: HYPERTENSION

Hypertension Prevalence

Definition

Responding "Yes" to the question "Have you ever been told by a doctor, nurse, or other health professional that you have high blood pressure?"

Prevalence

WV: 41.0% (95% CI: 39.5-42.4)
U.S.: 32.5% (95% CI: 32.3-32.8)
The West Virginia prevalence of hypertension was significantly higher than the national prevalence. West Virginia ranked the 2nd highest among the 53 BRFSS participants.

Gender

Men: 42.7% (95% CI: 40.4-45.0)
Women: 39.3% (95% CI: 37.4-41.2)
There was no gender difference in the prevalence of hypertension.

Race/Ethnicity

White, Non-Hispanic: 40.7% (95% CI: 39.3-42.2)
Black, Non-Hispanic: *46.2% (95% CI: 35.2-57.1)
Other, Non-Hispanic: *53.6% (95% CI: 36.7-70.4)
Multiracial, Non-Hispanic: *50.0% (95% CI: 37.7-62.2)
Hispanic: *28.1% (95% CI: 14.0-42.2)
There was no race/ethnic difference in the prevalence of hypertension.
* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 5.

Age

The prevalence of hypertension increased with age and was highest in those 65 and older (68.9%). There was a significant difference in the prevalence of hypertension between all age groups except between the 18-24 and the 25-34 age groups.

Education

The prevalence of hypertension was highest among those with less than a high school education (51.2%), significantly higher than all other educational attainment levels.

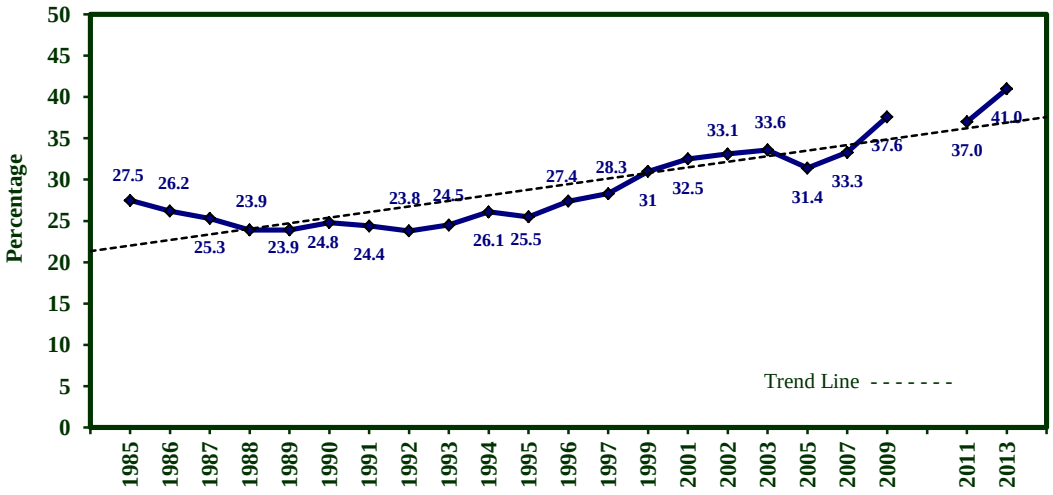
Household Income

The prevalence of hypertension was highest among those with an income of $25,000-$34,999 (48.8%), which was significantly higher than among those with an income above $35,000.

Table 8.1 Hypertension Awareness by Demographic Characteristics: WVBRFSS, 2013

Characteristic	Men			Women			Total		
	# Resp.	%	95% CI	# Resp.	%	95% CI	# Resp.	%	95% CI
TOTAL	2,448	42.7	40.4-45.0	3,431	39.3	37.4-41.2	5,879	41.0	39.5-42.4
Age									
18-24	135	12.4	6.4-18.3	169	*8.4	3.3-13.4	304	10.4	6.5-14.3
25-34	235	22.7	16.8-28.6	346	11.3	7.6-14.9	581	17.1	13.5-20.6
35-44	341	33.5	28.0-39.0	443	25.5	20.9-30.0	784	29.5	25.9-33.1
45-54	465	47.3	42.2-52.4	566	37.1	32.6-41.6	1,031	42.2	38.8-45.6
55-64	584	55.9	51.3-60.4	778	53.3	49.3-57.2	1,362	54.6	51.5-57.6
65+	676	68.0	63.9-72.0	1,100	69.7	66.7-72.8	1,776	68.9	66.5-71.4
Education									
Less than H.S.	347	49.3	43.1-55.5	396	53.5	47.5-59.5	743	51.2	46.9-55.6
H.S. or G.E.D.	939	40.7	37.1-44.3	1,330	42.0	39.0-44.9	2269	41.3	39.0-43.6
Some Post-H.S.	528	42.7	37.9-47.4	884	34.6	31.2-38.1	1,412	38.2	35.3-41.0
College Graduate	630	40.0	35.8-44.3	810	28.0	24.6-31.5	1,440	33.7	31.0-36.4
Income									
Less than $15,000	270	46.6	39.5-53.7	525	48.0	42.9-53.2	795	47.4	43.2-51.6
$15,000 - 24,999	432	44.1	38.6-49.6	622	40.5	36.1-44.9	1,054	42.3	38.8-45.8
$25,000 - 34,999	299	51.4	44.7-58.1	342	45.8	39.5-52.0	641	48.8	44.2-53.5
$35,000 - 49,999	329	41.7	35.6-47.9	368	35.5	30.1-40.9	697	38.8	34.7-42.9
$50,000 - 74,999	303	45.1	38.7-51.5	437	34.9	29.9-39.9	740	39.6	35.6-43.6
$75,000+	497	36.5	31.5-41.4	528	23.3	19.3-27.2	1,025	30.4	27.2-33.7

Figure 8.1 Hypertension Awareness by Year: WVBRFSS, 1986-2013

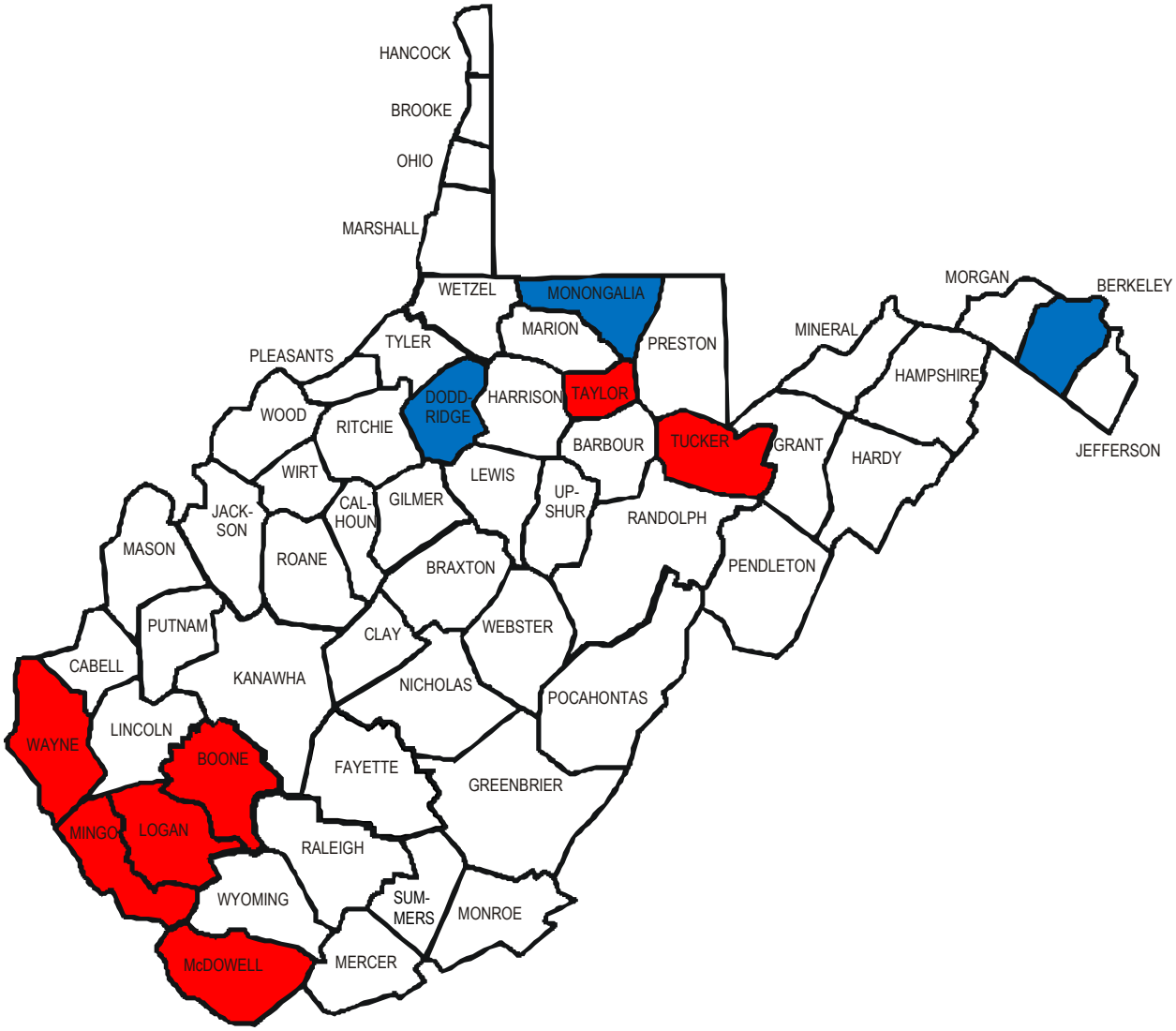


*Due to changes in sample composition and weighting methodology, 2011-2013 results are not directly comparable to previous years.

Figure 8.2 Hypertension Awareness by County: WVBRFSS, 2005, 2007, 2009, 2011, 2013

U.S. Prevalence (2009) – 29.3%

WV Prevalence (2005, 2007, 2009, 2011, 2013) - 36.1%
(Significantly Higher than U.S.)



Hypertension Medication

Definition

Reporting hypertension and responding "Yes" to the question "Are you currently taking medicine for your high blood pressure?

Prevalence

WV: 80.6% (95% CI: 78.7-82.5)
U.S.: 77.2% (95% CI: 76.7-77.6)
The West Virginia prevalence of taking medication for hypertension was significantly higher than the national prevalence. West Virginia ranked the 9th highest among the 53 BRFSS participants.

Gender

Men: 78.2% (95% CI: 75.3-81.2)
Women: 83.2% (95% CI: 80.8-85.5)
There was no gender difference in the prevalence of taking medication for hypertension.

Race/Ethnicity

White, Non-Hispanic: 80.9% (95% CI: 79.0-82.9)
Black, Non-Hispanic: 83.9% (95% CI: 74.0-93.9)
Other, Non-Hispanic: *83.6% (95% CI: 67.8-99.3)
Multiracial, Non-Hispanic: *72.1% (95% CI: 58.8-85.5)
Hispanic: *56.8% (95% CI: 26.0-87.6)
There was no race/ethnic difference in the prevalence of taking medication for hypertension.
* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 5.

Age

The prevalence of taking medication for hypertension increased with age and was highest in those 65 and older (93.8%). There was a significant difference in the prevalence of taking medication for hypertension between each age group over 35.

Education

There was no difference in the prevalence of taking medication for hypertension between educational attainment levels.

Household Income

There was no difference in the prevalence of taking medication for hypertension between income brackets.

Table 8.2 Use of Hypertension Medication by Demographic Characteristics: WVBRFSS, 2013

Characteristic	Men			Women			Total		
	# Resp.	%	95% CI	# Resp.	%	95% CI	# Resp.	%	95% CI
TOTAL	1,194	**78.2**	75.3-81.2	1,554	**83.2**	80.8-85.5	2,748	**80.6**	78.7-82.5
Age									
18-24	19	***5.2**	0.0-15.1	12	***25.7**	0.0-56.0	31	***13.2**	0.0-27.5
25-34	53	***50.9**	36.3-65.5	45	***43.2**	26.0-60.3	98	***48.4**	37.0-59.7
35-44	113	**62.8**	53.1-72.5	116	***63.5**	53.2-73.8	229	**63.1**	56.0-70.2
45-54	221	**76.1**	69.7-82.5	203	**75.6**	69.1-82.1	424	**75.9**	71.3-80.4
55-64	322	**86.6**	82.2-90.9	410	**90.1**	87.0-93.1	732	**88.3**	85.6-91.0
65+	462	**94.4**	92.1-96.7	754	**93.3**	91.4-95.3	1,216	**93.8**	92.3-95.3
Education									
Less than H.S.	191	**79.9**	73.0-86.9	238	**84.7**	78.6-90.8	429	**82.2**	77.5-86.9
H.S. or G.E.D.	456	**76.0**	71.3-80.8	656	**85.8**	82.6-89.1	1,112	**81.0**	78.1-83.9
Some Post-H.S.	265	**76.4**	70.2-82.7	378	**80.1**	75.2-85.0	643	**78.3**	74.3-82.3
College Graduate	280	**84.3**	78.7-89.9	273	**77.7**	71.1-84.3	553	**81.4**	77.1-85.6
Income									
Less than $15,000	145	**72.4**	64.2-80.6	285	**81.4**	75.7-87.1	430	**77.6**	72.9-82.4
$15,000 - 24,999	215	**72.5**	64.9-80.1	308	**88.0**	83.4-92.6	523	**80.1**	75.5-84.7
$25,000 - 34,999	167	**80.6**	72.9-88.3	171	**80.5**	73.5-87.5	338	**80.5**	75.2-85.9
$35,000 - 49,999	158	**82.7**	74.8-90.7	156	**78.0**	70.1-86.0	314	**80.7**	75.0-86.4
$50,000 - 74,999	155	**78.9**	71.0-86.8	169	**82.0**	74.7-89.3	324	**80.4**	74.9-85.8
$75,000+	211	**79.9**	73.4-86.5	140	**79.7**	71.2-88.3	351	**79.9**	74.7-85.1

CHAPTER 9: CHOLESTEROL

Cholesterol Testing

Definition

Responding "Yes" to the question "Have you ever had your blood cholesterol checked?" Responding "Within the past 5 years" to the question "about how long has it been since you last had your blood cholesterol checked?"

Prevalence

WV:

Ever:

WV: **82.4%** (95% CI: 81.0-83.7)
U.S.: **80.6%** (95% CI: 80.3-80.9)
The West Virginia prevalence of ever having cholesterol was significantly higher than the national prevalence. West Virginia ranked the 16th highest among the 53 BRFSS participants.

Past 5 Years:

WV: **78.7% (**95% CI: 77.2-80.1)
U.S.: **77.1%** (95% CI: 76.9-77.4)
The West Virginia prevalence of having cholesterol check in the past 5 years was similar to the national prevalence. West Virginia ranked the 18th highest among the 53 BRFSS participants.

Gender

Ever:

Men: 80.4% (95% CI: 78.2-82.6)
Women: 84.2% (95% CI: 82.5-85.9)
There was no gender difference in the prevalence ever had cholesterol checked.

Past 5 Years:

Men: **76.5%** (95% CI: 74.2-78.8)
Women: **80.8%** (95% CI: 79.0-82.6)
The prevalence of had cholesterol checked in past 5 years was significantly higher for females than for males.

Age

The prevalence of both ever had cholesterol checked and had cholesterol checked in the past 5 years increased with increasing age with the highest prevalence among those 65 and older.

Education

The prevalence of ever had cholesterol checked and had cholesterol checked in the past 5 years increased with educational attainment level with the highest in those with college degrees and the lowest in those with less than a high school education.

Household Income

The prevalence of ever had cholesterol checked and had cholesterol checked in past 5 years were significantly higher among those with an income over $50,000 than those with an income of less than $25,000.

Table 9.1 Ever Had Cholesterol Checked by Demographic Characteristics: WVBRFSS, 2013

Characteristic	Men			Women			Total		
	# Resp.	%	95% CI	# Resp.	%	95% CI	# Resp.	%	95% CI
TOTAL	2,405	**80.4**	78.2-82.6	3,369	**84.2**	82.5-85.9	5,774	**82.4**	81.0-83.7
Age									
18-24	121	**40.5**	30.6-50.3	157	**51.7**	42.9-60.4	278	**45.9**	39.2-52.5
25-34	225	**63.5**	56.4-70.6	330	**66.0**	60.3-71.8	555	**64.7**	60.1-69.3
35-44	336	**80.1**	75.2-85.0	429	**80.2**	75.9-84.6	765	**80.2**	76.9-83.4
45-54	455	**87.5**	83.9-91.1	562	**90.0**	87.3-92.7	1,017	**88.8**	86.5-91.0
55-64	583	**94.1**	91.9-96.3	774	**95.6**	93.9-97.3	1,357	**94.9**	93.5-96.3
65+	674	**97.0**	95.6-98.4	1,089	**98.0**	97.2-98.8	1,763	**97.6**	96.8-98.3
Education									
Less than H.S.	340	**75.0**	68.8-81.3	381	**83.4**	78.0-88.7	721	**78.8**	74.5-83.0
H.S. or G.E.D.	921	**77.5**	73.9-81.1	1,308	**84.0**	81.4-86.6	2,229	**80.7**	78.5-83.0
Some Post-H.S.	518	**81.6**	77.4-85.8	869	**82.3**	79.0-85.5	1,387	**82.0**	79.4-84.6
College Graduate	622	**92.4**	89.7-95.1	801	**88.6**	85.8-91.5	1,423	**90.4**	88.4-92.4
Income									
Less than $15,000	258	**76.0**	69.0-83.0	509	**76.5**	71.6-81.5	767	**76.3**	72.2-80.4
$15,000 - 24,999	422	**74.9**	69.6-80.2	611	**82.6**	78.4-86.8	1,033	**78.9**	75.5-82.2
$25,000 - 34,999	293	**82.5**	76.3-88.7	335	**89.7**	85.5-93.8	628	**85.7**	81.8-89.7
$35,000 - 49,999	328	**84.4**	79.1-89.8	365	**86.6**	82.2-91.0	693	**85.5**	81.9-89.0
$50,000 - 74,999	302	**85.3**	80.1-90.5	429	**89.1**	85.4-92.9	731	**87.3**	84.2-90.5
$75,000+	494	**85.8**	80.4-91.2	525	**87.4**	83.7-91.2	1,019	**86.5**	83.1-90.0

Table 9.2 Had Cholesterol Checked in Past Five Years: WVBRFSS, 2013

Characteristic	Men			Women			Total		
	# Resp.	%	95% CI	# Resp.	%	95% CI	# Resp.	%	95% CI
TOTAL	2,382	**76.5**	74.2-78.8	3,323	**80.8**	79.0-82.6	5,705	**78.7**	77.2-80.1
Age									
18-24	119	**38.7**	28.9-48.6	156	**47.6**	38.9-56.4	275	**43.1**	36.4-49.7
25-34	223	**58.0**	50.7-65.3	324	**62.3**	56.4-68.2	547	**60.1**	55.4-64.8
35-44	334	**72.0**	66.6-77.4	429	**74.6**	69.9-79.4	763	**73.3**	69.7-76.9
45-54	451	**82.9**	78.9-86.9	554	**85.8**	82.5-89.1	1,005	**84.4**	81.8-87.0
55-64	578	**91.2**	88.6-93.8	763	**93.5**	91.4-95.5	1,341	**92.3**	90.7-94.0
65+	667	**95.7**	94.0-97.4	1,071	**96.3**	95.1-97.6	1,738	**96.0**	95.0-97.1
Education									
Less than H.S.	338	**72.8**	66.4-79.1	370	**78.8**	73.1-84.5	708	**75.5**	71.1-79.8
H.S. or G.E.D.	906	**72.9**	69.1-76.6	1,290	**80.7**	77.9-83.5	2,196	**76.8**	74.4-79.1
Some Post-H.S.	516	**77.1**	72.6-81.6	862	**78.9**	75.4-82.3	1,378	**78.1**	75.3-80.8
College Graduate	618	**88.8**	85.7-91.9	791	**86.1**	83.0-89.1	1,409	**87.4**	85.2-89.6
Income									
Less than $15,000	256	**72.2**	65.0-79.3	500	**73.2**	68.1-78.3	756	**72.8**	68.6-77.0
$15,000 - 24,999	418	**70.2**	64.7-75.7	605	**78.4**	73.9-82.8	1,023	**74.4**	70.8-77.9
$25,000 - 34,999	289	**77.7**	71.3-84.2	335	**85.1**	80.4-89.9	624	**81.0**	76.9-85.2
$35,000 - 49,999	326	**79.9**	74.0-85.7	361	**81.3**	76.1-86.5	687	**80.5**	76.6-84.5
$50,000 - 74,999	301	**83.0**	77.6-88.3	428	**87.5**	83.5-91.5	729	**85.4**	82.1-88.7
$75,000+	492	**83.0**	77.5-88.5	521	**85.7**	81.8-89.6	1,013	**84.3**	80.8-87.8

High Cholesterol

Definition

Responding "Yes" to the question "Have you ever had your blood cholesterol checked?" and responding "Yes" to the question "Have you ever been told by a doctor, nurse or other health professional that your blood cholesterol is high?"

Prevalence

WV: 42.9% (95% CI: 41.3-44.5)
U.S: 38.6% (95% CI: 38.3-38.9)
The West Virginia prevalence of having high cholesterol was significantly higher than the national prevalence. West Virginia ranked the 3rd highest among the 53 BRFSS participants.

Gender

Men: 42.6% (95% CI: 40.1-45.1)
Women: 43.2% (95% CI: 41.2-45.3)
There was no gender difference in the prevalence of high cholesterol.

Race/Ethnicity

White, Non-Hispanic: 43.3% (95% CI: 41.6-44.9)
Black, Non-Hispanic: *39.6% (95% CI: 27.7-51.6)
Other, Non-Hispanic: *37.1% (95% CI: 20.0-54.3)
Multiracial, Non-Hispanic: *41.0% (95% CI: 28.3-53.6)
Hispanic: *37.3% (95% CI: 21.3-53.2)
There was no race/ethnic difference in the prevalence of taking medication for hypertension.
* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 5.

Age

The prevalence of high cholesterol increased with age and was highest among those 55 and older, significantly higher than among those younger than 55.

Education

The prevalence of high cholesterol was highest among those with less than a high school education (53.5%), significantly higher than among all other educational attainment levels.

Household Income

The prevalence of high cholesterol was highest among those with an income of $15,000 or less (53.5%) and generally decreased with income. The prevalence of high cholesterol was significantly higher among those with an income of less than $15,000 than among those with an income greater than $35,000.

Table 9.3 High Cholesterol by Demographic Characteristics: WVBRFSS, 2013

Characteristic	Men			Women			Total		
	# Resp.	%	95% CI	# Resp.	%	95% CI	# Resp.	%	95% CI
TOTAL	2,074	42.6	40.1-45.1	2,957	43.2	41.2-45.3	5,031	42.9	41.3-44.5
Age									
18-24	48	*9.7	1.7-17.7	81	12.2	4.0-20.4	129	11.0	5.2-16.8
25-34	146	17.1	10.2-24.0	218	16.7	11.1-22.3	364	16.9	12.5-21.3
+35-44	276	39.8	33.4-46.1	350	23.6	18.9-28.4	626	31.7	27.7-35.8
45-54	400	49.5	44.0-55.0	502	44.6	39.7-49.4	902	47.0	43.3-50.6
55-64	546	52.1	47.4-56.9	738	58.9	54.9-62.9	1,284	55.6	52.5-58.7
65+	648	50.8	46.3-55.3	1,045	58.4	55.0-61.8	1,693	55.0	52.3-57.8
Education									
Less than H.S.	276	53.2	46.5-59.8	332	53.8	47.5-60.1	608	53.5	48.9-58.1
H.S. or G.E.D.	771	43.6	39.6-47.6	1,138	48.0	44.7-51.3	1,909	45.9	43.3-48.5
Some Post-H.S.	442	37.5	32.5-42.6	750	38.2	34.3-42.1	1,192	37.9	34.8-41.0
College Graduate	582	37.3	33.0-41.7	730	32.3	28.4-36.2	1,312	34.7	31.8-37.6
Income									
Less than $15,000	212	52.1	44.0-60.2	416	54.5	48.7-60.3	628	53.5	48.7-58.2
$15,000 - 24,999	344	45.8	39.5-52.0	535	46.6	41.7-51.5	879	46.2	42.3-50.1
$25,000 - 34,999	258	49.4	42.4-56.3	306	46.5	40.1-52.9	564	48.0	43.3-52.8
$35,000 - 49,999	288	40.1	33.7-46.5	325	43.2	37.0-49.4	613	41.6	37.1-46.0
$50,000 - 74,999	269	37.1	30.7-43.6	394	38.2	32.9-43.5	663	37.7	33.6-41.9
$75,000+	454	39.5	34.3-44.7	476	30.4	25.6-35.2	930	35.3	31.7-38.8

* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 5.

CHAPTER 10: ALCOHOL CONSUMPTION

Binge Drinking

Definition

Defined as consumption of five or more alcoholic drinks for males, or four or more alcoholic drinks for females, on a single occasion during the past month.

Prevalence

WV: 11.2% (95% CI: 10.1-12.2)
U.S.: 16.5% (95% CI: 16.3-16.7)
The U.S. prevalence of binge drinking was significantly higher than the West Virginia prevalence. West Virginia ranked the 3rd lowest among 53 BRFSS participants.

Gender

Men: 15.9% (95% CI: 14.1-17.8)
Women: 6.7% (95% CI: 5.6-7.8)
Men had a significantly higher prevalence of binge drinking than women.

Race/Ethnicity

White, Non-Hispanic: 11.0% (95% CI: 9.9-12.1)
Black, Non-Hispanic: *8.7% (95% CI: 3.2-14.1)
Other, Non-Hispanic: *12.7% (95% CI: 2.3-23.2)
Multiracial, Non-Hispanic: *17.8% (95% CI: 8.0-27.5)
Hispanic: *20.1% (95% CI: 7.7-32.5)
There was no race/ethnicity difference in the prevalence of binge drinking.
* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 5.

Age

In general, the prevalence of binge drinking decreased with increased age. The prevalence of binge drinking was significantly higher among those aged 18-24 (20.7%) than among those aged 45 and older.

Education

There was no educational attainment differences in the prevalence of binge drinking.

Household Income

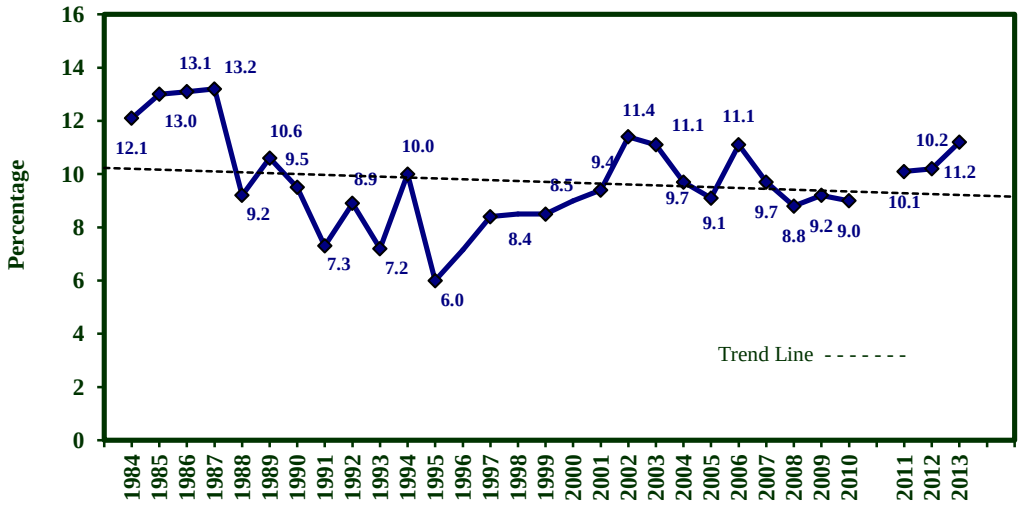
There was no income difference in the prevalence of binge drinking.

Table 10.1 Binge Drinking by Demographic Characteristics: WVBRFSS, 2013

Characteristic	Men			Women			Total		
	# Resp.	%	95% CI	# Resp.	%	95% CI	# Resp.	%	95% CI
TOTAL	2,399	**15.9**	14.1-17.8	3,366	**6.7**	5.6-7.8	5,765	**11.2**	10.1-12.2
Age									
18-24	131	**26.8**	18.5-35.0	165	**14.3**	9.0-19.7	296	**20.7**	15.7-25.8
25-34	229	**22.0**	16.2-27.8	340	**12.7**	8.7-16.7	569	**17.4**	13.8-20.9
35-44	335	**19.6**	14.9-24.3	433	**10.0**	6.8-13.3	768	**14.8**	11.9-17.7
45-54	455	**15.1**	11.5-18.7	550	**6.2**	3.9-8.4	1,005	**10.6**	8.5-12.8
55-64	575	**13.8**	10.6-17.1	770	**3.3**	1.9-4.8	1,345	**8.5**	6.7-10.3
65+	662	**4.8**	3.0-6.5	1,081	***0.7**	0.2-1.3	1,743	**2.5**	1.7-3.4
Education									
Less than H.S.	337	**13.5**	9.3-17.8	390	***4.2**	1.7-6.7	727	**9.2**	6.6-11.8
H.S. or G.E.D.	921	**17.0**	14.0-20.0	1,310	**5.8**	4.2-7.4	2,231	**11.4**	9.7-13.1
Some Post-H.S.	517	**16.3**	12.5-20.1	870	**8.9**	6.5-11.3	1,387	**12.2**	10.0-14.3
College Graduate	620	**15.5**	12.0-19.1	786	**7.4**	5.2-9.6	1,406	**11.3**	9.2-13.3
Income									
Less than $15,000	264	**20.2**	14.0-26.4	519	**9.9**	6.4-13.3	783	**14.2**	10.9-17.6
$15,000 - 24,999	425	**17.6**	13.0-22.1	611	**5.6**	3.2-7.9	1,036	**11.4**	8.8-13.9
$25,000 - 34,999	289	**14.3**	9.5-19.2	337	***4.4**	1.8-7.0	626	**9.8**	6.9-12.7
$35,000 - 49,999	324	**15.3**	10.1-20.4	365	**6.5**	3.3-9.8	689	**11.1**	8.0-14.3
$50,000 - 74,999	301	**16.7**	11.5-21.9	424	**6.4**	3.7-9.2	725	**11.3**	8.4-14.2
$75,000+	487	**16.7**	12.6-20.9	520	**8.2**	5.5-10.9	1,007	**12.8**	10.2-15.4

* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 5.

Figure 10.1 Binge Drinking by Year: WVBRFSS, 1984-2013



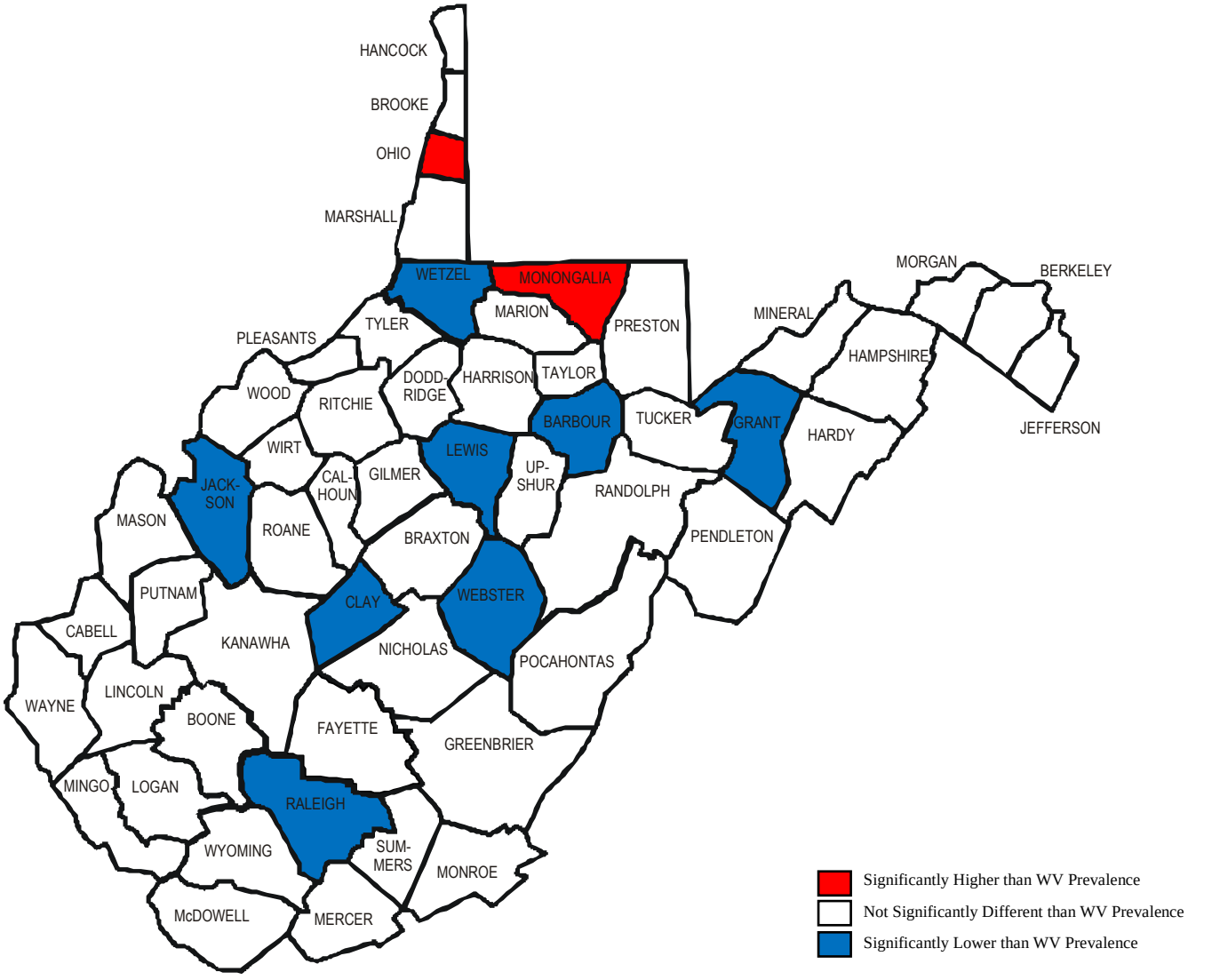
NOTE: Data are not available for the years 1996, 1998, and 2000.

*Due to changes in sample composition and weighting methodology, 2011-2013 results are not directly comparable to previous years.

Figure 10.2 Binge Drinking by County: WVBRFSS, 2009-2013

U.S. Prevalence (2011) – 18.3%

WV Prevalence (2009-2013) – 9.9%
(Significantly Lower than U.S.)



County prevalence estimates are listed in Appendix B.
See an explanation of the county-level data under County-Level Data on page 6.

Heavy Drinking

Definition

Defined as the consumption of more than two drinks per day for men and more than one drink per day for women during the past month.

Prevalence

WV: 3.9% (95% CI: 3.2-4.5)
U.S.: 6.0% (95% CI: 5.8-6.1)
The U.S. prevalence of heavy drinking was significantly higher than the West Virginia prevalence. West Virginia ranked the 2nd lowest among the 53 BRFSS participants.

Gender

Men: 4.9% (95% CI: 4.0-6.2)
Women: 2.8% (95% CI: 2.1-3.5)
The prevalence of heavy drinking was significantly higher among men than women.

Race/Ethnicity

White, Non-Hispanic: 3.8% (95% CI: 3.1-4.5)
Black, Non-Hispanic: *2.9% (95% CI: 0.0-5.8)
Other, Non-Hispanic: *8.2% (95% CI: 0.0-17.7)
Multiracial, Non-Hispanic: *7.0% (95% CI: 0.0-15.0)
Hispanic: *1.0% (95% CI: 0.0-2.9)
There was no race/ethnicity difference in the prevalence of heavy drinking.
* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 5.

Age

The highest prevalence of heavy drinking was among those aged 18-24 (7.2%) and was significantly higher than the prevalence among those aged 65 and older (1.5%).

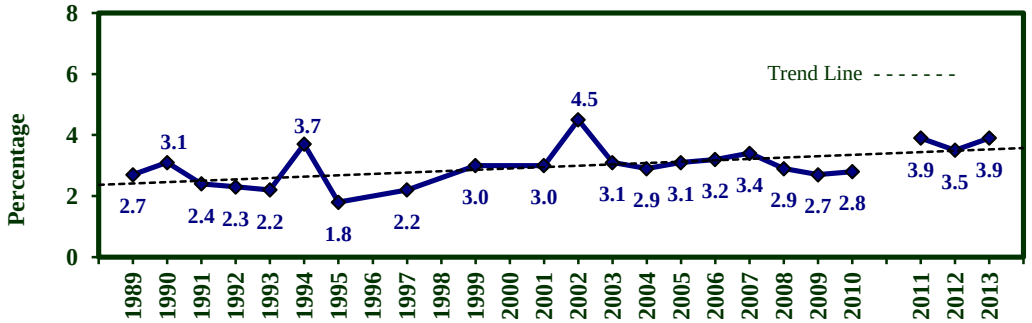
Education

There was no educational attainment difference in the prevalence of heavy drinking.

Household Income

The prevalence of heavy drinking was significantly higher among those earning less than $15,000 (6.8%) than those earning $25,000 - $49,999.

Figure 10.3 Heavy Drinking by Year: WVBRFSS, 1989-2013



NOTE: Data are not available for the years 1996, 1998, and 2000.

*Due to changes in sample composition and weighting methodology, 2011-2013 results are not directly comparable to previous years.

Table 10.2 Heavy Drinking by Demographic Characteristics: WVBRFSS, 2013

Characteristic	Men			Women			Total		
	# Resp.	%	95% CI	# Resp.	%	95% CI	# Resp.	%	95% CI
TOTAL	2,392	**4.9**	3.8-6.1	3,366	**2.8**	2.1-3.5	5,758	**3.9**	3.2-4.5
Age									
18-24	128	**8.8**	3.2-14.3	166	**5.5**	2.0-9.1	294	**7.2**	3.9-10.5
25-34	227	**5.0**	1.5-8.5	338	**3.4**	1.2-5.7	565	**4.2**	2.1-6.3
35-44	334	**5.9**	3.2-8.6	433	**4.3**	2.3-6.3	767	**5.1**	3.4-6.8
45-54	456	**4.9**	2.7-7.1	553	**2.8**	1.2-4.3	1,009	**3.8**	2.5-5.2
55-64	572	**4.8**	2.7-6.9	769	**2.0**	0.7-3.2	1,341	**3.4**	2.1-4.6
65+	663	**2.1**	1.0-3.1	1,080	**1.1**	0.5-1.8	1,743	**1.5**	1.0-2.1
Education									
Less than H.S.	339	**6.6**	3.3-9.9	392	**1.7**	0.3-3.1	731	**4.3**	2.5-6.2
H.S. or G.E.D.	919	**5.1**	3.2-6.9	1,309	**2.5**	1.3-3.6	2,228	**3.8**	2.7-4.9
Some Post-H.S.	510	**4.0**	2.0-6.0	868	**4.2**	2.6-5.8	1,378	**4.1**	2.9-5.4
College Graduate	620	**4.0**	2.3-5.8	787	**2.5**	1.2-3.8	1,407	**3.2**	2.1-4.3
Income									
Less than $15,000	266	**10.8**	5.6-16.0	518	**3.8**	1.7-5.9	784	**6.8**	4.2-9.3
$15,000 - 24,999	422	**5.9**	2.8-8.9	610	**1.6**	0.3-2.8	1,032	**3.6**	2.0-5.3
$25,000 - 34,999	291	**3.6**	1.4-5.7	336	**1.6**	0.0-3.2	627	**2.7**	1.3-4.0
$35,000 - 49,999	320	**3.0**	1.0-5.1	364	**2.3**	0.5-4.0	684	**2.7**	1.3-4.0
$50,000 - 74,999	301	**4.8**	1.8-7.7	426	**4.2**	1.8-6.7	727	**4.5**	2.6-6.4
$75,000+	488	**4.8**	2.2-7.5	520	**4.1**	2.2-5.9	1,008	**4.5**	2.8-6.1

No Drinking

Definition

Defined as the consumption of no alcoholic drinks during the past month.

Prevalence

WV: 66.0% (95% CI: 64.5-67.5)
U.S.: 47.4% (95% CI: 47.1-47.7)
The West Virginia prevalence of no drinking in the past month was significantly higher than the U.S. prevalence. West Virginia ranked the 3rd highest among 53 BRFSS participants.

Gender

Men: 56.3% (95% CI: 53.9-58.7)
Women: 75.3% (95% CI: 73.5-77.0)
The prevalence of no drinking in the past month was significantly higher among women than men.

Race/Ethnicity

White, Non-Hispanic: 66.5% (95% CI: 65.0-68.0)
Black, Non-Hispanic: *61.4% (95% CI: 50.5-72.3)
Other, Non-Hispanic: *61.5% (95% CI: 44.4-78.6)
Multiracial, Non-Hispanic: *59.0% (95% CI: 46.3-71.8)
Hispanic: *54.1% (95% CI: 38.3-69.9)
There was no race/ethnicity difference in the prevalence of no drinking.
* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 5.

Age

The prevalence of no drinking in the past month generally increased with increasing age. The prevalence of no drinking in the past month was significantly higher among those aged 65 and older (80.2%) than among all other age groups. The prevalence of no drinking in the past month was significantly lower among those aged 18-24 (58.1%) and those 25-34 (56.8%) than among those aged 55 and older.

Education

The prevalence of no drinking in the past month was significantly different for each level of educational attainment. The prevalence of no drinking in the past month was highest among those with less than a high school education (78.2%) and lowest among those with a college degree (50.2%).

Household Income

The prevalence of no drinking in the past month was highest among those with an annual household income of less than $15,000 (74.1%) and was significantly higher than the prevalence was among those with a household income of $35,000 or more per year.

Table 10.3 No Drinking in the Past Month by Demographic Characteristics: WVBRFSS, 2013

Characteristic	Men			Women			Total		
	# Resp.	%	95% CI	# Resp.	%	95% CI	# Resp.	%	95% CI
TOTAL	2,419	**56.3**	53.9-58.7	3,377	**75.3**	73.5-77.0	5,796	**66.0**	64.5-67.5
Age									
18-24	132	**50.1**	40.5-59.7	166	**66.6**	58.8-74.3	298	**58.1**	51.8-64.3
25-34	231	**45.2**	38.1-52.4	340	**68.6**	63.0-74.1	571	**56.8**	52.1-61.4
35-44	337	**50.1**	44.2-56.0	436	**68.1**	63.3-72.9	773	**59.1**	55.2-63.0
45-54	459	**58.5**	53.4-63.5	554	**70.7**	66.6-74.8	1,013	**64.6**	61.3-67.9
55-64	578	**56.9**	52.4-61.5	770	**78.6**	75.5-81.8	1,348	**67.9**	65.1-70.8
65+	669	**70.1**	66.2-74.0	1,083	**88.1**	86.0-90.2	1,752	**80.2**	78.1-82.3
Education									
Less than H.S.	343	**69.4**	63.6-75.2	392	**88.6**	84.8-92.5	735	**78.2**	74.6-81.9
H.S. or G.E.D.	929	**57.3**	53.5-61.1	1,314	**81.5**	79.0-84.1	2243	**69.4**	67.0-71.7
Some Post-H.S.	520	**54.1**	49.1-59.1	871	**69.5**	65.9-73.1	1,391	**62.6**	59.6-65.7
College Graduate	623	**41.1**	36.8-45.5	790	**58.4**	54.4-62.4	1,413	**50.2**	47.2-53.2
Income									
Less than $15,000	267	**65.2**	58.1-72.3	521	**80.6**	76.1-85.1	788	**74.1**	70.1-78.1
$15,000 - 24,999	427	**62.5**	57.0-67.9	612	**79.5**	75.6-83.4	1,039	**71.2**	67.8-74.6
$25,000 - 34,999	293	**57.6**	50.9-64.4	338	**79.1**	73.7-84.4	631	**67.3**	62.8-71.9
$35,000 - 49,999	325	**50.8**	44.4-57.2	365	**74.2**	69.0-79.5	690	**61.9**	57.5-66.3
$50,000 - 74,999	302	**51.1**	44.5-57.6	426	**68.2**	63.2-73.2	728	**60.2**	56.0-64.3
$75,000+	490	**45.5**	39.9-51.1	522	**59.9**	55.1-64.7	1,012	**52.1**	48.3-55.9

CHAPTER 11: SEAT BELT USE

Usually Wear Seat Belt

Definition

Responding "Always" or "Nearly always" to the question "How often do you use seat belts when you drive or ride in a car?"

Prevalence

WV: 90.6% (95% CI: 89.5-91.6)
U.S.: 94.2% (95% CI: 94.0-94.3)
The U.S. prevalence of usually wear a seat belt was significantly higher than the West Virginia prevalence. West Virginia ranked the 10th lowest among 53 BRFSS participants.

Gender

Men: 86.1% (95% CI: 84.2-88.0)
Women: 94.8% (95% CI: 93.9-95.8)
The prevalence of usually wear a seat belt was significantly higher among women than men.

Race/Ethnicity

White, Non-Hispanic: 91.0% (95% CI: 90.0-92.0)
Black, Non-Hispanic: 82.9% (95% CI: 71.8-93.9)
Other, Non-Hispanic: *90.5% (95% CI: 78.6-100.0)
Multiracial, Non-Hispanic: 87.9% (95% CI: 79.1-96.7)
Hispanic: 89.6% (95% CI: 77.4-100.0)
There was no race/ethnicity difference in the prevalence of usually wear a seat belt.
* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 5.

Age

The prevalence of usually wear a seat belt generally increased with age. The prevalence of usually wear a seat belt among those aged 65 and older (95.0%) was significantly higher than among all the other age groups except those aged 55-64.

Education

The prevalence of usually wear a seat belt was significantly higher among those with some college (93.6%) and among college graduates (97.0%) than among those with a high school education (88.8%) or less than high school education (83.8%).

Household Income

In general, the prevalence of usually wear a seat belt increased with increasing income. The prevalence of usually wear a seat belt was significantly higher among those making more than $35,000 than among those making less than $15,000.

Table 11.1 Usually Wear a Seat Belt by Demographic Characteristics: WVBRFSS, 2013

Characteristic	Men			Women			Total		
	# Resp.	%	95% CI	# Resp.	%	95% CI	# Resp.	%	95% CI
TOTAL	2,406	**86.1**	84.2-88.0	3,354	**94.8**	93.9-95.8	5,760	**90.6**	89.5-91.6
Age									
18-24	129	**77.2**	68.6-85.9	161	**94.4**	90.4-98.4	290	**85.5**	80.4-90.6
25-34	231	**77.9**	71.8-84.1	336	**92.7**	89.5-96.0	567	**85.2**	81.6-88.8
35-44	334	**85.9**	81.6-90.2	431	**93.8**	91.2-96.5	765	**89.9**	87.3-92.4
45-54	453	**87.3**	83.5-91.1	556	**95.0**	93.0-97.1	1,009	**91.2**	89.0-93.4
55-64	579	**89.3**	86.1-92.5	767	**95.7**	93.9-97.5	1,346	**92.5**	90.7-94.4
65+	669	**94.0**	91.7-96.2	1,076	**95.9**	94.4-97.3	1,745	**95.0**	93.7-96.3
Education									
Less than H.S.	346	**80.7**	75.0-86.3	385	**87.6**	83.3-91.9	731	**83.8**	80.1-87.5
H.S. or G.E.D.	919	**82.7**	79.5-85.9	1,300	**94.9**	93.5-96.3	2,219	**88.8**	87.0-90.5
Some Post-H.S.	520	**90.3**	87.1-93.4	861	**96.3**	95.0-97.7	1,381	**93.6**	92.0-95.2
College Graduate	617	**95.2**	93.3-97.1	798	**98.5**	97.6-99.4	1,415	**97.0**	95.9-98.0
Income									
Less than $15,000	265	**82.9**	76.8-89.0	513	**89.0**	85.3-92.6	778	**86.4**	83.0-89.7
$15,000 - 24,999	422	**84.0**	79.7-88.3	602	**93.9**	91.5-96.3	1,024	**89.1**	86.6-91.5
$25,000 - 34,999	298	**87.0**	82.3-91.7	336	**96.7**	94.8-98.6	634	**91.3**	88.6-94.1
$35,000 - 49,999	325	**88.7**	83.9-93.5	362	**97.0**	94.9-99.1	687	**92.6**	89.8-95.4
$50,000 - 74,999	299	**87.8**	82.8-92.9	429	**97.4**	95.7-99.0	728	**92.9**	90.3-95.5
$75,000+	490	**88.7**	84.0-93.5	524	**97.2**	95.7-98.8	1,014	**92.6**	89.9-95.4

Always Wear Seat Belt

Definition

Responding "Always" to the question "How often do you use seat belts when you drive or ride in a car?"

Prevalence

WV: 83.3% (95% CI: 82.0-84.6)
U.S.: 87.7% (95% CI: 87.5-87.9)
The U.S. prevalence of always wear a seat belt was significantly higher than the West Virginia prevalence. West Virginia ranked the 35th highest among the 53 BRFSS participants.

Gender

Men: 76.5% (95% CI: 74.3-78.7)
Women: 89.9% (95% CI: 88.6-91.2)
The prevalence of always wear a seat belt was significantly higher among women than men.

Race/Ethnicity

White, Non-Hispanic: 83.8% (95% CI: 82.4-85.1)
Black, Non-Hispanic: *77.4% (95% CI: 66.0-88.8)
Other, Non-Hispanic: *85.4% (95% CI: 71.9-98.9)
Multiracial, Non-Hispanic: *75.4% (95% CI: 63.7-87.0)
Hispanic: *79.7% (95% CI: 65.8-93.6)
There was no race/ethnicity difference in the prevalence of always wear a seat belt.
* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 5.

Age

The prevalence of always wear a seat belt generally increased as age increased. The prevalence of always wear a seat belt was highest among those aged 65 and older (91.0%) and lowest among those aged 18-24 (71.3%). This difference was statistically significant.

Education

The prevalence of always wear a seat belt was significantly higher among those with some college (86.3%) and college graduates (90.1%) than among those with a high school education (80.8%) and those with less than a high school education (77.8%).

Household Income

The prevalence of always wearing a seatbelt was significantly higher among those earning $50,000 or more than it was among those earning $15,000 or less.

Table 11.2 Always Wear a Seat Belt by Demographic Characteristics: WVBRFSS, 2013

Characteristic	Men			Women			Total		
	# Resp.	%	95% CI	# Resp.	%	95% CI	# Resp.	%	95% CI
TOTAL	2,406	**76.5**	74.3-78.7	3,354	**89.9**	88.6-91.2	5,760	**83.3**	82.0-84.6
Age									
18-24	129	**60.5**	50.8-70.2	161	**83.0**	76.5-89.5	290	**71.3**	65.1-77.5
25-34	231	**64.8**	57.9-71.7	336	**85.5**	81.2-89.8	567	**74.9**	70.7-79.1
35-44	334	**77.1**	72.1-82.2	431	**89.0**	85.8-92.3	765	**83.0**	80.0-86.1
45-54	453	**78.6**	74.2-83.0	556	**90.9**	88.2-93.6	1,009	**84.8**	82.2-87.4
55-64	579	**81.4**	77.5-85.2	767	**92.4**	90.2-94.7	1,346	**87.0**	84.7-89.2
65+	669	**88.1**	85.2-91.1	1,076	**93.2**	91.5-94.9	1,745	**91.0**	89.3-92.6
Education									
Less than H.S.	346	**74.5**	68.5-80.5	385	**81.8**	76.8-86.8	731	**77.8**	73.8-81.8
H.S. or G.E.D.	919	**71.3**	67.7-75.0	1,300	**90.4**	88.5-92.3	2,219	**80.8**	78.7-83.0
Some Post-H.S.	520	**79.9**	75.5-84.4	861	**91.5**	89.3-93.8	1,381	**86.3**	83.9-88.7
College Graduate	617	**86.8**	83.6-89.9	798	**93.1**	91.1-95.2	1,415	**90.1**	88.3-92.0
Income									
Less than $15,000	265	**73.5**	66.6-80.4	513	**82.4**	77.9-86.8	778	**78.6**	74.7-82.5
$15,000 - 24,999	422	**74.2**	69.1-79.3	602	**88.6**	85.5-91.6	1,024	**81.6**	78.6-84.6
$25,000 - 34,999	298	**80.4**	75.0-85.7	336	**92.5**	89.5-95.4	634	**85.8**	82.5-89.1
$35,000 - 49,999	325	**78.8**	73.0-84.6	362	**91.3**	87.7-94.9	687	**84.6**	81.0-88.2
$50,000 - 74,999	299	**76.6**	70.7-82.5	429	**94.3**	91.8-96.8	728	**86.1**	82.8-89.3
$75,000+	490	**79.8**	74.6-85.1	524	**93.7**	91.4-96.1	1,014	**86.2**	83.1-89.4

CHAPTER 12: IMMUNIZATION

Seasonal Flu Vaccine

Definition

Responding "No" to the question "During the past 12 months, have you had either a seasonal flu shot or a seasonal flu vaccine that was sprayed in your nose?" This indicator is among all adults.

Prevalence

WV: 54.3% (95% CI: 52.8-55.9)
U.S.: 61.5% (95% CI: 61.2-61.8)
The U.S. prevalence of no seasonal flu vaccine in the past year among all adults was significantly higher than the West Virginia prevalence. West Virginia ranked the 7th lowest among 53 BRFSS participants.

Gender

Men: 58.0% (95% CI: 55.7-60.4)
Women: 50.8% (95% CI: 48.8-52.8)
The prevalence of no seasonal flu vaccine in the past year among all adults was significantly higher among men than women.

Race/Ethnicity

White, Non-Hispanic: 53.4% (95% CI: 51.9-55.0)
Black, Non-Hispanic: 70.3% (95% CI: 60.5-80.2)
Other, Non-Hispanic: *49.4% (95% CI: 32.8-66.1)
Multiracial, Non-Hispanic: *63.8% (95% CI: 53.2-74.4)
Hispanic: *61.6% (95% CI: 46.5-76.6)
The prevalence of no seasonal flu vaccine in the past year was significantly higher among Black, Non-Hispanics than White, Non-Hispanics. There were no other race/ethnicity differences in the prevalence of no seasonal flu vaccine in the past year.
* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 5.

Age

The prevalence of no seasonal flu vaccine in the past year among all adults was lowest among the 65 and older age group (26.1%) and was significantly lower than all other age groups. The prevalence of no seasonal flu vaccine in the past year among all adults was highest among those aged 18-24 (69.7%) and was significantly higher than those aged 55 and older.

Education

The prevalence of no seasonal flu vaccine in the past year among all adults was significantly higher among those with less than a high school education (57.3%) than among college graduates (46.5%).

Household Income

The prevalence of no seasonal flu vaccine in the past year was significantly higher in those with an income less than $25,000 than it was for those with an income of $50,000-$74,999.

Table 12.1 No Seasonal Flu Vaccine in the Past Year Among All Adults by Demographic Characteristics: WVBRFSS, 2013

Characteristic	Men			Women			Total		
	# Resp.	%	95% CI	# Resp.	%	95% CI	# Resp.	%	95% CI
TOTAL	2,393	**58.0**	55.7-60.4	3,343	**50.8**	48.8-52.8	5,736	**54.3**	52.8-55.9
Age									
18-24	127	**70.5**	61.4-79.6	161	**68.8**	60.9-76.7	288	**69.7**	63.6-75.7
25-34	230	**74.2**	67.9-80.4	333	**64.4**	58.7-70.1	563	**69.4**	65.2-73.7
35-44	333	**72.3**	67.1-77.5	431	**63.7**	58.7-68.6	764	**68.0**	64.4-71.6
45-54	448	**68.1**	63.3-72.8	556	**57.0**	52.5-61.6	1,004	**62.5**	59.2-65.8
55-64	577	**49.8**	45.1-54.4	764	**45.4**	41.4-49.4	1,341	**47.6**	44.5-50.6
65+	668	**26.1**	22.2-30.0	1,071	**26.2**	23.2-29.1	1,739	**26.1**	23.8-28.5
Education									
Less than H.S.	344	**59.8**	53.9-65.8	384	**54.3**	48.3-60.2	728	**57.3**	53.1-61.5
H.S. or G.E.D.	912	**62.7**	59.0-66.3	1,296	**50.3**	47.1-53.4	2,208	**56.5**	54.1-58.9
Some Post-H.S.	519	**56.0**	51.0-61.0	857	**52.5**	48.6-56.4	1,376	**54.1**	51.0-57.1
College Graduate	614	**46.8**	42.2-51.3	796	**46.3**	42.3-50.4	1,410	**46.5**	43.5-49.5
Income									
Less than $15,000	261	**65.4**	58.6-72.2	506	**54.1**	48.9-59.3	767	**58.9**	54.8-63.1
$15,000 - 24,999	420	**61.5**	56.1-66.9	600	**54.9**	50.3-59.6	1,020	**58.1**	54.6-61.7
$25,000 - 34,999	295	**54.5**	47.9-61.1	336	**46.8**	40.3-53.3	631	**51.0**	46.4-55.7
$35,000 - 49,999	325	**57.1**	50.8-63.4	361	**51.7**	45.7-57.7	686	**54.6**	50.2-58.9
$50,000 - 74,999	299	**53.2**	46.6-59.7	429	**44.4**	39.0-49.7	728	**48.5**	44.3-52.7
$75,000+	490	**54.5**	49.0-59.9	523	**52.3**	47.2-57.3	1,013	**53.5**	49.7-57.2

Seasonal Flu Vaccine 65 and Older

Definition

Responding "No" to the question "During the past 12 months, have you had either a seasonal flu shot or a seasonal flu vaccine that was sprayed in your nose?" This indicator is restricted to adults aged 65 and older.

Prevalence

WV: 26.1% (95% CI: 23.7-28.5)
U.S.: 38.8% (95% CI: 38.2-39.3)
The U.S. prevalence of no seasonal flu vaccine in the past year among adults 65 and older was significantly higher than the West Virginia prevalence. West Virginia ranked the lowest among 53 BRFSS participants.

Gender

Men: 26.1% (95% CI: 22.2-30.0)
Women: 26.2% (95% CI: 23.2-29.2)
There was no gender difference in the prevalence of no seasonal flu vaccine in the past year among adults 65 and older.

Race/Ethnicity

No race/ethnicity analysis was completed due to small sample size.

Education

There was no educational attainment difference in the prevalence of no seasonal flu vaccine in the past year among adults 65 and older.

Household Income

There was no annual household income difference in the prevalence of no seasonal flu vaccine in the past year among adults 65 and older.

Table 12.2 No Seasonal Flu Vaccine in the Past Year Among Adults Aged 65 and Older by Demographic Characteristics: WVBRFSS, 2013

Characteristic	Men			Women			Total		
	# Resp.	%	95% CI	# Resp.	%	95% CI	# Resp.	%	95% CI
TOTAL	668	**26.1**	22.2-30.0	1,071	**26.2**	23.2-29.2	1,739	**26.1**	23.7-28.5
Age									
65+	668	**26.1**	22.2-30.0	1,071	**26.2**	23.2-29.2	1,739	**26.1**	23.7-28.5
Education									
Less than H.S.	136	**27.2**	18.7-35.8	175	**30.2**	22.6-37.9	311	**28.6**	22.9-34.4
H.S. or G.E.D.	222	**26.7**	20.4-33.1	505	**24.6**	20.5-28.7	727	**25.3**	21.9-28.8
Some Post-H.S.	125	**23.9**	15.9-31.8	222	**24.0**	17.9-30.0	347	**23.9**	19.0-28.8
College Graduate	182	**23.1**	16.6-29.7	160	**28.8**	21.2-36.4	342	**25.6**	20.6-30.5
Income									
Less than $15,000	56	***41.6**	26.2-57.1	163	**26.5**	18.0-34.9	219	**31.7**	23.9-39.4
$15,000 - 24,999	137	**26.3**	18.0-34.5	249	**26.7**	20.6-32.8	386	**26.5**	21.6-31.5
$25,000 - 34,999	125	**16.7**	9.8-23.7	149	**24.1**	16.5-31.7	274	**20.2**	15.0-25.4
$35,000 - 49,999	101	**23.6**	14.5-32.8	98	**25.9**	16.7-35.1	199	**24.7**	18.1-31.2
$50,000 - 74,999	72	***29.9**	18.6-41.2	86	**23.7**	14.3-33.1	158	**26.7**	19.4-34.0
$75,000+	72	**16.2**	7.0-25.3	49	**29.2**	*15.2-43.2	121	**20.9**	13.0-28.8

* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 5.

Never Had a Pneumonia Vaccination

Definition

Responding "No" to the question "pneumonia shot or pneumococcal vaccine is usually given only once or twice in a person's lifetime and is different from the flu shot. Have you ever had a pneumonia shot?" This indicator is among all adults.

Prevalence

WV: 68.4% (95% CI: 67.0-69.8)
U.S.: 68.1% (95% CI: 67.8-68.3)
The prevalence of never had a pneumonia vaccine was similar in West Virginia to that nationally. West Virginia ranked the 25th highest among 53 BRFSS participants.

Gender

Men: 68.9% (95% CI: 66.7-71.1)
Women: 67.9% (95% CI: 66.1-69.7)
There was no gender difference in the prevalence of never had a pneumonia vaccination among all adults.

Race/Ethnicity

White, Non-Hispanic: 68.3% (95% CI: 66.9-69.8)
Black, Non-Hispanic: *68.3% (95% CI: 57.0-78.0)
Other, Non-Hispanic: *63.0% (95% CI: 47.6-78.4)
Multiracial, Non-Hispanic: *71.9% (95% CI: 61.5-82.2)
Hispanic: *76.3% (95% CI: 62.0-90.6)
There was no race/ethnicity difference in the prevalence of never had a pneumonia vaccination among all adults.
* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 5.

Age

The prevalence of never had a pneumonia vaccination among all adults was lowest among those aged 65 and older (30.5%) and was significantly lower than all other age groups.

Education

The prevalence of never had a pneumonia vaccination among all adults was lowest among those with less than a high school education (60.6%) and was significantly lower than the prevalence among all other educational attainment categories.

Household Income

The prevalence of never had a pneumonia vaccination among all adults was lowest among those with an annual household income $25,000-$34,999 (59.7%) and highest among those with a household income of $75,000 or more per year (79.3%).

Table 12.3 Never Had a Pneumonia Vaccination Among All Adults by Demographic Characteristics: WVBRFSS, 2013

Characteristic	Men			Women			Total		
	# Resp.	%	95% CI	# Resp.	%	95% CI	# Resp.	%	95% CI
TOTAL	2,278	**68.9**	66.7-71.1	3,265	**67.9**	66.1-69.7	5,543	**68.4**	67.0-69.8
Age									
18-24	108	**73.6**	63.3-83.8	144	**88.7**	83.3-94.1	252	**81.0**	74.9-87.1
25-34	208	**91.1**	87.3-94.8	316	**90.6**	87.0-94.1	524	**90.8**	88.2-93.4
35-44	312	**85.2**	80.8-89.6	417	**84.8**	81.2-88.5	729	**85.0**	82.2-87.8
45-54	436	**82.1**	78.0-86.1	547	**79.6**	75.8-83.3	983	**80.8**	78.0-83.5
55-64	559	**64.6**	60.2-69.1	758	**64.9**	61.0-68.7	1,317	**64.7**	61.8-67.7
65+	646	**30.5**	26.3-34.7	1,058	**30.5**	27.4-33.7	1,704	**30.5**	27.9-33.1
Education									
Less than H.S.	329	**62.6**	56.5-68.7	376	**58.3**	52.5-64.1	705	**60.6**	56.4-64.8
H.S. or G.E.D.	867	**70.5**	67.1-74.0	1,264	**63.9**	60.9-66.8	2,131	**67.2**	64.9-69.4
Some Post-H.S.	493	**70.6**	65.9-75.2	841	**73.1**	69.9-76.3	1,334	**72.0**	69.3-74.7
College Graduate	585	**69.8**	65.7-73.8	775	**77.1**	74.0-80.2	1,360	**73.7**	71.2-76.2
Income									
Less than $15,000	243	**67.5**	60.8-74.2	498	**60.8**	55.8-65.7	741	**63.5**	59.5-67.6
$15,000 - 24,999	403	**66.1**	60.8-71.3	589	**62.5**	58.0-67.0	992	**64.2**	60.8-67.7
$25,000 - 34,999	284	**59.2**	52.5-65.9	333	**60.3**	54.1-66.4	617	**59.7**	55.1-64.3
$35,000 - 49,999	316	**68.3**	62.6-73.9	355	**72.2**	67.2-77.2	671	**70.1**	66.3-73.9
$50,000 - 74,999	286	**73.6**	68.2-79.1	419	**75.1**	70.6-79.6	705	**74.4**	70.9-77.9
$75,000+	467	**75.4**	70.2-80.6	513	**83.7**	80.4-87.1	980	**79.3**	76.1-82.5

Never Had a Pneumonia Vaccination 65 and Older

Definition

Responding "No" to the question "A pneumonia shot or pneumococcal vaccine is usually given only once or twice in a person's lifetime and is different from the flu shot. Have you ever had a pneumonia shot?" This indicator is restricted to adults aged 65 and older.

Prevalence

WV: 30.5% (95% CI: 27.9-33.1)
U.S.: 32.1% (95% CI: 31.6-32.7)
The West Virginia prevalence of never had a pneumonia vaccination among adults 65 and older was similar to the U.S. prevalence. West Virginia ranked the 28th highest among 53 BRFSS participants.

Gender

Men: 30.5% (95% CI: 26.3-34.7)
Women: 30.5% (95% CI: 27.4-33.7)
There was no gender difference in the prevalence of never had a pneumonia vaccination among adults 65 and older.

Race/Ethnicity

No race/ethnicity analysis was conducted due to small sample size.

Education

There was no educational attainment difference in the prevalence of never had a pneumonia vaccination among adults 65 and older.

Household Income

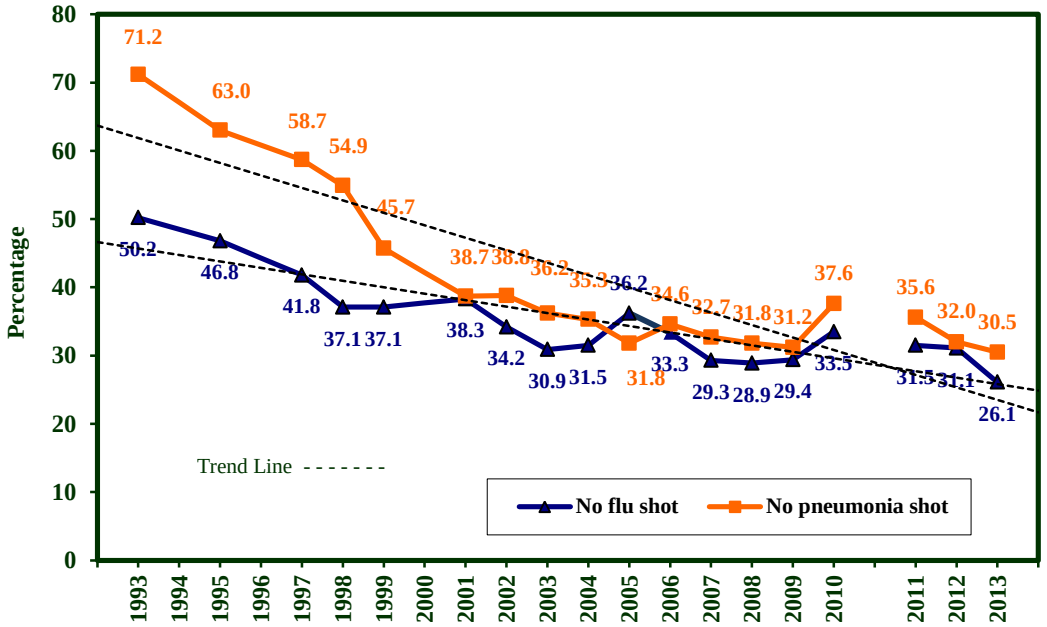
There was no annual household income difference in the prevalence of never had a pneumonia vaccination among adults 65 and older.

Table 12.4 Never Had a Pneumonia Vaccination Among Adults Aged 65 and Older by Demographic Characteristics: WVBRFSS, 2013

Characteristic	Men			Women			Total		
	# Resp.	%	95% CI	# Resp.	%	95% CI	# Resp.	%	95% CI
TOTAL	646	**30.5**	26.3-34.7	1,058	**30.5**	27.4-33.7	1,704	**30.5**	27.9-33.1
Age									
65+	646	**30.5**	26.3-34.7	1,058	**30.5**	27.4-33.7	1,704	**30.5**	27.9-33.1
Education									
Less than H.S.	129	**31.7**	22.5-40.9	172	**28.8**	20.9-36.8	301	**30.3**	24.2-36.5
H.S. or G.E.D.	219	**30.0**	23.3-36.6	500	**33.1**	28.5-37.7	719	**32.0**	28.3-35.8
Some Post-H.S.	120	**28.7**	19.9-37.5	222	**26.3**	20.1-32.5	342	**27.3**	22.1-32.6
College Graduate	175	**29.2**	22.0-36.4	156	**29.9**	22.0-37.7	331	**29.5**	24.2-34.8
Income									
Less than $15,000	53	***34.3**	18.8-49.9	162	**24.5**	15.9-33.1	215	**27.7**	20.0-35.5
$15,000 - 24,999	135	**28.0**	19.4-36.5	246	**26.8**	20.5-33.1	381	**27.3**	22.2-32.4
$25,000 - 34,999	121	**27.4**	18.2-36.6	148	**29.2**	21.3-37.1	269	**28.3**	22.1-34.4
$35,000 - 49,999	98	***32.7**	22.2-43.3	98	***31.0**	20.8-41.3	196	**32.0**	24.5-39.4
$50,000 - 74,999	69	***24.7**	13.8-35.7	86	***36.4**	25.6-47.2	155	**30.9**	23.2-38.7
$75,000+	70	***27.1**	15.6-38.6	47	***39.0**	24.0-54.0	117	**31.3**	22.1-40.6

* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 5.

Figure 12.1 No Seasonal Flu Vaccine (in Past 12 Months) and No Pneumonia Vaccination (in Lifetime) Among Adults Aged 65 and Older by Year: WVBRFSS, 1993-2013



NOTE: Data are not available for the years 1994, 1996, and 2000.

*Due to changes in sample composition and weighting methodology, 2011-2013 results are not directly comparable to previous years.

CHAPTER 13: CARDIOVASCULAR DISEASE

Heart Attack

Definition

Responding "Yes" to the question "Has a doctor, nurse, or other health professional ever told you that you had a heart attack also called a myocardial infarction?"

Prevalence

WV: **7.8%** (95% CI: 7.0-8.5)
U.S.: **4.4%** (95% CI: 4.3-4.5)
The West Virginia prevalence of heart attack was significantly higher than the U.S. prevalence. West Virginia ranked the highest among 53 BRFSS participants.

Gender

Men: 10.0% (95% CI: 8.8-11.3)
Women: 5.6% (95% CI: 4.8-6.4)
Men had a significantly higher prevalence of heart attack than women.

Race/Ethnicity

White, Non-Hispanic: 8.0% (95% CI: 7.3-8.8)
Black, Non-Hispanic: *4.9% (95% CI: 1.0-8.8)
Other, Non-Hispanic: *8.2% (95% CI: 0.4-16.0)
Multiracial, Non-Hispanic: *8.2% (95% CI: 2.7-13.7)
Hispanic: *0.0% (95% CI: 0.0-0.0)
The prevalence of heart attacks among Hispanics was significantly lower than all other race/ethnicities.
* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 5.

Age

The prevalence of heart attack was significantly higher among the 65 and older age group (19.4%) than among any other age group.

Education

Adults with less than a high school education had the highest prevalence of heart attack (15.0%) and was significantly higher than all other educational attainment groups. Adults with a college education had the lowest prevalence of heart attack (3.7%), significantly lower than all other educational attainments groups.

Household Income

The prevalence of heart attack was highest among those earning less than $15,000 per year (12.7%) and lowest among those whose annual household income was $75,000 or more (3.7%), a statistically significant difference.

Table 13.1 Heart Attack by Demographic Characteristics: WVBRFSS, 2013

Characteristic	Men			Women			Total		
	# Resp.	%	95% CI	# Resp.	%	95% CI	# Resp.	%	95% CI
TOTAL	2,445	**10.0**	8.8-11.3	3,425	**5.6**	4.8-6.4	5,870	**7.8**	7.0-8.5
Age									
18-24	136	***0.5**	0.0-1.4	169	***0.0**	0.0-0.0.	305	***0.2**	0.0-0.7
25-34	236	***2.8**	0.3-5.2	347	***0.0**	0.0-0.0	583	***1.4**	0.1-2.7
35-44	342	**4.3**	1.9-6.7	441	***1.4**	0.3-2.5	783	**2.9**	1.5-4.2
45-54	464	**9.1**	6.1-12.1	564	**3.8**	2.0-5.5	1,028	**6.4**	4.7-8.2
55-64	582	**12.1**	9.1-15.0	777	**7.0**	5.0-9.0	1,359	**9.5**	7.7-11.3
65+	672	**25.6**	21.7-29.5	1,098	**14.6**	12.1-17.0	1,770	**19.4**	17.2-21.7
Education									
Less than H.S.	348	**16.4**	12.2-20.7	392	**13.3**	9.8-16.8	740	**15.0**	12.2-17.8
H.S. or G.E.D.	936	**9.0**	7.2-10.8	1,329	**6.1**	4.8-7.3	2,265	**7.5**	6.4-8.6
Some Post-H.S.	527	**9.8**	7.2-12.4	883	**3.1**	2.0-4.2	1,410	**6.1**	4.8-7.4
College Graduate	629	**5.8**	4.0-7.6	810	**1.9**	1.0-2.8	1,439	**3.7**	2.8-4.7
Income									
Less than $15,000	267	**16.0**	11.2-20.7	522	**10.4**	7.4-13.3	789	**12.7**	10.1-15.4
$15,000 - 24,999	430	**11.4**	8.2-14.6	620	**8.2**	5.9-10.5	1,050	**9.8**	7.8-11.7
$25,000 - 34,999	296	**13.0**	9.0-17.0	342	**5.2**	2.9-7.6	638	**9.5**	7.0-11.9
$35,000 - 49,999	332	**10.3**	6.5-14.1	368	***2.7**	1.1-4.3	700	**6.8**	4.6-8.9
$50,000 - 74,999	303	**7.7**	4.6-10.7	437	***2.6**	1.0-4.2	740	**5.0**	3.3-6.6
$75,000+	496	**6.1**	3.8-8.3	528	***0.9**	0.1-1.7	1,024	**3.7**	2.4-5.0

* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 5.

Angina or Coronary Heart Disease

Definition

Responding "Yes" to the question "Has a doctor, nurse, or other health professional ever told you that you had angina or coronary heart disease?"

Prevalence

WV: **7.5%** (95% CI: 6.7-8.2)
U.S.: **4.2%** (95% CI: 4.1-4.3)
The West Virginia prevalence of angina or coronary heart disease was significantly higher than the U.S. prevalence. West Virginia ranked the 2nd highest among 53 BRFSS participants.

Gender

Men: 8.8% (95% CI: 7.6-10.0)
Women: 6.2% (95% CI: 5.3-7.1)
The prevalence of angina or coronary heart disease was significantly higher among men than among women.

Race/Ethnicity

White, Non-Hispanic: 7.6% (95% CI: 6.9-8.4)
Black, Non-Hispanic: *6.0% (95% CI: 1.4-10.6)
Other, Non-Hispanic: *9.9% (95% CI: 0.5-19.4)
Multiracial, Non-Hispanic: *5.5% (95% CI: 2.0-8.9)
Hispanic: *1.0% (95% CI: 0.0-2.9)
The prevalence of angina or coronary heart disease was significantly lower among Hispanics than all other race/ethnicities.
* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 5.

Age

The prevalence of angina or coronary heart disease was highest among those aged 65 and older (17.1%) and was significantly higher than all other age groups.

Education

Adults with less than a high school education had the highest prevalence of angina or coronary heart disease (12.0%) and was significantly higher than the prevalence among all other educational attainment groups.

Household Income

The prevalence of angina or coronary heart disease was highest among those with an annual household income of $25,000-$34,999 (11.3%) followed by those with an income of $15,000 or less and both were significantly higher than the prevalence among those earning $50,000 or more per year.

Table 13.2 Angina or Coronary Heart Disease by Demographic Characteristics: WVBRFSS, 2013

Characteristic	Men			Women			Total		
	# Resp.	%	95% CI	# Resp.	%	95% CI	# Resp.	%	95% CI
TOTAL	2,431	**8.8**	7.6-10.0	3,398	**6.2**	5.3-7.1	5,829	**7.5**	6.7-8.2
Age									
18-24	136	***1.9**	0.0-4.0	168	***0.0**	0.0-0.0	304	***1.0**	0.0-2.1
25-34	236	***0.6**	0.0-1.4	346	***1.2**	0.1-2.4	582	***0.9**	0.2-1.6
35-44	341	***3.5**	1.2-5.9	442	***1.9**	0.6-3.2	783	**2.7**	1.4-4.1
45-54	462	**6.7**	4.0-9.4	560	**5.3**	3.1-7.5	1,022	**6.0**	4.2-7.7
55-64	580	**14.6**	11.4-17.9	770	**7.6**	5.3-9.8	1,350	**11.1**	9.1-13.0
65+	662	**20.6**	17.1-24.1	1,086	**14.3**	11.9-16.8	1,748	**17.1**	15.1-19.1
Education									
Less than H.S.	343	**11.5**	7.9-15.1	385	**12.5**	8.8-16.1	728	**12.0**	9.4-14.5
H.S. or G.E.D.	931	**7.6**	5.9-9.2	1,318	**7.0**	5.6-8.4	2,249	**7.3**	6.2-8.4
Some Post-H.S.	524	**10.3**	7.7-12.9	877	**3.7**	2.5-4.9	1,401	**6.6**	5.3-7.9
College Graduate	628	**6.7**	4.8-8.6	807	**3.3**	2.1-4.5	1,435	**4.9**	3.8-6.0
Income									
Less than $15,000	265	**13.4**	8.6-18.1	517	**9.6**	6.7-12.5	782	**11.2**	8.6-13.8
$15,000 - 24,999	425	**9.0**	6.2-11.7	613	**7.2**	5.1-9.4	1,038	**8.1**	6.3-9.8
$25,000 - 34,999	298	**12.7**	8.6-16.8	338	**9.5**	6.0-13.0	636	**11.3**	8.5-14.1
$35,000 - 49,999	330	**7.4**	4.5-10.4	367	**6.3**	3.7-8.9	697	**6.9**	4.9-8.9
$50,000 - 74,999	299	**7.7**	4.8-10.7	437	**2.5**	1.1-4.0	736	**4.9**	3.3-6.5
$75,000+	495	**6.4**	4.3-8.5	527	**2.5**	1.0-4.0	1,022	**4.6**	3.3-6.0

* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 5.

Stroke

Definition

Responding "Yes" to the question "Has a doctor, nurse, or other health professional ever told you that you had a stroke?"

Prevalence

WV: 3.9% (95% CI: 3.4-4.5)
U.S.: 2.9% (95% CI: 2.8-3.0)
The West Virginia prevalence of stroke was significantly higher than the U.S. prevalence. West Virginia ranked the 7th highest among 53 BRFSS participants.

Gender

Men: 3.8% (95% CI: 3.0-4.5)
Women: 4.1% (95% CI: 3.4-4.8)
There was no gender difference in stroke prevalence.

Race/Ethnicity

White, Non-Hispanic: 3.9% (95% CI: 3.4-4.4)
Black, Non-Hispanic: *3.7% (95% CI: 0.0-7.9)
Other, Non-Hispanic: *6.5% (95% CI: 0.0-15.3)
Multiracial, Non-Hispanic: *4.0% (95% CI: 1.2-6.8)
Hispanic: *3.0% (95% CI: 0.0-6.5)
There was no race/ethnicity difference in the prevalence of stroke.
* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 5.

Age

The prevalence of stroke was significantly higher among the 65 and older age group (8.9%) than the prevalence among all other age groups.

Education

Adults with less than a high school education had the highest prevalence of stroke (6.7%) and was significantly higher than those with some post-high school education (3.0%) and those with a college degree (1.8%).

Household Income

Those with an annual household income of less than $15,000 had the highest prevalence of stroke (6.8%) and was significantly higher than the prevalence among those earning $35,000 or more per year.

Table 13.3 Stroke by Demographic Characteristics: WVBRFSS, 2013

Characteristic	Men			Women			Total		
	# Resp.	%	95% CI	# Resp.	%	95% CI	# Resp.	%	95% CI
TOTAL	2,454	**3.8**	3.0-4.5	3,430	**4.1**	3.4-4.8	5,884	**3.9**	3.4-4.5
Age									
18-24	136	***0.6**	0.0-1.7	169	***0.0**	0.0-0.0	305	***0.3**	0.0-0.9
25-34	236	***0.0**	0.0-0.0	347	***0.3**	0.0-0.9	583	***0.1**	0.0-0.4
35-44	342	***2.0**	0.6-3.4	441	***1.5**	0.3-2.6	783	**1.7**	0.8-2.6
45-54	464	**3.5**	1.6-5.3	567	**4.7**	2.7-6.7	1,031	**4.1**	2.7-5.5
55-64	586	**5.5**	3.4-7.6	777	**5.0**	3.2-6.7	1,363	**5.2**	3.9-6.6
65+	676	**8.8**	6.3-11.3	1,100	**8.9**	7.1-10.8	1,776	**8.9**	7.4-10.4
Education									
Less than H.S.	350	**5.8**	3.4-8.2	395	**7.7**	5.1-10.3	745	**6.7**	4.9-8.4
H.S. or G.E.D.	941	**3.9**	2.6-5.1	1,332	**4.6**	3.5-5.7	2,273	**4.3**	3.4-5.1
Some Post-H.S.	529	**3.2**	1.8-4.5	883	**3.0**	1.9-4.0	1,412	**3.0**	2.2-3.9
College Graduate	629	**2.0**	1.0-3.0	809	**1.7**	0.8-2.5	1,438	**1.8**	1.2-2.5
Income									
Less than $15,000	270	**5.6**	3.0-8.2	526	**7.7**	5.3-10.0	796	**6.8**	5.0-8.6
$15,000 - 24,999	431	**4.7**	2.7-6.7	621	**4.8**	3.2-6.4	1,052	**4.8**	3.5-6.0
$25,000 - 34,999	301	**5.5**	2.4-8.6	342	**3.9**	1.9-5.9	643	**4.8**	2.8-6.7
$35,000 - 49,999	331	**2.5**	1.0-3.9	368	**1.7**	0.4-3.1	699	**2.1**	1.1-3.1
$50,000 - 74,999	302	***1.8**	0.4-3.2	437	**1.7**	0.5-2.9	739	**1.8**	0.8-2.7
$75,000+	498	***2.5**	1.0-4.0	528	**2.2**	0.8-3.6	1,026	**2.3**	1.3-3.4

* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 5.

Any Cardiovascular Disease

Definition

Responding "Yes" to any of the questions "Has a doctor, nurse, or other health professional ever told you that you had any of the following?" ". . . ever told you had a heart attack, also called a myocardial infarction?" ". . . ever told you had angina or coronary heart disease?" ". . . ever told you had a stroke?"

Prevalence

WV: 13.7% (95% CI: 12.8-14.7)
U.S.: 8.6% (95% CI: 8.4-8.7)
The prevalence of cardiovascular disease was significantly higher in West Virginia than in the U.S. West Virginia ranked the highest among 53 BRFSS participants.

Gender

Men: 16.1% (95% CI: 14.5-17.7)
Women: 11.4% (95% CI: 10.3-12.6)
The prevalence of cardiovascular disease was significantly higher among men than among women.

Race/Ethnicity

White, Non-Hispanic: 13.9% (95% CI: 12.9-14.9)
Black, Non-Hispanic: 10.9% (95% CI: 4.5-17.2)
Other, Non-Hispanic: *19.3% (95% CI: 6.8-31.8)
Multiracial, Non-Hispanic: 13.3% (95% CI: 6.7-19.8)
Hispanic: *4.0% (95% CI: 0.0-8.0)
There was a significantly higher prevalence of cardiovascular disease among White, Non-Hispanics than among Hispanics.
* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 5.

Age

The prevalence of cardiovascular disease was significantly higher among the 65 and older age group (31.5%) than among any other age group.

Education

Adults with less than a high school education had the highest prevalence of cardiovascular disease (23.9%) and was significantly higher than all other educational attainment groups.

Household Income

The prevalence of cardiovascular disease was highest among those with an annual household income of less than $15,000 (21.3%) and was significantly higher than the prevalence among those with income over $35,000.

Table 13.4 Prevalence of Any Cardiovascular Disease by Demographic Characteristics: WVBRFSS, 2013

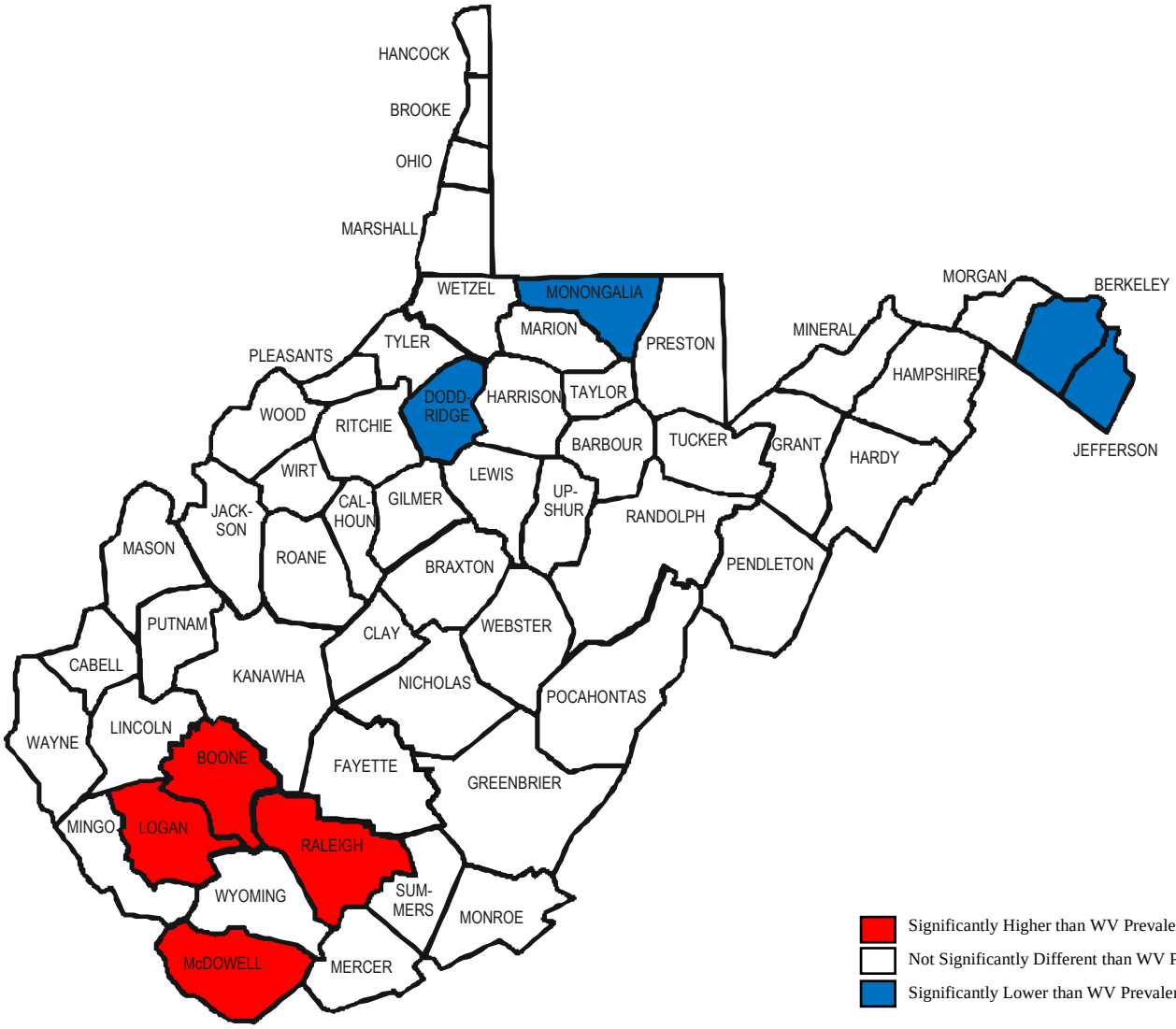
Characteristic	Men			Women			Total		
	# Resp.	%	95% CI	# Resp.	%	95% CI	# Resp.	%	95% CI
TOTAL	2,437	**16.1**	14.5-17.7	3,400	**11.4**	10.3-12.6	5,837	**13.7**	12.8-14.7
Age									
18-24	136	***2.4**	0.0-4.8	168	***0.0**	0.0-0.0	304	***1.3**	0.0-2.5
25-34	236	***3.3**	0.7-5.9	346	***1.6**	0.3-2.8	582	***2.5**	1.0-3.9
35-44	340	**7.3**	4.2-10.3	439	**3.5**	1.8-5.2	779	**5.4**	3.6-7.1
45-54	462	**12.9**	9.4-16.4	561	**10.5**	7.6-13.4	1,023	**11.7**	9.4-14.0
55-64	577	**22.9**	19.1-26.8	771	**14.6**	11.7-17.5	1,348	**18.7**	16.3-21.1
65+	673	**38.3**	34.0-42.6	1,089	**26.0**	23.1-29.0	1,762	**31.5**	28.9-34.0
Education									
Less than H.S.	347	**24.3**	19.4-29.3	385	**23.3**	18.7-27.9	732	**23.9**	20.4-27.3
H.S. or G.E.D.	928	**14.2**	11.9-16.5	1320	**12.5**	10.7-14.3	2,248	**13.4**	11.9-14.8
Some Post-H.S.	527	**16.3**	13.1-19.5	878	**7.3**	5.6-8.9	1,405	**11.3**	9.6-13.0
College Graduate	630	**11.1**	8.6-13.5	806	**5.6**	4.0-7.2	1,436	**8.2**	6.8-9.6
Income									
Less than $15,000	268	**24.2**	18.4-30.0	518	**19.1**	15.3-23.0	786	**21.3**	18.0-24.6
$15,000 - 24,999	426	**17.5**	13.7-21.4	617	**14.5**	11.6-17.3	1,043	**15.9**	13.6-18.3
$25,000 - 34,999	297	**20.9**	15.8-26.1	338	**13.3**	9.3-17.2	635	**17.5**	14.2-20.9
$35,000 - 49,999	329	**13.9**	9.7-18.1	367	**8.6**	5.6-11.5	696	**11.4**	8.8-14.0
$50,000 - 74,999	301	**13.0**	9.1-16.9	437	**5.8**	3.6-8.1	738	**9.1**	7.0-11.3
$75,000+	497	**11.0**	8.0-14.0	527	**4.3**	2.4-6.1	1,024	**7.9**	6.1-9.8

* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 5.

Figure 13.1 Cardiovascular Disease Prevalence by County: WVBRFSS, 2009-2013

U.S. Prevalence (2011) – 8.4%

WV Prevalence (2009-2013) – 13.0%
(Significantly Higher than U.S.)



County prevalence estimates are listed in Appendix B.
See an explanation of the county-level data under County-Level Data on page 6.

Advised to Take Aspirin

Definition

Responding "Yes" to the question "In the past 12 months, has your health care provider recommended your take aspirin to reduce the chance of a heart attack or stroke?"

Prevalence

WV: 30.4% (95% CI: 29.1-31.8)
Because this was a state added question and complete national data are not available, a U.S. comparison was not conducted.

Gender

Men: 32.3% (95% CI: 30.2-34.4)
Women: 28.7% (95% CI: 27.0-30.4)
There was no gender difference in being advised to take aspirin.

Race/Ethnicity

White, Non-Hispanic: 30.7% (95% CI: 29.4-32.1)
Black, Non-Hispanic: 30.5% (95% CI: 20.7-40.2)
Other, Non-Hispanic: *41.3% (95% CI: 24.6-58.0)
Multiracial, Non-Hispanic: 26.9% (95% CI: 17.8-36.0)
Hispanic: *7.1% (95% CI: 1.4-12.7)
The prevalence of being advised to take aspirin was significantly lower among Hispanics than all other race/ethnicities.
* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 5.

Age

The prevalence of being advised to take aspirin increased with age. The prevalence of being advised to take aspirin was highest among those 65 and older (61.6%), significantly higher than all other age groups.

Education

The prevalence of being advised to take aspirin decreased with higher educational attainment levels. Those with less than a high school education had the highest prevalence of being advised to take aspirin (40.2%), significantly higher than all other educational attainment levels.

Household Income

There was no consistent pattern in the prevalence of being advised to take aspirin with income. The prevalence of cardiovascular disease was lowest among those with an income of $75,000 or more (21.7%), significantly lower than all other income brackets.

Table 13.5 Advised to Take Aspirin by Demographic Characteristics: WVBRFSS, 2013

Characteristic	Men			Women			Total		
	# Resp.	%	95% CI	# Resp.	%	95% CI	# Resp.	%	95% CI
TOTAL	2,366	**32.3**	30.2-34.4	3,314	**28.7**	27.0-30.4	5,680	**30.4**	29.1-31.8
Age									
18-24	124	***2.0**	0.0-4.8	155	**1.1**	0.0-2.7	279	**1.6**	0.0-3.2
25-34	219	***5.6**	2.1-9.2	328	**4.4**	1.8-7.0	547	**5.0**	2.8-7.2
35-44	327	**15.1**	10.8-19.4	425	**9.9**	6.9-12.9	752	**12.5**	9.9-15.1
45-54	447	**31.5**	26.6-36.3	553	**26.8**	22.6-31.0	1,000	**29.1**	25.9-32.3
55-64	575	**50.5**	45.9-55.1	761	**41.2**	37.2-45.2	1,336	**45.8**	42.8-48.9
65+	663	**66.3**	62.2-70.5	1,067	**57.9**	54.6-61.2	1,730	**61.6**	59.0-64.3
Education									
Less than H.S.	341	**38.2**	32.4-44.0	385	**42.6**	36.8-48.4	726	**40.2**	36.1-44.4
H.S. or G.E.D.	910	**30.3**	27.1-33.5	1,293	**31.2**	28.5-33.9	2,203	**30.7**	28.6-32.8
Some Post-H.S.	505	**32.1**	27.7-36.5	845	**23.3**	20.3-26.3	1,350	**27.2**	24.6-29.8
College Graduate	607	**30.5**	26.6-34.4	782	**18.8**	16.0-21.5	1,389	**24.3**	22.0-26.6
Income									
Less than $15,000	257	**34.9**	28.1-41.7	508	**34.4**	29.6-39.2	765	**34.6**	30.6-38.6
$15,000 - 24,999	415	**30.4**	25.5-35.3	597	**30.7**	26.6-34.9	1,012	**30.6**	27.4-33.7
$25,000 - 34,999	294	**41.8**	35.2-48.4	331	**31.8**	26.1-37.5	625	**37.3**	32.9-41.8
$35,000 - 49,999	322	**33.4**	27.7-39.0	359	**26.5**	21.5-31.6	681	**30.2**	26.3-34.0
$50,000 - 74,999	294	**34.4**	28.4-40.4	424	**24.3**	20.0-28.7	718	**29.0**	25.4-32.6
$75,000+	482	**26.6**	22.3-30.8	512	**15.9**	12.6-19.1	994	**21.7**	18.9-24.4

* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 5.

CHAPTER 14: DIABETES

Diabetes Prevalence

Definition

Responding "Yes" to the question "Has a doctor, nurse, or other health professional ever told you that you have diabetes?"

Prevalence

WV: 13.0% (95% CI: 12.1-14.0)
U.S.: 10.3% (95% CI: 10.1-10.4)
West Virginia's diabetes prevalence was significantly higher than the U.S. prevalence. West Virginia ranked the 4th highest among 53 BRFSS participants.

Gender

Men: 13.5% (95% CI: 12.0-14.9)
Women: 12.6% (95% CI: 11.4-13.9)
There was no gender difference in diabetes prevalence.

Race/Ethnicity

White, Non-Hispanic: 12.9% (95% CI: 12.0-13.9)
Black, Non-Hispanic: 16.8% (95% CI: 8.9-24.8)
Other, Non-Hispanic: *17.3% (95% CI: 5.7-29.0)
Multiracial, Non-Hispanic: 17.6% (95% CI: 8.4-26.7)
Hispanic: *8.2% (95% CI: 2.1-14.3)
There was no race/ethnicity difference in the prevalence of diabetes.
* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 5.

Age

Adults aged 65 and older had the highest diabetes prevalence (25.0%) and was significantly higher than the prevalence among all other age groups under 55.

Education

Adults with less than a high school education had the highest prevalence of diabetes (19.0%) and were significantly higher than the prevalence among all other educational attainment groups. College graduates had the lowest prevalence of diabetes (9.9%).

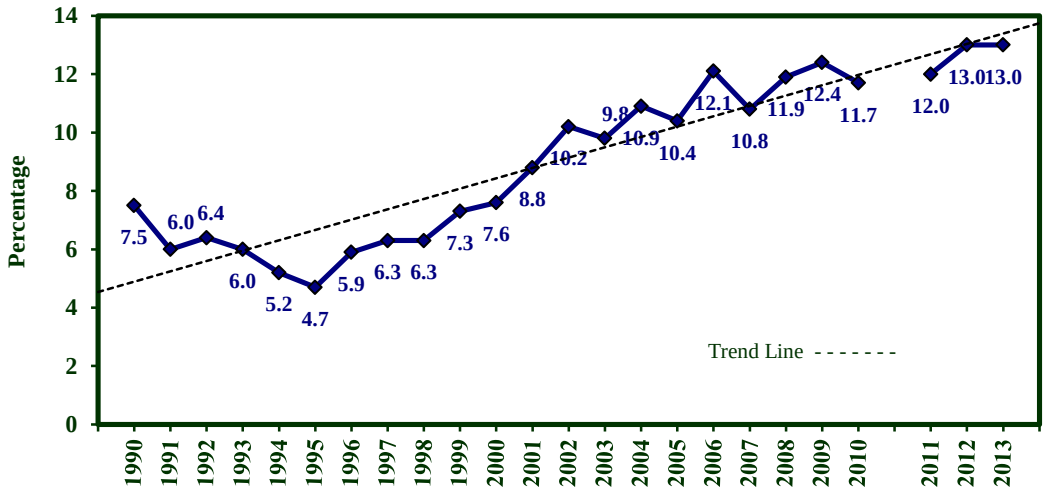
Household Income

The prevalence of diabetes was highest among those with an annual household income of less than $15,000 (19.2%) and was significantly higher than the prevalence among those earning $35,000 or more per year. The lowest prevalence of diabetes was among those with a household income of $75,000 or more per year (7.5%).

Table 14.1 Diabetes Prevalence by Demographic Characteristics: WVBRFSS, 2013

Characteristic	Men			Women			Total		
	# Resp.	%	95% CI	# Resp.	%	95% CI	# Resp.	%	95% CI
TOTAL	2,457	**13.5**	12.0-14.9	3,433	**12.6**	11.4-13.9	5,890	**13.0**	12.1-14.0
Age									
18-24	136	**0.4**	0.0-1.1	169	**2.4**	0.0-5.5	305	**1.4**	0.0-2.9
25-34	236	**1.8**	0.0-3.7	347	**3.4**	1.3-5.5	583	**2.6**	1.2-4.0
35-44	341	**8.0**	4.8-11.3	443	**5.7**	3.5-7.9	784	**6.9**	4.9-8.8
45-54	466	**12.8**	9.6-16.1	567	**12.3**	9.3-15.2	1,033	**12.5**	10.3-14.7
55-64	587	**21.4**	17.7-25.1	779	**19.6**	16.3-22.8	1,366	**20.5**	18.0-22.9
65+	677	**28.2**	24.1-32.3	1,099	**22.5**	19.7-25.3	1,776	**25.0**	22.6-27.4
Education									
Less than H.S.	350	**17.2**	12.9-21.5	395	**21.1**	16.6-25.7	745	**19.0**	15.9-22.1
H.S. or G.E.D.	943	**12.2**	10.1-14.3	1,333	**13.6**	11.7-15.5	2,276	**12.9**	11.5-14.3
Some Post-H.S.	527	**12.9**	10.0-15.9	884	**10.0**	8.0-12.0	1,411	**11.3**	9.6-13.0
College Graduate	632	**12.7**	10.0-15.4	810	**7.4**	5.5-9.2	1,442	**9.9**	8.3-11.5
Income									
Less than $15,000	269	**16.8**	11.7-21.8	526	**21.0**	17.2-24.9	795	**19.2**	16.1-22.3
$15,000 - 24,999	433	**14.4**	11.0-17.9	622	**15.3**	12.4-18.3	1,055	**14.9**	12.6-17.2
$25,000 - 34,999	301	**18.6**	13.5-23.6	341	**11.2**	7.6-14.9	642	**15.3**	12.0-18.5
$35,000 - 49,999	331	**10.4**	7.0-13.8	368	**11.3**	7.7-14.9	699	**10.8**	8.4-13.3
$50,000 - 74,999	303	**11.0**	7.4-14.5	437	**9.2**	6.4-12.0	740	**10.0**	7.8-12.2
$75,000+	498	**9.7**	7.0-12.4	528	**4.8**	2.8-6.9	1,026	**7.5**	5.8-9.2

Figure 14.1 Diabetes Prevalence by Year: WVBRFSS, 1990-2013

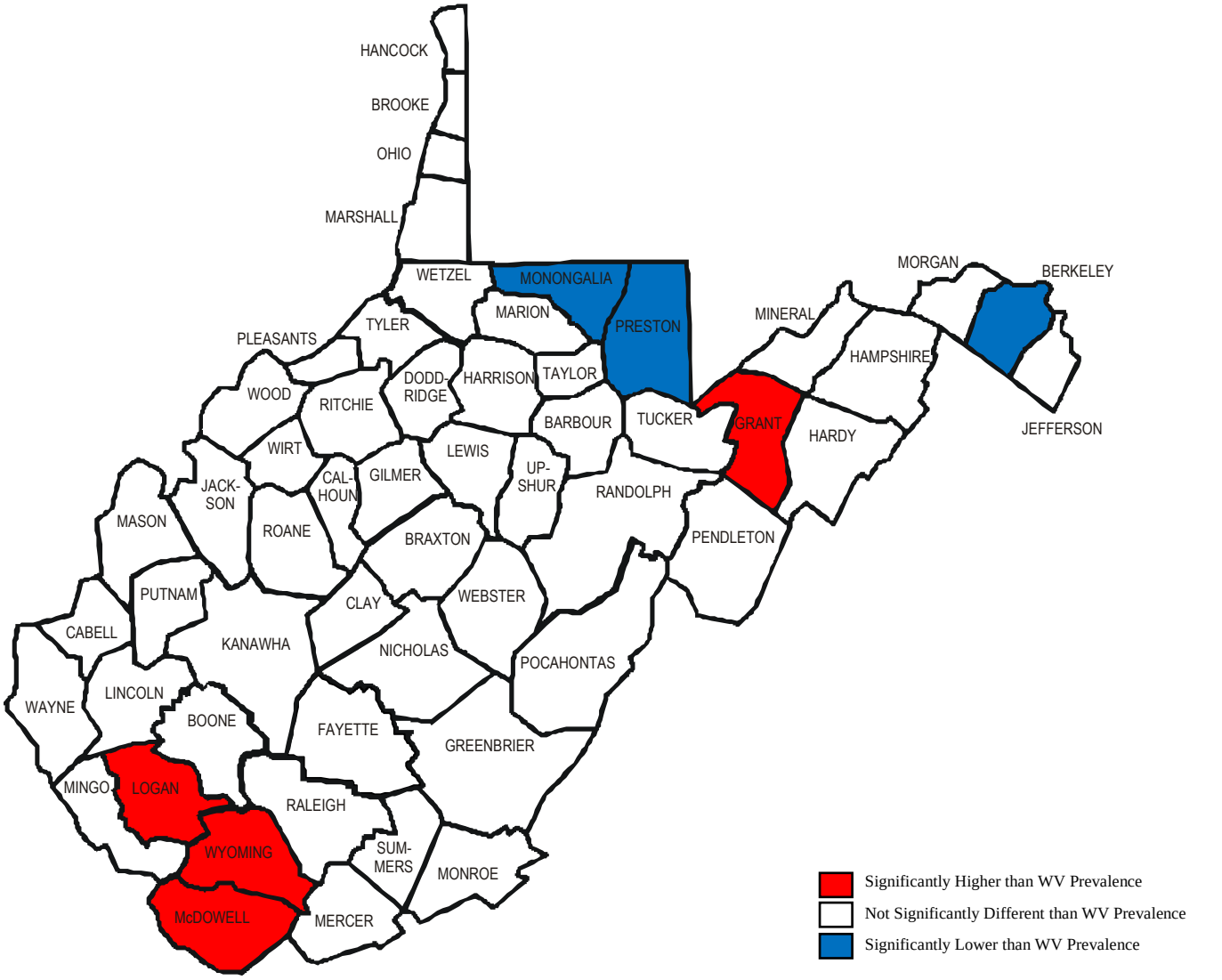


*Due to changes in sample composition and weighting methodology, 2011-2013 results are not directly comparable to previous years.

Figure 14.2 Diabetes Prevalence by County: WVBRFSS, 2009-2013

U.S. Prevalence (2011) – 9.8%

WV Prevalence (2009-2013) – 12.4%
(Significantly Higher than U.S.)



County prevalence estimates are listed in Appendix B.
See an explanation of the county-level data under County-Level Data on page 6.

Diabetes Management – Medical Care

Definitions

Persons reporting that they have diabetes were asked a series of questions about medical care for their diabetes.
At least 2 doctor visits in the past year is defined as responding "2" or more to the question "About how many times in the past 12 months have you seen a doctor, nurse, or other health professional for your diabetes?"
At least 2 A1C tests in the past year is defined as responding "2" or more to the following question "About how many times in the past 12 months has a doctor, nurse, or other health professional checked you for A1C?"
Doctor checked feet in the past year is defined as responding "1" or more to the question "About how many times in the past 12 months has a doctor, nurse, or other health professional checked your feet for any sores or irritations?"
Eye exam in the past year is defined as responding "Within the past month" or "Within the past year" to the question "When was the last time you had an eye exam in which the pupils were dilated?"

Prevalence

At Least 2 Doctor Visits in Past Year: **80.4%** (95% CI: 77.3-83.5)
At Least 2 A1C Tests in Past Year: **72.5%** (95% CI: 68.9-76.1)
Doctor Checked Feet in Past Year: **68.5%** (95% CI: 64.8-72.1)
Eye Exam in Past Year: **64.4%** (95% CI: 60.7-68.1)
Because this question is part of a state selected optional module and complete national data are not available, a U.S. comparison was not conducted.

Gender

At Least 2 Doctor Visits in Past Year:
Men: 81.4% (95% CI: 77.0-85.8)
Women: 79.5% (95% CI: 75.1-83.8)
There was no gender difference in the prevalence of had at least 2 doctor visits in the past year.
At Least 2 A1C Tests in Past Year:
Men: 72.4% (95% CI: 67.1-77.7)
Women: 72.6% (95% CI: 67.7-77.6)
There was no gender difference in the prevalence of had at least 2 A1C tests in the past year.
Doctor Checked Feet in Past Year:
Men: 71.9% (95% CI: 66.8-77.0)
Women: 65.0% (95% CI: 59.9-70.1)
There was no gender difference in the prevalence of doctor checked feet in the past year.
Eye Exam in Past Year:
Men: 61.8% (95% CI: 56.1-67.5)
Women: 67.0% (95% CI: 62.3-71.8)
There was no gender difference in the prevalence of had an eye exam in the past year.

Race/Ethnicity

No race/ethnicity analysis was conducted due to small sample size.

Age

There was no age difference in the prevalence of at least two A1C tests in the past year or doctor checked feet in the past year. There was a significantly higher prevalence of at least two doctor visits in the past year among those 55-64 than those among those 45-54 or those 65 and older. The prevalence of having an eye exam in the past year was significantly higher among those 65 and over than among those 35-54.

Education

There was no educational attainment difference in the prevalence of at least 2 doctor visits in the past year, at least 2 A1C tests in the past year, doctor checked feet in the past year, or eye exam in the past year.

Household Income

Due to small sample size, some prevalence estimates for various annual household income brackets were unreliable. People who made less than $15,000 had a higher prevalence of at least two doctor visits per year (87.4%) than did those with an income of $25,000-$34,999 (70.6%). There were no differences in the prevalence of at least 2 A1C tests in the past year or doctor checked feet in the past year. The prevalence of had an eye exam in the past year was significantly higher among those with an annual household income of $25,000-$34,999 (73.9%) and those with an annual household income of $$50,000-$74,999 than (75.6%) than among those earning less than $15,000 (51.6%).

Table 14.2 Medical Management of Diabetes by Demographic Characteristics: WVBRFSS, 2013

Characteristic	At Least 2 Doctor Visits in Past Year		At Least 2 A1C Tests in Past Year		Doctor Checked Feet in Past Year		Eye Exam in Past Year	
	%	95% CI	%	95% CI	%	95% CI	%	95% CI
TOTAL	**80.4**	77.3-83.5	**72.5**	68.9-76.1	**68.5**	64.8-72.1	**64.4**	60.7-68.1
Sex								
Males	**81.4**	77.0-85.8	**72.4**	67.1-77.7	**71.9**	66.8-77.0	**61.8**	56.1-67.5
Females	**79.5**	75.1-83.8	**72.6**	67.7-77.6	**65.0**	59.9-70.1	**67.0**	62.3-71.8
Age								
18-24	***41.8**	0.0-94.4	***41.8**	0.0-94.4	***53.8**	0.0-100.0	***100**	100.0-100.0
25-34	***80.0**	58.7-100.0	***56.0**	27.0-84.9	***62.7**	37.0-88.4	***48.3**	20.9-75.8
35-44	***74.4**	61.1-87.7	***60.6**	46.0-75.2	***57.9**	43.3-72.6	***47.2**	32.2-62.2
45-54	**76.9**	68.9-84.8	**68.7**	59.9-77.5	**59.7**	50.4-69.1	**48.9**	39.6-58.3
55-64	**88.8**	84.9-92.7	**82.3**	77.1-87.4	**74.3**	68.2-80.4	**65.1**	58.7-71.6
65+	**78.3**	73.5-83.1	**71.7**	66.1-77.2	**70.8**	65.6-76.0	**73.4**	68.2-78.6
Education								
Less than H.S.	**84.7**	77.6-91.9	**65.0**	55.4-74.6	**62.9**	53.9-71.8	**55.6**	46.7-64.5
H.S. or G.E.D.	**75.8**	70.7-80.9	**71.0**	65.6-76.5	**69.4**	64.0-74.8	**67.8**	62.5-73.2
Some Post-H.S.	**82.5**	76.7-88.4	**76.9**	70.0-83.7	**70.4**	63.2-77.6	**63.8**	55.9-71.8
College Graduate	**83.6**	77.1-90.0	**81.4**	74.6-88.2	**71.7**	63.7-79.6	**70.8**	63.0-78.6
Income								
Less than $15,000	**87.4**	82.7-92.2	**73.8**	66.3-81.2	**67.0**	58.7-75.2	**51.6**	42.8-60.3
$15,000 - 24,999	**79.9**	73.2-86.5	**71.9**	64.0-79.8	**67.3**	59.8-74.8	**59.4**	51.3-67.5
$25,000 - 34,999	***70.6**	59.7-81.4	***68.8**	57.7-79.9	***67.3**	56.7-77.9	**73.9**	64.0-83.7
$35,000 - 49,999	**83.6**	75.0-92.1	***82.7**	72.4-93.1	***70.8**	59.7-82.0	***61.9**	50.1-73.7
$50,000 - 74,999	**83.0**	73.9-92.2	**79.5**	69.7-89.3	***73.3**	63.0-83.7	**75.6**	65.6-85.5
$75,000+	**84.9**	77.1-92.7	**82.8**	74.3-91.3	**75.0**	65.1-84.9	***71.0**	59.7-82.3

* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 5.

Diabetes Management – Self-Care

Definition

Persons responding that they have diabetes were asked a series of questions about how they care for their own diabetes.
Take insulin is defined as responding "Yes" to the question "Are you now taking insulin?"
Check glucose daily is defined as responding daily to the question "About how often do you check your blood for glucose or sugar?"
Check feet daily is defined as responding at least 1 time per day to the question "About how often do you check your feet for any sores or irritations?"
Taken a diabetes education class is defined as responding "Yes" to the question "Have you ever taken a course or class in how to manage your diabetes yourself?"

Prevalence

Take Insulin: **29.7%** (95% CI: 26.2-33.3)
Check Glucose Daily: **66.3%** (95% CI: 62.7-69.9)
Check Feet Daily: **75.8%** (95% CI: 72.6-79.1)
Taken a Diabetes Education Class: **48.3%** (95% CI: 44.5-52.1)
Because this question is part of a state selected optional module and complete national data are not available, a U.S. comparison was not conducted.

Gender

Take Insulin:
Men: 30.6% (95% CI: 25.3-35.9)
Women: 28.8% (95% CI: 24.1-33.5)
There was no gender difference in the prevalence of take insulin.
Check Glucose Daily:
Men: 61.5 (95% CI: 56.0-66.9)
Women: 71.2% (95% CI: 66.5-75.9)
There was no gender difference in the prevalence of check glucose daily.
Check Feet Daily:
Men: 73.8% (95% CI: 68.8-78.7)
Women: 78.0% (95% CI: 73.7-82.2)
There was no gender difference in the prevalence of check feet daily.
Taken a Diabetes Education Class:
Men: 47.3% (95% CI: 41.6-52.9)
Women: 49.4% (95% CI: 44.3-54.5)
There was no gender difference in the prevalence of taken a diabetes education class.

Race/Ethnicity

No race/ethnicity analysis was conducted due to small sample size.

Age

There was no age difference in the prevalence of take insulin, check glucose daily, check feet daily, or taken a diabetes education class.

Education

There was no educational attainment difference in the prevalence of take insulin, check glucose daily, or check feet daily. The prevalence of taken a diabetes education class was significantly lower among those with less than a high school education (26.9%) than the prevalence among all other educational attainment groups.

Household Income

Those with a household income of $50,000-$74,000 had a significantly lower prevalence of taking insulin (18.1%) than those with a household income of $15,000 or less. The prevalence of taken a diabetes education class was

significantly higher among those with annual household income higher than $35,000 than it was among those with household income of less than $15,000. There was no annual household income difference in the prevalence of take insulin, check glucose daily, or check feet daily.

Table 14.3 Self-Care of Diabetes by Demographic Characteristics: WVBRFSS, 2013

Characteristic	Take Insulin		Check Glucose Daily		Check Feet Daily		Taken a Diabetes Education Class	
	%	95% CI	%	95% CI	%	95% CI	%	95% CI
TOTAL	**29.7**	26.2-33.3	**66.3**	62.7-69.9	**75.8**	72.6-79.1	**48.3**	44.5-52.1
Sex								
Males	**30.6**	25.3-35.9	**61.5**	56.0-66.9	**73.8**	68.8-78.7	**47.3**	41.6-52.9
Females	**28.8**	24.1-33.5	**71.2**	66.5-75.9	**78.0**	73.7-82.2	**49.4**	44.3-54.5
Age								
18-24	**53.8**	*0.0-100.0	***53.8**	0.0-100.0	***100.0**	100.0-100.0	***39.3**	0.0-90.9
25-34	**41.8**	*15.1-68.6	***83.6**	63.5-100	***74.2**	52.5-96.0	***78.8**	58.5-99.1
35-44	**26.4**	*12.4-40.5	***68.1**	54.5-81.7	***83.1**	72.9-93.3	***43.4**	28.8-58.0
45-54	**26.8**	18.4-35.1	**59.2**	49.8-68.5	**70.7**	61.9-79.5	**43.1**	33.9-52.2
55-64	**34.1**	27.6-40.7	**66.8**	60.4-73.3	**78.8**	73.0-84.6	**50.3**	43.5-57.1
65+	**27.0**	21.9-32.2	**67.7**	62.5-72.8	**73.9**	68.9-79.0	**48.2**	42.5-53.9
Education								
Less than H.S.	**32.3**	23.8-40.7	**70.8**	62.6-78.9	**76.6**	69.2-84.0	**26.9**	19.4-34.5
H.S. or G.E.D.	**29.0**	23.7-34.3	**64.7**	59.2-70.2	**75.6**	70.5-80.8	**48.2**	42.5-54.0
Some Post-H.S.	**29.9**	22.6-37.3	**66.7**	59.2-74.2	**77.1**	70.6-83.6	**63.4**	55.8-71.0
College Graduate	**28.0**	20.3-35.7	**63.6**	55.5-71.8	**72.4**	64.5-80.3	**61.9**	53.5-70.2
Income								
Less than $15,000	**38.1**	29.4-46.8	**69.7**	61.7-77.8	**76.8**	69.4-84.2	**35.5**	27.5-43.5
$15,000 - 24,999	**32.6**	24.9-40.3	**70.2**	63.0-77.4	**80.8**	74.7-86.8	**43.4**	35.5-51.3
$25,000 - 34,999	***28.8**	17.9-39.8	***55.8**	44.5-67.1	***70.8**	59.7-81.9	***46.2**	34.8-57.7
$35,000 - 49,999	***29.7**	18.3-41.1	***68.6**	58.0-79.2	***72.7**	61.9-83.4	***67.5**	56.8-78.1
$50,000 - 74,999	**18.1**	9.5-26.7	***66.4**	55.6-77.2	**78.0**	68.8-87.1	***65.7**	54.7-76.6
$75,000+	**23.8**	13.8-33.7	***69.4**	58.6-80.2	***72.4**	62.1-82.7	***58.4**	46.8-70.1

* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 5.

Other Diabetes Indicators

Definition Responding "Yes" to the question "Have you ever been told by a doctor or other health professional that you have pre-diabetes or borderline diabetes?"

Prevalence **8.6%** (95% CI: 7.7-9.5)
Because this question is part of a state selected optional module and complete national data are not available, a U.S. comparison was not conducted.

Gender **Men:** 7.8% (95% CI: 6.5-9.0)
Women: 9.4% (95% CI: 8.1-10.7)
There was no gender difference in the prevalence of pre-diabetes or borderline diabetes.

Race/Ethnicity No race/ethnicity analysis was conducted due to small sample size.

Age The prevalence of borderline diabetes or pre-diabetes generally increased with age. The prevalence of borderline diabetes or pre-diabetes was significantly higher among those 65 and over (12.7%) than among those under 35.

Education The prevalence of borderline diabetes or pre-diabetes decreased with educational attainment. The prevalence of borderline diabetes or pre-diabetes was significantly lower in those with a college degree (6.2%) than in those with less than a high school education (11.2%).

Household Income The prevalence of borderline diabetes or pre-diabetes was significantly lower among those with a household income of $75,000 or more than among any other income bracket.

Table 14.4 Borderline/Pre-Diabetes Prevalence by Demographic Characteristics: WVBRFSS, 2013

Characteristic	Men			Women			Total		
	# Resp.	%	95% CI	# Resp.	%	95% CI	# Resp.	%	95% CI
TOTAL	2,027	**7.8**	6.5-9.0	2,872	**9.4**	8.1-10.7	4,899	**8.6**	7.7-9.5
Age									
18-24	129	***0.5**	0.0-1.4	159	**7.1**	1.7-12.5	288	**3.6**	0.9-6.3
25-34	220	**2.1**	0.4-3.8	326	**4.2**	1.9-6.6	546	**3.2**	1.7-4.6
35-44	308	**6.5**	3.1-9.8	408	**9.7**	6.2-13.3	716	**8.1**	5.7-10.6
45-54	401	**10.0**	6.6-13.3	486	**10.4**	7.5-13.4	887	**10.2**	8.0-12.4
55-64	458	**12.6**	9.2-15.9	628	**10.6**	7.9-13.3	1,086	**11.6**	9.4-13.7
65+	498	**13.5**	10.0-16.9	839	**12.2**	9.7-14.8	1,337	**12.7**	10.7-14.8
Education									
Less than H.S.	278	**8.9**	5.3-12.5	296	**14.0**	8.7-19.2	574	**11.2**	8.1-14.3
H.S. or G.E.D.	781	**7.7**	5.8-9.6	1,094	**8.9**	7.0-10.8	1,875	**8.3**	6.9-9.6
Some Post-H.S.	434	**7.5**	5.1-10.0	752	**10.2**	7.8-12.7	1,186	**9.1**	7.3-10.8
College Graduate	530	**7.0**	4.6-9.4	721	**5.5**	3.8-7.2	1,251	**6.2**	4.8-7.6
Income									
Less than $15,000	214	**8.2**	4.1-12.4	381	**10.2**	6.9-13.5	595	**9.3**	6.7-11.9
$15,000 - 24,999	349	**8.7**	5.4-12.1	495	**11.6**	8.2-15.1	844	**10.2**	7.8-12.6
$25,000 - 34,999	236	**11.3**	7.1-15.5	294	**10.3**	6.0-14.5	530	**10.8**	7.8-13.8
$35,000 - 49,999	286	**10.0**	6.5-13.6	318	**7.9**	4.9-10.9	604	**9.0**	6.7-11.4
$50,000 - 74,999	258	**8.1**	4.6-11.5	386	**9.8**	6.0-13.6	644	**9.0**	6.4-11.6
$75,000+	429	**3.9**	2.0-5.8	488	**5.1**	2.7-7.6	917	**4.5**	3.0-6.0

* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 5.

Definition Responding "Yes" to the question "Have you had a test for high blood sugar or diabetes within the past three years?"

Prevalence **61.2%** (95% CI: 59.5-62.9)
Because this question is part of a state selected optional module and complete national data are not available, a U.S. comparison was not conducted.

Gender **Men**: 58.2% (95% CI: 55.5-60.9)
Women: 64.0% (95% CI: 61.8-66.1)
The prevalence of had a diabetes test in the past 3 years was significantly higher in females than males.

Race/Ethnicity No race/ethnicity analysis was conducted due to small sample size.

Age The prevalence of had a diabetes test in the past 3 years generally increased with age with those 65 and over (76.1%) significantly higher than those under 55.

Education Adults with less than a high school education had the lowest prevalence of had a diabetes test in the past 3 years (52.9%), significantly lower than those with some post high school education (62.5%) and those with a college degree (70.2%).

Household Income The prevalence of had a diabetes test in the past 3 years was significantly lower among those with an annual household income of less than $15,000 (53.5%) than the prevalence among those with a household income of $35,000 or more per year.

Table 14.5 Had a Diabetes Test in the Past 3 Years by Demographic Characteristics: WVBRFSS, 2013

Characteristic	Men			Women			Total		
	# Resp.	%	95% CI	# Resp.	%	95% CI	# Resp.	%	95% CI
TOTAL	1,931	**58.2**	55.5-60.9	2,764	**64.0**	61.8-66.1	4,695	**61.2**	59.5-62.9
Age									
18-24	124	**33.6**	24.2-42.9	155	**48.1**	39.4-56.8	279	**40.5**	34.0-46.9
25-34	216	**37.5**	30.4-44.6	321	**55.3**	49.3-61.3	537	**46.4**	41.6-51.1
35-44	294	**55.3**	48.9-61.6	397	**58.6**	53.1-64.0	691	**57.0**	52.8-61.1
45-54	376	**67.4**	61.9-72.9	471	**66.1**	61.3-70.9	847	**66.7**	63.1-70.3
55-64	439	**73.1**	68.3-77.9	609	**73.1**	69.1-77.2	1,048	**73.1**	70.0-76.2
65+	470	**78.0**	73.8-82.3	787	**74.7**	71.3-78.1	1,257	**76.1**	73.5-78.8
Education									
Less than H.S.	264	**53.9**	46.8-60.9	279	**51.7**	44.7-58.6	543	**52.9**	47.9-57.9
H.S. or G.E.D.	745	**55.1**	50.9-59.4	1,051	**64.2**	60.8-67.6	1,796	**59.7**	56.9-62.4
Some Post-H.S.	412	**58.9**	53.2-64.7	734	**65.1**	61.0-69.1	1,146	**62.5**	59.1-65.9
College Graduate	506	**69.6**	64.8-74.5	694	**70.7**	66.8-74.6	1,200	**70.2**	67.2-73.3
Income									
Less than $15,000	204	**47.8**	39.5-56.1	372	**57.8**	51.7-63.9	576	**53.5**	48.4-58.5
$15,000 - 24,999	338	**51.9**	45.5-58.3	479	**58.8**	53.4-64.2	817	**55.4**	51.3-59.6
$25,000 - 34,999	227	**60.0**	52.2-67.8	283	**62.0**	54.9-69.2	510	**61.0**	55.7-66.3
$35,000 - 49,999	271	**64.1**	57.1-71.2	308	**68.5**	62.4-74.7	579	**66.2**	61.5-71.0
$50,000 - 74,999	250	**64.6**	57.6-71.7	377	**70.4**	65.2-75.7	627	**67.8**	63.5-72.1
$75,000+	404	**65.1**	59.0-71.2	474	**70.7**	65.7-75.7	878	**67.8**	63.8-71.8

Definition Persons reporting that they have diabetes and responding "Yes" to the question "Has a doctor ever told you that diabetes has affected your eyes or that you had retinopathy?"

Prevalence **18.3%** (95% CI: 15.4-21.3)
Because this question is part of a state selected optional module and complete national data are not available, a U.S. comparison was not conducted.

Gender **Men**: 19.0% (95% CI: 14.7-23.3)
Women: 17.7% (95% CI: 13.7-21.7)
There was no gender difference in the prevalence of retinopathy.

Race/Ethnicity No race/ethnicity analysis was conducted due to small sample size.

Age There was no age difference in the prevalence of retinopathy.

Education There was no educational attainment difference in the prevalence of retinopathy.

Household Income The prevalence of retinopathy was highest among those with an annual household income of less than $15,000 (27.1%) and was significantly higher than those with a household income of $75,000 or more.

Table 14.6 Told That Diabetes Affected Eyes or Have Retinopathy by Demographic Characteristics: WVBRFSS, 2013

Characteristic	Total		
	# Resp.	%	95% CI
TOTAL	911	**18.3**	15.4-21.3
Sex			
Males	394	**19.0**	14.7-23.3
Females	517	**17.7**	13.7-21.7
Age			
18-24	4	***0.0**	0.0-0.0
25-34	17	***20.6**	1.0-40.2
35-44	54	***15.4**	4.8-25.9
45-54	138	**22.2**	14.2-30.2
55-64	267	**22.8**	17.0-28.6
65+	428	**14.6**	10.6-18.5
Education			
Less than H.S.	163	**20.4**	13.3-27.6
H.S. or G.E.D.	380	**18.8**	14.3-23.3
Some Post-H.S.	195	**19.7**	13.9-25.5
College Graduate	170	**10.8**	5.4-16.1
Income			
Less than $15,000	185	**27.1**	19.4-34.7
$15,000 - 24,999	194	**18.4**	11.8-25.1
$25,000 - 34,999	105	**19.3**	10.8-27.7
$35,000 - 49,999	92	***15.8**	6.5-25.2
$50,000 - 74,999	88	**15.3**	7.5-23.1
$75,000+	89	***3.2**	0.0-7.1

* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 5.

CHAPTER 15: CANCER

Skin Cancer Prevalence

Definition

Responding "Yes" to the question "Has a doctor, nurse, or other health professional ever told you that you had skin cancer?"

Prevalence

WV: 6.8% (95% CI: 6.2-7.4)
U.S.: 5.8% (95% CI: 5.7-5.9)
The West Virginia prevalence of skin cancer was significantly higher than the U.S. prevalence. West Virginia ranked the 14th highest among 53 BRFSS participants.

Gender

Men: 7.1% (95% CI: 6.1-8.1)
Women: 6.5% (95% CI: 5.7-7.4)
There was no gender difference in skin cancer prevalence.

Race/Ethnicity

White, Non-Hispanic: 7.2% (95% CI: 6.5-7.9)
Black, Non-Hispanic: *0.0% (95% CI: 0.0-0.0)
Other, Non-Hispanic: *3.0% (95% CI: 0.0-8.2)
Multiracial, Non-Hispanic: *4.7% (95% CI: 0.8-8.7)
Hispanic: *0.0% (95% CI: 0.0-0.0)
The prevalence of skin cancer was significantly higher among White, Non-Hispanics than among Black, Non-Hispanics and Hispanics. There was no other race/ethnicity difference in the prevalence of skin cancer.
* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 5.

Age

The prevalence of skin cancer was highest among those aged 65 and older (17.8%) and was significantly higher than all other age groups.

Education

The prevalence of skin cancer was significantly higher among those with a college degree than among those with some post-high school education.

Household Income

There was no annual household income difference in the prevalence of skin cancer.

Table 15.1 Skin Cancer Prevalence by Demographic Characteristics: WVBRFSS, 2013

Characteristic	Men			Women			Total		
	# Resp.	%	95% CI	# Resp.	%	95% CI	# Resp.	%	95% CI
TOTAL	2,454	**7.1**	6.1-8.1	3,429	**6.5**	5.7-7.4	5,883	**6.8**	6.2-7.4
Age									
18-24	136	***0.0**	0.0.-0.0	168	***0.5**	0.0-1.6	304	***0.3**	0.0-0.8
25-34	235	***0.2**	0.0-0.5	347	***1.2**	0.1-2.2	582	***0.7**	0.1-1.2
35-44	342	**4.0**	1.9-6.2	442	***1.7**	0.5-2.8	784	**2.9**	1.6-4.1
45-54	465	**3.3**	1.6-5.1	566	**3.7**	2.0-5.3	1,031	**3.5**	2.3-4.7
55-64	585	**9.9**	7.3-12.5	778	**8.5**	6.3-10.7	1,363	**9.2**	7.5-10.9
65+	677	**19.9**	16.5-23.2	1,098	**16.1**	13.6-18.5	1,775	**17.8**	15.7-19.8
Education									
Less than H.S.	351	**5.9**	3.5-8.3	396	**9.1**	6.2-12.1	747	**7.4**	5.5-9.3
H.S. or G.E.D.	940	**6.6**	5.1-8.2	1,331	**7.1**	5.7-8.4	2,271	**6.9**	5.8-7.9
Some Post-H.S.	526	**5.6**	3.8-7.5	883	**4.6**	3.3-5.9	1,409	**5.0**	4.0-6.1
College Graduate	632	**11.3**	8.8-13.7	808	**6.3**	4.6-8.0	1,440	**8.6**	7.2-10.1
Income									
Less than $15,000	269	**5.8**	3.1-8.4	525	**5.6**	3.5-7.6	794	**5.6**	4.0-7.3
$15,000 - 24,999	432	**6.4**	4.2-8.6	621	**7.3**	5.1-9.5	1,053	**6.9**	5.3-8.4
$25,000 - 34,999	300	**8.2**	5.2-11.1	340	**7.0**	3.9-10.0	640	**7.6**	5.5-9.7
$35,000 - 49,999	331	**8.2**	5.2-11.2	368	**4.6**	2.8-6.5	699	**6.5**	4.7-8.3
$50,000 - 74,999	301	**8.0**	4.9-11.2	437	**7.4**	5.1-9.8	738	**7.7**	5.8-9.6
$75,000+	498	**6.1**	4.1-8.0	527	**4.6**	2.8-6.4	1,025	**5.4**	4.1-6.7

* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 5.

Other Cancer Prevalence

Definition

Responding "Yes" to the question "Has a doctor, nurse, or other health professional ever told you that you had any other types of cancer?"

Prevalence

WV: 7.3% (95% CI: 6.6-8.0)
U.S.: 6.5% (95% CI: 6.4-6.6)
The West Virginia prevalence of other cancer was similar to the national prevalence. West Virginia ranked the 14th highest among 53 BRFSS participants.

Gender

Men: 5.0% (95% CI: 4.2-5.9)
Women: 9.4% (95% CI: 8.4-10.5)
The prevalence of other types of cancer was significantly higher among females than among males.

Race/Ethnicity

White, Non-Hispanic: 7.4% (95% CI: 6.7-8.1)
Black, Non-Hispanic: *7.0% (95% CI: 1.5-12.4)
Other, Non-Hispanic: *0.4% (95% CI: 0.0-1.1)
Multiracial, Non-Hispanic: *3.8% (95% CI: 0.3-7.2)
Hispanic: *4.6% (95% CI: 0.0-9.1)
The prevalence of other cancer was significantly higher among White, Non-Hispanics and Black Non-Hispanics than among Other, Non-Hispanics.
* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 5.

Age

The prevalence of other cancer was highest among those aged 65 and older (15.9%) and was significantly higher than all other age groups.

Education

There was no educational attainment difference in the prevalence of other cancer.

Household Income

Those with an annual household income of $75,000 had a significantly lower prevalence of other cancer (4.4%) than did those with an annual household income less than $35,000.

Table 15.2 Other Cancer Prevalence by Demographic Characteristics: WVBRFSS, 2013

Characteristic	Men			Women			Total		
	# Resp.	%	95% CI	# Resp.	%	95% CI	# Resp.	%	95% CI
TOTAL	2,456	**5.0**	4.2-5.9	3,431	**9.4**	8.4-10.5	5,887	**7.3**	6.6-8.0
Age									
18-24	136	***0.0**	0.0-0.0	169	***1.6**	0.0-3.4	305	***0.8**	0.0-1.6
25-34	234	***0.7**	0.0-2.1	346	**4.1**	1.8-6.4	580	**2.4**	1.0-3.8
35-44	343	***2.3**	0.6-3.9	443	**8.2**	5.3-11.1	786	**5.3**	3.6-6.9
45-54	466	**0.9**	0.1-1.7	565	**9.2**	6.5-12.0	1,031	**5.1**	3.6-6.6
55-64	586	**6.0**	3.9-8.1	777	**11.9**	9.3-14.4	1,363	**9.0**	7.3-10.6
65+	677	**16.4**	13.2-19.6	1,101	**15.4**	13.0-17.8	1,778	**15.9**	13.9-17.8
Education									
Less than H.S.	351	**6.8**	4.0-9.6	395	**10.4**	7.1-13.7	746	**8.4**	6.3-10.6
H.S. or G.E.D.	941	**4.4**	3.2-5.7	1,332	**9.9**	8.2-11.6	2,273	**7.2**	6.1-8.2
Some Post-H.S.	527	**4.3**	2.7-5.9	883	**9.5**	7.5-11.5	1,410	**7.2**	5.8-8.5
College Graduate	632	**5.7**	4.0-7.5	810	**7.3**	5.5-9.1	1,442	**6.6**	5.3-7.8
Income									
Less than $15,000	268	***2.8**	1.1-4.5	525	**13.0**	9.8-16.2	793	**8.7**	6.6-10.7
$15,000 - 24,999	432	**6.6**	4.1-9.1	620	**10.2**	7.5-12.9	1,052	**8.4**	6.6-10.3
$25,000 - 34,999	301	**7.4**	4.1-10.6	341	**10.8**	7.4-14.3	642	**8.9**	6.5-11.3
$35,000 - 49,999	332	**4.9**	2.5-7.3	368	**9.9**	6.5-13.3	700	**7.2**	5.2-9.3
$50,000 - 74,999	302	**6.1**	3.6-8.7	437	**4.6**	2.8-6.4	739	**5.3**	3.8-6.8
$75,000+	498	**3.1**	1.7-4.4	528	**5.9**	3.8-8.0	1,026	**4.4**	3.2-5.6

* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 5.

Overall Cancer Prevalence

Definition

Responding "Yes" to either of the questions "Has a doctor, nurse, or other health professional ever told you that you had skin cancer?" "Has a doctor, nurse, or other health professional ever told you that you had any other types of cancer?"

Prevalence

WV: 13.0% (95% CI: 12.2-13.9)
U.S.: 11.1% (95% CI: 11.0-11.2)
The West Virginia cancer prevalence was significantly higher than the U.S. prevalence. West Virginia ranked the 10th highest among 53 BRFSS participants.

Gender

Men: 11.1% (95% CI: 9.9-12.4)
Women: 14.9% (95% CI: 13.6-16.1)
The prevalence of cancer was significantly higher among females than males.

Race/Ethnicity

White, Non-Hispanic: 13.5% (95% CI: 12.6-14.5)
Black, Non-Hispanic: *7.0% (95% CI: 1.5-12.4)
Other, Non-Hispanic: *3.3% (95% CI: 0.0-8.6)
Multiracial, Non-Hispanic: 7.8% (95% CI: 2.8-12.9)
Hispanic: *4.6% (95% CI: 0.0-9.1)
White, Non-Hispanics had a significantly higher prevalence of cancer than Black, Non-Hispanics, Other Non-Hispanics and Hispanics.
* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 5.

Age

The prevalence of cancer generally increased as age increased. Those aged 65 and older had the highest cancer prevalence among all age groups in West Virginia, significantly higher than all other age groups. More than one-fourth of WV adults 65 and older (30.4%) had cancer during their life.

Education

There was no educational attainment difference in the prevalence of cancer.

Household Income

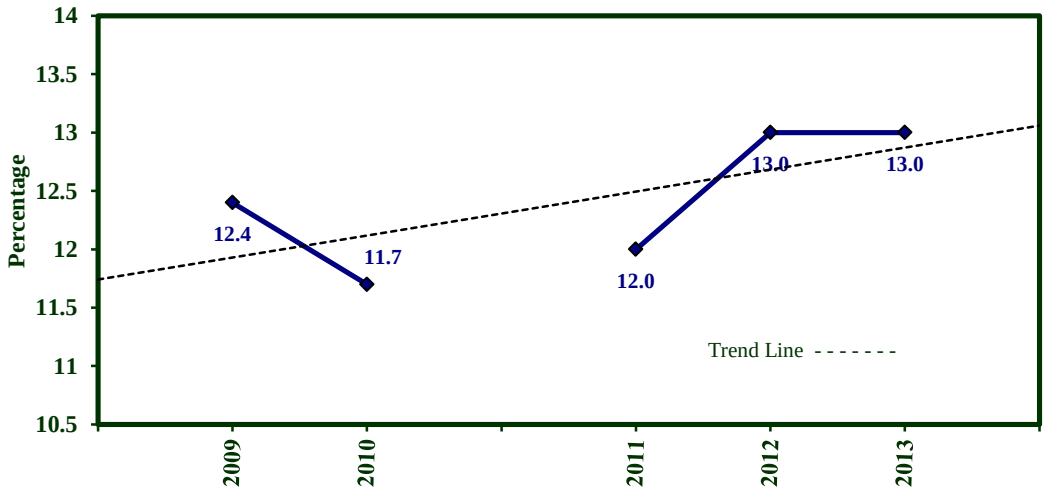
The prevalence of cancer was lowest among those with an annual household income of $75,000 or more (9.0%) and was significantly lower than those earning less than $35,000 per year.

Table 15.3 Overall Cancer Prevalence by Demographic Characteristics: WVBRFSS, 2013

Characteristic	Men			Women			Total		
	# Resp.	%	95% CI	# Resp.	%	95% CI	# Resp.	%	95% CI
TOTAL	2,451	**11.1**	9.9-12.4	3,426	**14.9**	13.6-16.1	5,877	**13.0**	12.2-13.9
Age									
18-24	136	***0.0**	0.0-0.0	168	***2.1**	0.1-4.2	304	**1.0**	0.0-2.0
25-34	233	***0.9**	0.0-2.4	346	**5.1**	2.6-7.6	579	**3.0**	1.5-4.4
35-44	342	**6.4**	3.7-9.0	442	**9.6**	6.6-12.7	784	**8.0**	6.0-10.0
45-54	465	**4.2**	2.3-6.1	565	**12.2**	9.1-15.3	1,030	**8.2**	6.4-10.1
55-64	585	**14.9**	11.8-18.0	777	**18.9**	15.8-22.0	1,362	**16.9**	14.7-19.1
65+	676	**32.4**	28.3-36.4	1,098	**28.8**	25.7-31.8	1,774	**30.4**	27.9-32.8
Education									
Less than H.S.	350	**11.8**	8.3-15.3	395	**18.8**	14.6-23.0	745	**15.0**	12.3-17.7
H.S. or G.E.D.	940	**10.1**	8.2-11.9	1,328	**15.6**	13.5-17.6	2,268	**12.8**	11.4-14.2
Some Post-H.S.	524	**9.0**	6.7-11.3	883	**13.1**	10.9-15.4	1,407	**11.3**	9.7-12.9
College Graduate	632	**16.0**	13.1-18.8	809	**12.6**	10.2-15.0	1,441	**14.2**	12.4-16.0
Income									
Less than $15,000	267	**8.0**	5.0-11.0	523	**17.5**	13.8-21.2	790	**13.5**	11.0-16.0
$15,000 - 24,999	431	**12.2**	9.0-15.4	620	**16.5**	13.2-19.7	1,051	**14.4**	12.1-16.7
$25,000 - 34,999	300	**13.5**	9.4-17.5	340	**16.6**	12.3-20.9	640	**14.9**	11.9-17.8
$35,000 - 49,999	331	**12.2**	8.5-15.9	368	**14.2**	10.4-18.0	699	**13.1**	10.5-15.8
$50,000 - 74,999	301	**12.6**	8.9-16.4	437	**11.3**	8.4-14.1	738	**11.9**	9.6-14.2
$75,000+	498	**8.5**	6.2-10.8	527	**9.6**	7.0-12.1	1,025	**9.0**	7.3-10.7

* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 5.

Figure 15.1 Overall Cancer Prevalence by Year: WVBRFSS, 2000-2013

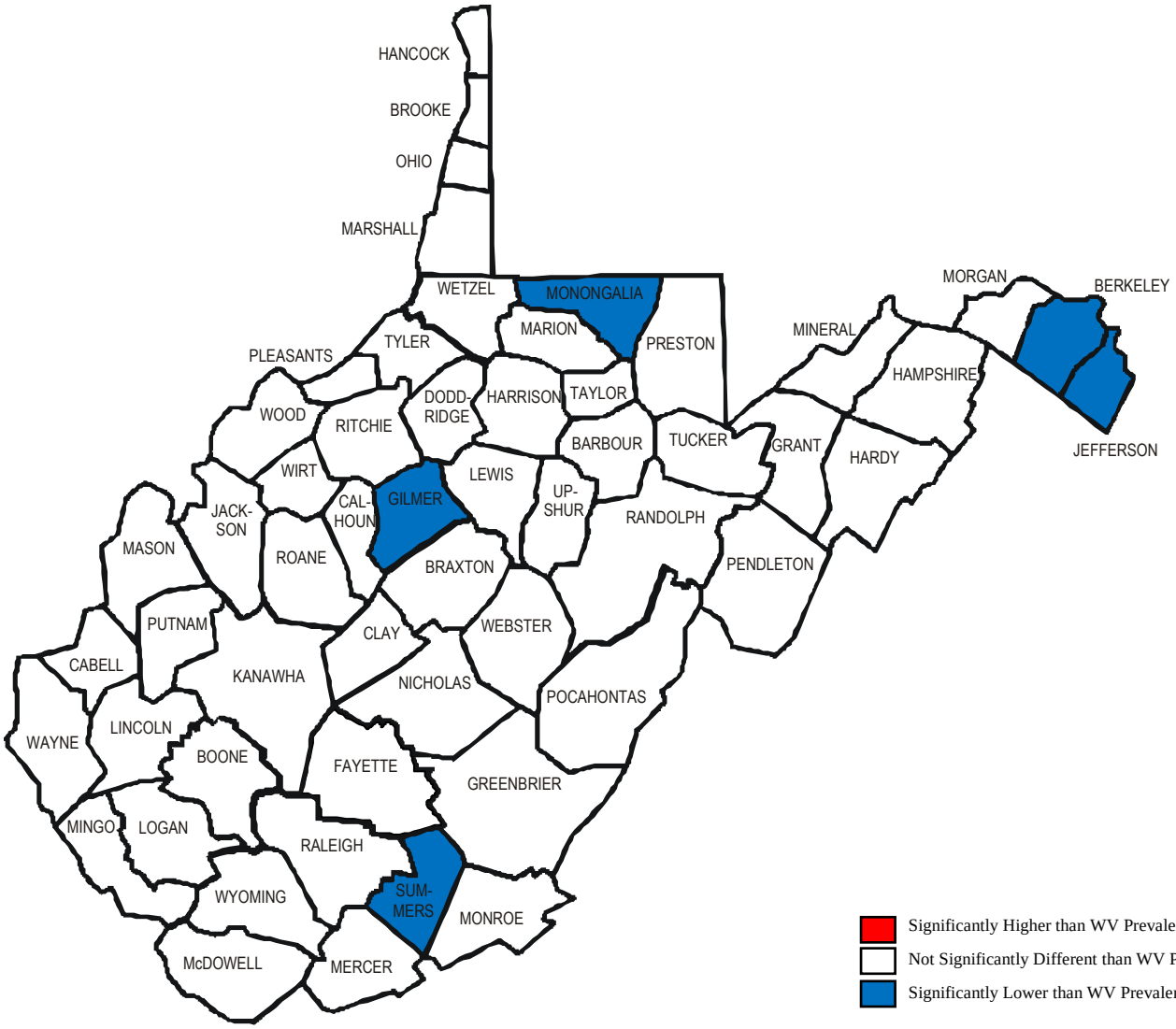


*Due to changes in sample composition and weighting methodology, 2011-2013 results are not directly comparable to previous years.

Figure 15.2 Cancer Prevalence by County: WVBRFSS, 2009-2013

U.S. Prevalence (2011) – 11.1%

WV Prevalence (2009-2013) – 11.7%
(Significantly Higher than U.S.)



County prevalence estimates are listed in Appendix B.
See an explanation of the county-level data under County-Level Data on page 6.

CHAPTER 16: RESPIRATORY DISEASES

Lifetime Asthma

Definitions

Responding "Yes" to the question "Has a doctor, nurse, or other health professional ever told you that you had asthma?"

Prevalence

WV: 13.6% (95% CI: 12.5-14.7)
U.S.: 14.1% (95% CI: 13.9-14.3)
The West Virginia prevalence of lifetime asthma was similar to the U.S. prevalence. West Virginia ranked the 31st highest among 53 BRFSS participants.

Gender

Men: 10.5% (95% CI: 8.9-12.0)
Women: 16.6% (95% CI: 15.1-18.1)
The prevalence of lifetime asthma was significantly higher among females than among males.

Race/Ethnicity

White, Non-Hispanic: 13.1% (95% CI: 12.0-14.2)
Black, Non-Hispanic: *24.4% (95% CI: 13.8-35.0)
Other, Non-Hispanic: *16.2% (95% CI: 4.9-27.4)
Multiracial, Non-Hispanic: 21.3% (95% CI: 11.6-31.0)
Hispanic: *14.0% (95% CI: 3.7-24.3)
There was no race/ethnicity difference in the prevalence of lifetime asthma.
* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 5.

Age

In general, the prevalence of lifetime asthma decreased with age. The prevalence of lifetime asthma was highest among those 18-24 (19.7%) which was significantly higher than those aged 45-54 (11.6%) and those 65 and older (11.6%).

Education

The prevalence of lifetime asthma was significantly higher among those with less than a high school education (18.5%) than among those with some post-high school education (12.2%) and college graduates (10.3%).

Household Income

The prevalence of lifetime asthma was significantly higher among those with an annual household income of less than $15,000 (23.6%) than among all other income brackets.

Table 16.1 Prevalence of Lifetime Asthma by Demographic Characteristics: WVBRFSS, 2013

Characteristic	Men			Women			Total		
	# Resp.	%	95% CI	# Resp.	%	95% CI	# Resp.	%	95% CI
TOTAL	2,448	**10.5**	8.9-12.0	3,419	**16.6**	15.1-18.1	5,867	**13.6**	12.5-14.7
Age									
18-24	136	**16.4**	9.2-23.7	169	**23.2**	16.3-30.1	305	**19.7**	14.7-24.7
25-34	234	**12.0**	7.7-16.4	346	**17.4**	13.1-21.7	580	**14.7**	11.6-17.8
35-44	343	**9.9**	6.3-13.4	441	**18.2**	14.2-22.3	784	**14.0**	11.3-16.7
45-54	462	**5.8**	3.4-8.2	565	**17.4**	13.8-21.0	1,027	**11.6**	9.4-13.8
55-64	586	**12.7**	9.6-15.9	773	**13.2**	10.4-16.0	1,359	**13.0**	10.9-15.0
65+	673	**8.2**	5.7-10.6	1,096	**14.4**	11.9-16.9	1,769	**11.6**	9.9-13.4
Education									
Less than H.S.	348	**14.0**	9.4-18.7	393	**23.9**	19.0-28.9	741	**18.5**	15.1-21.9
H.S. or G.E.D.	938	**10.8**	8.4-13.2	1,327	**16.8**	14.4-19.2	2,265	**13.8**	12.1-15.5
Some Post-H.S.	529	**8.4**	5.6-11.2	882	**15.2**	12.4-18.1	1,411	**12.2**	10.2-14.2
College Graduate	628	**8.4**	5.9-10.8	807	**12.1**	9.6-14.6	1,435	**10.3**	8.6-12.1
Income									
Less than $15,000	269	**18.2**	12.8-23.7	522	**27.6**	22.9-32.3	791	**23.6**	20.0-27.2
$15,000 - 24,999	431	**11.7**	8.1-15.4	620	**20.3**	16.4-24.2	1,051	**16.1**	13.4-18.8
$25,000 - 34,999	301	**9.9**	5.8-14.1	340	**12.6**	8.0-17.2	641	**11.1**	8.0-14.2
$35,000 - 49,999	331	**6.9**	4.0-9.9	367	**10.1**	6.5-13.6	698	**8.4**	6.1-10.7
$50,000 - 74,999	300	**6.6**	3.7-9.5	436	**13.9**	10.3-17.6	736	**10.5**	8.1-13.0
$75,000+	496	**9.2**	5.0-13.4	528	**10.2**	6.8-13.5	1,024	**9.7**	6.9-12.4

* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 5.

Current Asthma

Definitions

Responding "Yes" to the lifetime asthma question and "Yes" to the question "Do you still have asthma?"

Prevalence

WV: 9.0% (95% CI: 8.2-9.9)
U.S.: 9.0% (95% CI: 8.8-9.1)
The West Virginia prevalence of current asthma was significantly higher than the U.S. prevalence. West Virginia ranked the 27th highest among 53 BRFSS participants.

Gender

Men: 5.5% (95% CI: 4.5-6.5)
Women: 12.4% (95% CI: 11.0-13.7)
The prevalence of current asthma was significantly higher among women than men.

Race/Ethnicity

White, Non-Hispanic: 8.8% (95% CI: 7.9-9.6)
Black, Non-Hispanic: 14.1% (95% CI: 6.8-21.3)
Other, Non-Hispanic: *14.8% (95% CI: 3.8-25.9)
Multiracial, Non-Hispanic: 13.6% (95% CI: 5.0-22.2)
Hispanic: *9.0% (95% CI: 0.2-17.9)
There was no race/ethnicity difference in the prevalence of current asthma.
* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 5.

Age

There was no age difference in the prevalence of current asthma.

Education

The prevalence of current asthma was highest among adults with less than a high school education (14.1%) and was significantly higher than all other educational attainment groups.

Household Income

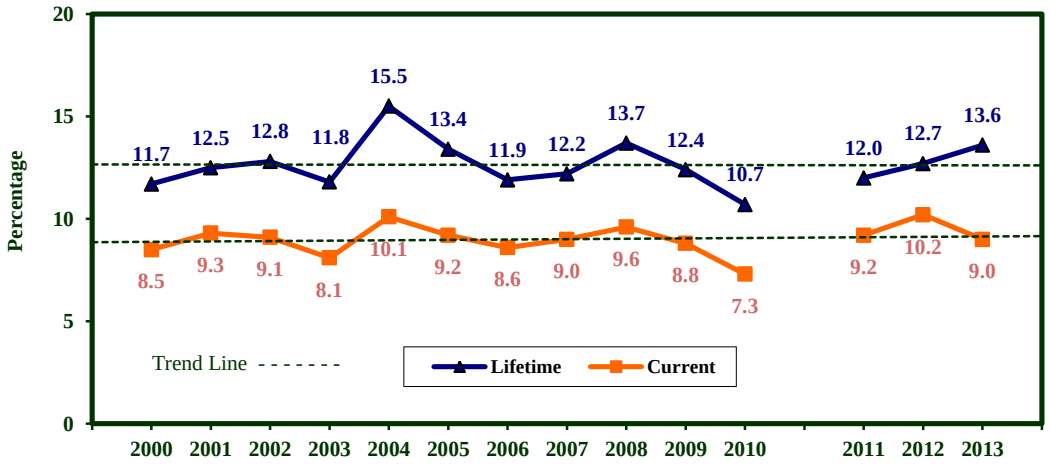
The prevalence of current asthma was highest among those with an annual household income of less than $15,000 (17.9%) and was significantly higher than the prevalence among all other income brackets.

Table 16.2 Prevalence of Current Asthma by Demographic Characteristics: WVBRFSS, 2013

Characteristic	Men			Women			Total		
	# Resp.	%	95% CI	# Resp.	%	95% CI	# Resp.	%	95% CI
TOTAL	2,438	**5.5**	4.5-6.5	3,399	**12.4**	11.0-13.7	5,837	**9.0**	8.2-9.9
Age									
18-24	134	**0.7**	0.0-2.0	162	**13.3**	7.4-19.2	296	**6.7**	3.7-9.7
25-34	231	**4.9**	1.9-8.0	344	**11.6**	8.0-15.1	575	**8.2**	5.9-10.6
35-44	343	**6.1**	3.3-8.9	441	**14.0**	10.3-17.7	784	**10.0**	7.7-12.4
45-54	461	**4.2**	2.2-6.1	562	**13.7**	10.5-16.9	1,023	**9.0**	7.0-10.9
55-64	585	**10.5**	7.6-13.5	770	**10.9**	8.3-13.4	1,355	**10.7**	8.8-12.6
65+	670	**4.8**	2.9-6.7	1,091	**11.9**	9.5-14.2	1,761	**8.8**	7.2-10.3
Education									
Less than H.S.	345	**8.5**	5.4-11.6	389	**20.8**	16.0-25.6	734	**14.1**	11.3-16.9
H.S. or G.E.D.	936	**5.0**	3.6-6.5	1,318	**12.1**	10.0-14.1	2,254	**8.5**	7.2-9.8
Some Post-H.S.	527	**4.8**	2.8-6.9	876	**11.1**	8.5-13.6	1,403	**8.3**	6.6-10.0
College Graduate	625	**4.2**	2.5-5.9	806	**7.9**	5.9-9.9	1,431	**6.2**	4.8-7.5
Income									
Less than $15,000	267	**11.9**	7.5-16.2	518	**22.4**	18.1-26.7	785	**17.9**	14.7-21.0
$15,000 - 24,999	428	**5.7**	3.2-8.2	615	**14.8**	11.4-18.2	1,043	**10.4**	8.2-12.5
$25,000 - 34,999	300	**5.3**	2.5-8.0	338	**9.0**	4.9-13.1	638	**6.9**	4.6-9.3
$35,000 - 49,999	331	**5.3**	2.6-8.0	367	**7.6**	4.5-10.8	698	**6.4**	4.3-8.4
$50,000 - 74,999	300	**4.2**	1.8-6.6	434	**9.5**	6.4-12.6	734	**7.1**	5.1-9.1
$75,000+	494	**3.5**	1.6-5.4	525	**6.5**	3.6-9.5	1,019	**4.9**	3.1-6.6

* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 5.

Figure 16.1 Lifetime and Current Asthma by Year: WVBRFSS, 2000-2013

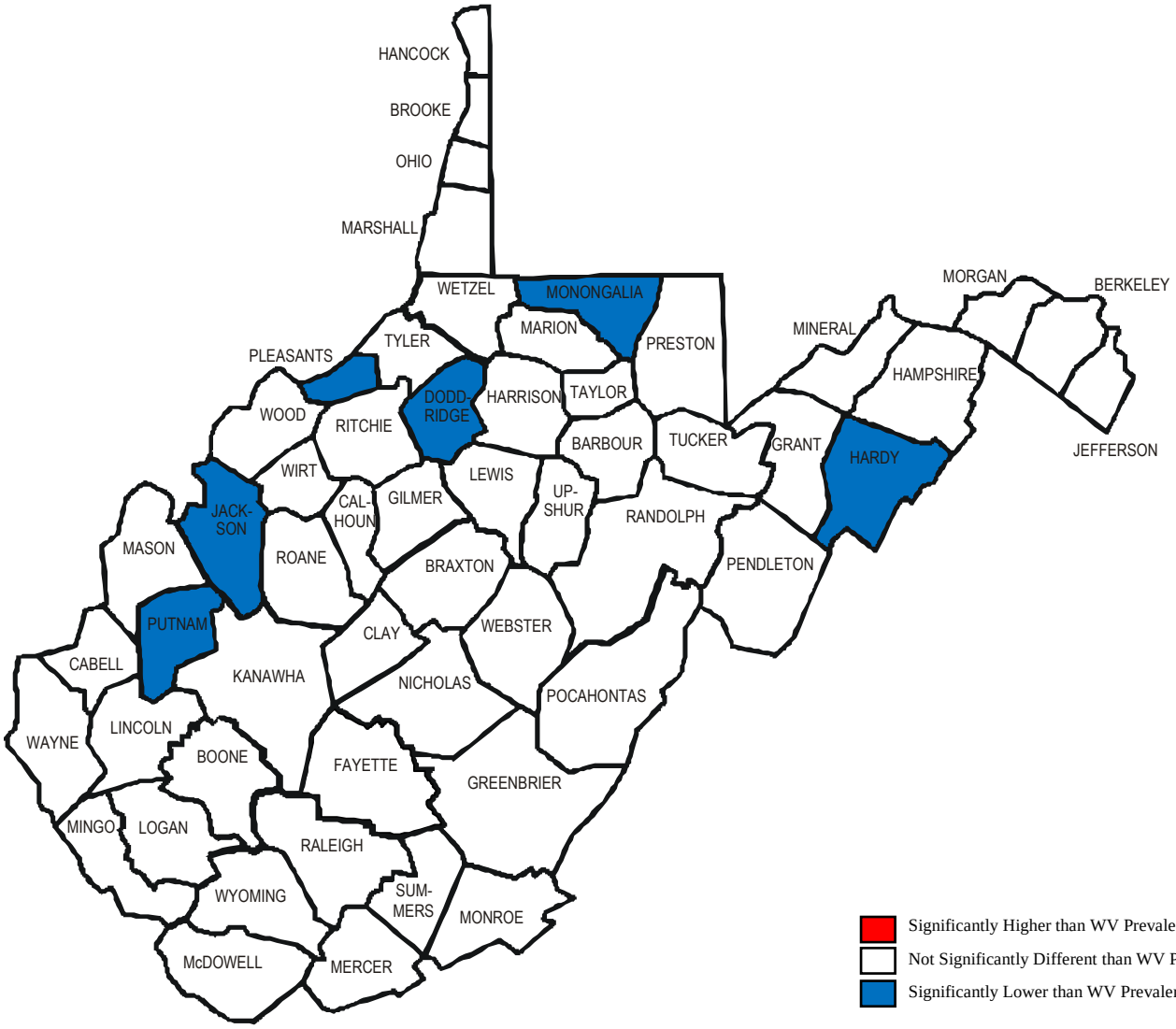


*Due to changes in sample composition and weighting methodology, 2011-2013 results are not directly comparable to previous years.

Figure 16.2 Current Asthma Prevalence by County: WVBRFSS, 2009-2013

U.S. Prevalence (2011) – 8.8%

WV Prevalence (2009-2013) – 8.9%
(Similar to U.S.)



County prevalence estimates are listed in Appendix B.
See an explanation of the county-level data under County-Level Data on page 6.

Chronic Obstructive Pulmonary Disease Prevalence

Definition

Responding "Yes" to the question "Has a doctor, nurse, or other health professional ever told you that you have chronic obstructive pulmonary disease or COPD, emphysema, or chronic bronchitis?"

Prevalence

WV: 10.6% (95% CI: 9.7-11.5)
U.S.: 6.4% (95% CI: 6.3-6.6)
The West Virginia prevalence of chronic obstructive pulmonary disease (COPD) was significantly higher than the U.S. prevalence. West Virginia ranked the 2nd highest among 53 BRFSS participants.

Gender

Men: 9.1% (95% CI: 7.8-10.4)
Women: 12.0% (95% CI: 10.8-13.2)
The prevalence of COPD was significantly higher among females than males.

Race/Ethnicity

White, Non-Hispanic: 10.5% (95% CI: 9.6-11.4)
Black, Non-Hispanic: *7.8% (95% CI: 2.4-13.2)
Other, Non-Hispanic: *17.4% (95% CI: 4.6-30.1)
Multiracial, Non-Hispanic: *13.7% (95% CI: 5.4-22.1)
Hispanic: *16.3% (95% CI: 2.5-30.0)
There was no race/ethnicity difference in the prevalence of COPD.
* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 5.

Age

The prevalence COPD generally increased with age and was highest among those aged 65 and older (18.1%), significantly higher than all other age groups under 55.

Education

There was a significant decrease in the prevalence of COPD with each educational level. The prevalence of COPD was highest among those with less than a high school education (21.0%) and was lowest among those with a college degree (3.3%).

Household Income

The prevalence of COPD was highest among those with an annual household income of less than $15,000 (22.9%) and was significantly higher than among all other income levels.

Table 16.3 Chronic Obstructive Pulmonary Disease (COPD) Prevalence by Demographic Characteristics: WVBRFSS, 2013

Characteristic	Men			Women			Total		
	# Resp.	%	95% CI	# Resp.	%	95% CI	# Resp.	%	95% CI
TOTAL	2,443	**9.1**	7.8-10.4	3,411	**12.0**	10.8-13.2	5,854	**10.6**	9.7-11.5
Age									
18-24	136	**1.4**	0.0-4.1	168	**3.4**	0.1-6.8	304	**2.4**	0.3-4.5
25-34	235	**5.5**	2.1-8.8	346	**4.2**	1.8-6.6	581	**4.8**	2.8-6.9
35-44	343	**6.4**	3.4-9.4	439	**8.5**	5.7-11.4	782	**7.4**	5.4-9.5
45-54	460	**6.9**	4.4-9.4	563	**14.1**	10.8-17.5	1,023	**10.5**	8.5-12.6
55-64	582	**12.4**	9.4-15.4	775	**16.2**	13.1-19.3	1,357	**14.3**	12.1-16.5
65+	673	**17.9**	14.4-21.4	1,090	**18.2**	15.6-20.9	1,763	**18.1**	15.9-20.2
Education									
Less than H.S.	345	**17.9**	13.4-22.4	392	**24.7**	19.7-29.6	737	**21.0**	17.7-24.3
H.S. or G.E.D.	937	**8.6**	6.8-10.4	1,325	**13.3**	11.3-15.2	2,262	**10.9**	9.6-12.2
Some Post-H.S.	525	**7.4**	5.0-9.8	879	**8.5**	6.6-10.4	1,404	**8.0**	6.5-9.5
College Graduate	631	**2.8**	1.6-4.1	805	**3.6**	2.4-4.9	1,436	**3.3**	2.4-4.1
Income									
Less than $15,000	264	**21.0**	15.4-26.6	520	**24.4**	20.1-28.7	784	**22.9**	19.5-26.4
$15,000 - 24,999	428	**11.3**	8.0-14.6	618	**17.2**	13.8-20.6	1,046	**14.3**	11.9-16.7
$25,000 - 34,999	299	**11.4**	7.7-15.1	342	**11.4**	7.6-15.1	641	**11.4**	8.7-14.0
$35,000 - 49,999	331	**8.2**	5.1-11.4	368	**7.6**	4.5-10.7	699	**7.9**	5.7-10.2
$50,000 - 74,999	302	**4.0**	1.7-6.3	437	**4.7**	2.3-7.0	739	**4.4**	2.7-6.0
$75,000+	497	**2.9**	1.2-4.6	525	**1.2**	0.4-2.1	1,022	**2.1**	1.1-3.1

CHAPTER 17: ARTHRITIS

Arthritis Prevalence

Definition

Responding "Yes" to the question "Has a doctor, nurse, or other health professional ever told you that you have some form of arthritis, rheumatoid arthritis, gout, lupus, or fibromyalgia?"

Prevalence

WV: 36.2% (95% CI: 34.7-37.6)
U.S.: 25.0% (95% CI: 24.8-25.2)
The West Virginia prevalence of arthritis was significantly higher than the U.S. prevalence. West Virginia ranked the highest among 53 BRFSS participants.

Gender

Men: 33.8% (95% CI: 31.7-35.9)
Women: 38.4% (95% CI: 36.5-40.3)
The prevalence of arthritis was significantly higher among women than men.

Race/Ethnicity

White, Non-Hispanic36.7% (95% CI: 35.2-38.1)
Black, Non-Hispanic: 28.3% (95% CI: 19.3-37.2)
Other, Non-Hispanic: *33.1% (95% CI: 18.1-48.2)
Multiracial, Non-Hispanic: *40.6% (95% CI: 29.0-52.2)
Hispanic: *25.7% (95% CI: 13.6-37.9)
There was no race/ethnicity difference in the prevalence of arthritis.
* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 5.

Age

The prevalence of arthritis significantly increased with age. The prevalence of arthritis was highest among those aged 65 and older (61.1%) and significantly higher than the prevalence among all other age groups.

Education

The prevalence of arthritis was significantly higher among those with less than a high school education (46.7%) than all other educational attainment groups.

Household Income

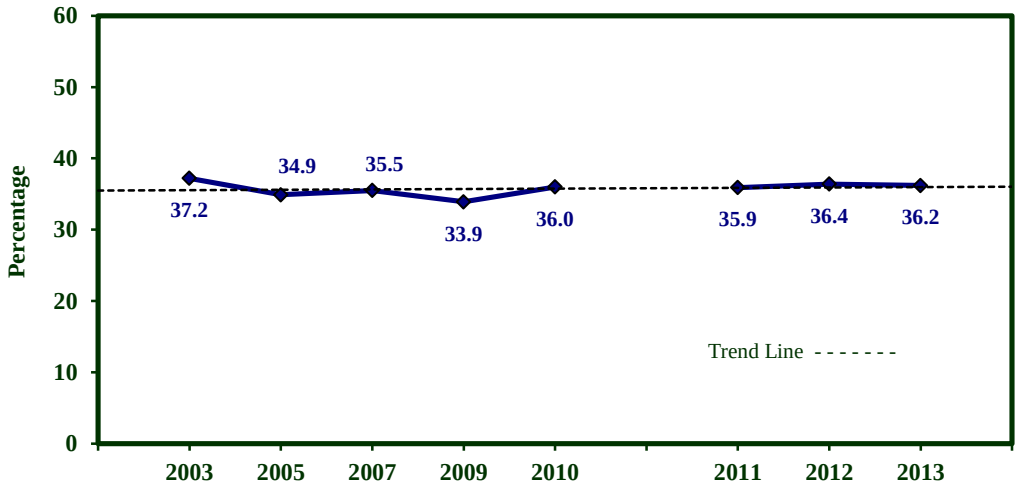
The prevalence of arthritis was highest among those with an annual household income of less than $15,000 (45.1%) and was significantly higher than the prevalence those with an annual household income of $50,000 or more. The prevalence of arthritis was lowest among those with a household income of $75,000 or more per year (23.8%) and was significantly lower than the prevalence among all other income brackets under $50,000.

Table 17.1 Arthritis Prevalence by Demographic Characteristics: WVBRFSS, 2013

Characteristic	Men			Women			Total		
	# Resp.	%	95% CI	# Resp.	%	95% CI	# Resp.	%	95% CI
TOTAL	2,446	**33.8**	31.7-35.9	3,415	**38.4**	36.5-40.3	5,861	**36.2**	34.7-37.6
Age									
18-24	136	**1.8**	0.0-4.3	169	**4.6**	1.6-7.7	305	**3.2**	1.2-5.1
25-34	236	**13.0**	8.2-17.7	347	**13.3**	9.2-17.3	583	**13.1**	10.0-16.2
35-44	342	**26.4**	21.1-31.6	441	**23.1**	18.6-27.6	783	**24.7**	21.3-28.2
45-54	464	**41.0**	35.9-46.1	562	**39.7**	35.2-44.2	1,026	**40.4**	36.9-43.8
55-64	581	**51.2**	46.6-55.8	776	**53.2**	49.2-57.1	1,357	**52.2**	49.2-55.2
65+	673	**53.9**	49.6-58.3	1,091	**66.8**	63.7-70.0	1,764	**61.1**	58.5-63.8
Education									
Less than H.S.	349	**42.6**	36.7-48.6	393	**51.4**	45.4-57.4	742	**46.7**	42.4-50.9
H.S. or G.E.D.	939	**35.2**	31.8-38.6	1,325	**42.7**	39.6-45.7	2,264	**38.9**	36.6-41.2
Some Post-H.S.	524	**30.7**	26.4-35.0	880	**34.1**	30.7-37.5	1,404	**32.6**	29.9-35.3
College Graduate	629	**24.1**	20.5-27.6	807	**24.2**	21.1-27.3	1,436	**24.1**	21.8-26.5
Income									
Less than $15,000	268	**44.3**	37.3-51.3	524	**45.7**	40.6-50.8	792	**45.1**	40.9-49.3
$15,000 - 24,999	430	**38.6**	33.4-43.9	616	**48.3**	43.6-53.0	1,046	**43.6**	40.1-47.1
$25,000 - 34,999	298	**36.6**	30.3-42.9	342	**41.9**	35.9-48.0	640	**39.0**	34.6-43.4
$35,000 - 49,999	329	**38.1**	32.0-44.2	368	**35.9**	30.3-41.5	697	**37.0**	32.9-41.2
$50,000 - 74,999	301	**27.9**	22.3-33.4	435	**30.9**	26.0-35.7	736	**29.5**	25.8-33.1
$75,000+	497	**23.5**	19.3-27.7	526	**24.1**	20.0-28.2	1,023	**23.8**	20.8-26.7

* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 5.

Figure 17.1 Arthritis Prevalence by Year: WVBRFSS, 2003-2013

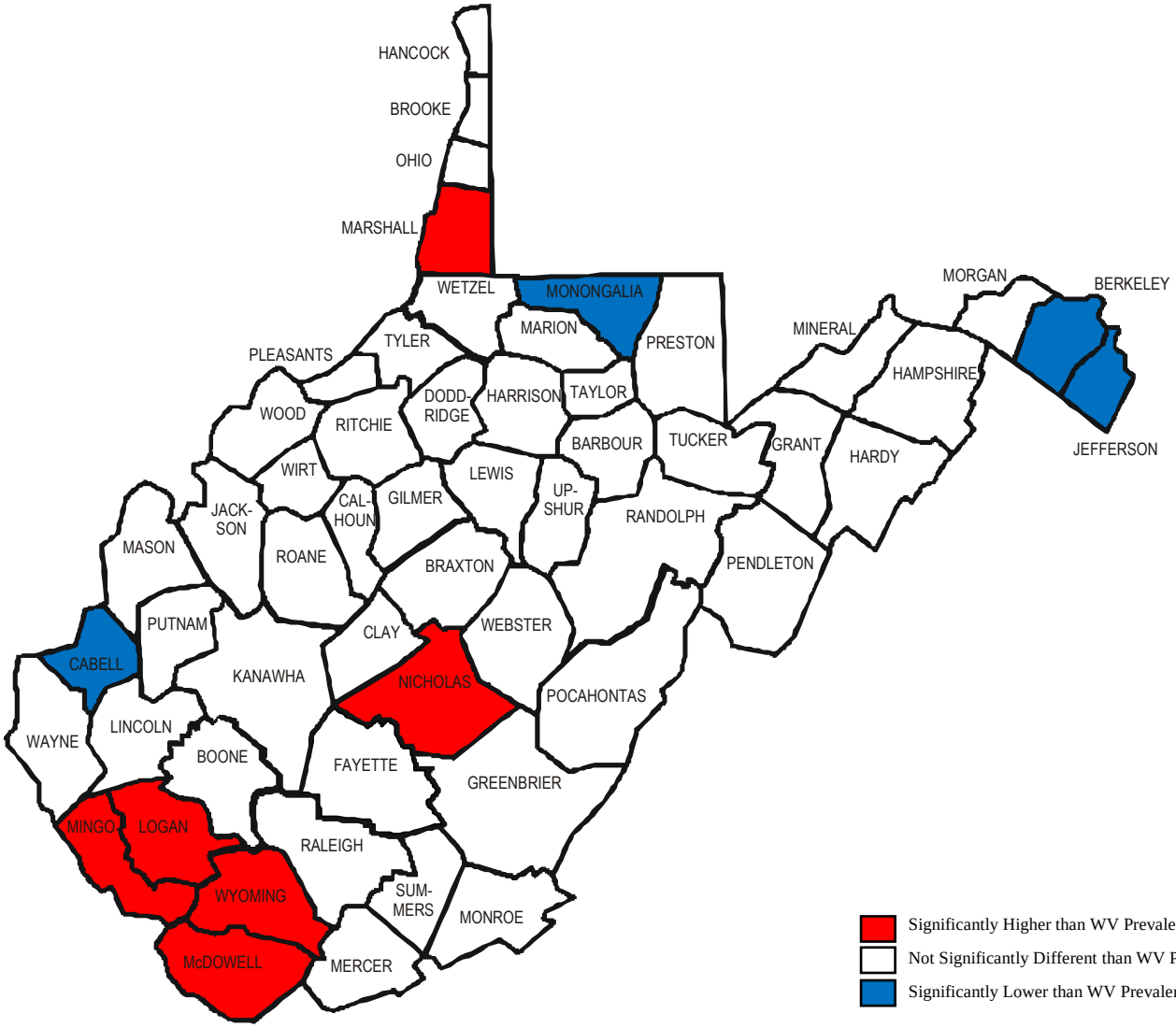


*Due to changes in sample composition and weighting methodology, 2011-2013 results are not directly comparable to previous years.

Figure 17.2 Arthritis Prevalence by County: WVBRFSS, 2009-2013

U.S. Prevalence (2011) – 24.8%

WV Prevalence (2009-2013) – 35.7%
(Significantly Higher than U.S)



County prevalence estimates are listed in Appendix B.
See an explanation of the county-level data under County-Level Data on page 6.

Living With Arthritis

Definition

Persons reporting they have arthritis and responding "Yes" to the question "Are you now limited in any way in any of your usual activities because of arthritis or joint symptoms?"

Prevalence

WV: 55.2% (95% CI: 52.9-57.5)
U.S.: 50.4% (95% CI: 49.9-50.9)
The West Virginia prevalence of limited due to arthritis was significantly higher than the U.S. prevalence. West Virginia ranked the 6th highest among 53 BRFSS participants.

Gender

Men: 54.5% (95% CI: 50.8-58.2)
Women: 55.7% (95% CI: 52.8-58.7)
There was no gender difference in the prevalence of limited due to arthritis.

Age

The prevalence of limited due to arthritis was lowest among those 65 and older (46.5%) significantly lower than those 35-64.

Education

The prevalence of limited due to arthritis was highest among those with less than a high school education (64.6%), significantly higher than among all other educational attainment groups.

Household Income

The prevalence of limited due to arthritis was highest among those with an annual household income of less than $15,000 (75.9%) and was significantly higher than the prevalence among all other income brackets.

Table 17.2 Limited Due to Arthritis by Demographic Characteristics: WVBRFSS, 2013

Characteristic	Men			Women			Total		
	# Resp.	%	95% CI	# Resp.	%	95% CI	# Resp.	%	95% CI
TOTAL	916	**54.5**	50.8-58.2	1,465	**55.7**	52.8-58.7	2,381	**55.2**	52.9-57.5
Age									
18-24	2	***83.6**	45.5-100.0	8	***61.1**	26.4-95.8	10	***67.2**	37.1-97.2
25-34	28	***61.2**	42.0-80.5	43	***48.3**	31.5-65.1	71	***54.7**	41.6-67.9
35-44	84	***59.6**	47.9-71.3	97	***67.4**	57.1-77.6	181	**63.2**	55.2-71.1
45-54	172	**54.7**	46.3-63.1	214	**62.6**	55.3-69.9	386	**58.6**	53.0-64.2
55-64	277	**61.2**	54.7-67.6	396	**62.7**	57.4-68.0	673	**62.0**	57.8-66.1
65+	351	**45.3**	39.3-51.2	698	**47.2**	43.0-51.5	1,049	**46.5**	43.0-49.9
Education									
Less than H.S.	167	**65.9**	58.0-73.9	225	**63.2**	56.0-70.4	392	**64.6**	59.2-69.9
H.S. or G.E.D.	382	**54.6**	48.9-60.2	618	**53.1**	48.7-57.6	1,000	**53.8**	50.2-57.3
Some Post-H.S.	188	**50.0**	42.0-58.1	377	**57.4**	51.8-63.0	565	**54.3**	49.6-59.0
College Graduate	175	**40.4**	32.4-48.3	240	**49.4**	42.3-56.5	415	**45.1**	39.8-50.5
Income									
Less than $15,000	136	**79.5**	70.9-88.0	276	**73.4**	66.9-79.8	412	**75.9**	70.7-81.0
$15,000 - 24,999	187	**64.5**	56.7-72.4	326	**53.4**	47.3-59.6	513	**58.2**	53.3-63.1
$25,000 - 34,999	118	***51.4**	40.8-61.9	158	**55.7**	47.2-64.3	276	**53.5**	46.7-60.3
$35,000 - 49,999	127	**44.4**	34.4-54.4	142	**48.7**	39.1-58.3	269	**46.4**	39.4-53.3
$50,000 - 74,999	95	***41.1**	29.8-52.3	154	**52.4**	43.2-61.6	249	**47.4**	40.2-54.6
$75,000+	132	**37.3**	28.0-46.6	140	**48.5**	38.9-58.0	272	**42.5**	35.7-49.2

* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 5.

Definition

Persons reporting they have arthritis and responding "Yes" to the question "Do arthritis or joint symptoms now affect whether you work, the type of work you do or the amount of work you do?"

Prevalence

WV: 38.9% (95% CI: 36.6-41.3)
U.S.: 35.5% (95% CI: 35.0-36.0)
The West Virginia prevalence of arthritis affects work was significantly higher than the U.S. prevalence. West Virginia ranked the 12th highest among 53 BRFSS participants.

Gender

Men: 41.7% (95% CI: 38.0-45.5)
Women: 36.6% (95% CI: 33.7-39.5)
There was no gender difference in the prevalence of arthritis affects work.

Age

The prevalence of arthritis affects work was lowest among those 65 and older (27.1%), significantly lower than all other age groups except those 25-34.

Education

The prevalence of arthritis affects work was highest among those with less than a high school education (47.8%), significantly higher than among those with a college degree.

Household Income

The prevalence of arthritis affects work was highest among those with an annual household income of less than $15,000 (56.3%) and was significantly higher than the prevalence among all other income brackets.

Table 17.3 Arthritis Affects Work by Demographic Characteristics: WVBRFSS, 2013

Characteristic	Men			Women			Total		
	# Resp.	%	95% CI	# Resp.	%	95% CI	# Resp.	%	95% CI
TOTAL	904	**41.7**	38.0-45.5	1,443	**36.6**	33.7-39.5	2,347	**38.9**	36.6-41.3
Age									
18-24	2	***100.0**	100.0-100.0	6	***71.2**	36.1-100.0	8	***80.5**	54.4-100.0
25-34	27	***55.3**	34.9-75.8	41	***30.1**	14.5-45.7	68	***42.6**	29.3-55.8
35-44	83	***50.7**	38.7-62.7	97	***45.9**	34.5-57.3	180	**48.5**	40.1-56.8
45-54	172	**46.0**	37.6-54.5	214	**45.7**	38.3-53.2	386	**45.9**	40.2-51.5
55-64	275	**44.8**	38.1-51.4	390	**45.2**	39.6-50.8	665	**45.0**	40.7-49.3
65+	343	**29.4**	23.7-35.2	687	**25.6**	21.8-29.3	1,030	**27.1**	23.9-30.3
Education									
Less than H.S.	160	**53.3**	44.7-61.9	226	**42.6**	35.2-50.0	386	**47.8**	42.1-53.5
H.S. or G.E.D.	382	**42.0**	36.3-47.6	610	**35.9**	31.5-40.2	992	**38.7**	35.2-42.2
Some Post-H.S.	184	**38.8**	30.8-46.7	365	**37.3**	31.7-43.0	549	**37.9**	33.3-42.6
College Graduate	174	**24.2**	17.0-31.3	237	**27.2**	20.8-33.5	411	**25.7**	21.0-30.5
Income									
Less than $15,000	134	**59.7**	50.0-69.5	272	**53.9**	46.8-61.1	406	**56.3**	50.5-62.1
$15,000 - 24,999	184	**51.0**	42.7-59.3	321	**40.5**	34.4-46.7	505	**45.0**	40.0-50.1
$25,000 - 34,999	116	**40.1**	29.4-50.9	155	**36.8**	28.2-45.3	271	**38.5**	31.5-45.4
$35,000 - 49,999	126	**33.4**	23.6-43.2	140	**31.9**	22.6-41.2	266	**32.7**	25.9-39.5
$50,000 - 74,999	94	**34.6**	23.5-45.6	154	**34.7**	25.4-44.0	248	**34.6**	27.5-41.8
$75,000+	133	**28.9**	19.3-38.5	139	**24.2**	15.9-32.4	272	**26.7**	20.2-33.2

* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 5.

Definition

Persons reporting they have arthritis and responding "A lot" to the question "During the past 30 days, to what extent has your arthritis or joint symptoms interfered with your normal social activities, such as going shopping, to the movies, or to religious or social gatherings?"

Prevalence

WV: 25.2% (95% CI: 23.1-27.3)
U.S.: 19.9% (95% CI: 19.5-20.4)
The West Virginia prevalence of disability was significantly higher than the U.S. prevalence. West Virginia ranked the 8th highest among 53 BRFSS participants.

Gender

Men: 23.5% (95% CI: 20.3-26.7)
Women: 26.6% (95% CI: 24.0-29.3)
There was no gender difference in the prevalence of arthritis affects social activities.

Age

The prevalence of arthritis affects social activities was highest among those 45-64 (29.5%), significantly higher than those 65 and older.

Education

The prevalence of arthritis affects social activities was highest among those with less than a high school education (38.1%), significantly higher than among all other educational attainment levels.

Household Income

The prevalence of arthritis affects social activities was highest among those with an annual household income of less than $15,000 (45.4%) and was significantly higher than the prevalence among all other income brackets.

Table 17.4 Arthritis Affects Social Activities by Demographic Characteristics: WVBRFSS, 2013

Characteristic	Men			Women			Total		
	# Resp.	%	95% CI	# Resp.	%	95% CI	# Resp.	%	95% CI
TOTAL	921	**23.5**	20.3-26.7	1,464	**26.6**	24.0-29.3	2,385	**25.2**	23.1-27.3
Age									
18-24	2	***0.0**	0.0-0.0	8	***11.6**	0.0-33.1	10	***8.5**	0.0-24.7
25-34	29	***24.4**	7.5-41.3	43	***22.2**	7.3-37.2	72	***23.3**	12.0-34.6
35-44	83	***24.2**	13.9-34.5	97	***30.1**	19.3-40.8	180	**26.9**	19.4-34.4
45-54	173	**25.3**	18.1-32.6	215	**33.6**	26.5-40.8	388	**29.5**	24.3-34.6
55-64	280	**28.3**	22.4-34.2	395	**30.7**	25.5-35.9	675	**29.5**	25.6-33.4
65+	352	**18.2**	13.2-23.1	697	**21.7**	18.1-25.3	1,049	**20.3**	17.4-23.2
Education									
Less than H.S.	169	**36.9**	28.7-45.1	224	**39.2**	31.8-46.7	393	**38.1**	32.5-43.6
H.S. or G.E.D.	385	**22.1**	17.5-26.6	619	**25.2**	21.3-29.1	1,004	**23.8**	20.8-26.7
Some Post-H.S.	189	**19.9**	13.6-26.3	374	**23.8**	19.0-28.6	563	**22.2**	18.3-26.0
College Graduate	174	**8.1**	3.9-12.2	242	**16.4**	11.4-21.4	416	**12.5**	9.2-15.8
Income									
Less than $15,000	137	**43.2**	33.5-52.8	276	**47.0**	39.8-54.1	413	**45.4**	39.6-51.2
$15,000 - 24,999	189	**31.2**	23.4-39.0	327	**26.8**	21.3-32.3	516	**28.7**	24.1-33.3
$25,000 - 34,999	118	**12.2**	5.8-18.6	158	**17.6**	11.0-24.1	276	**14.8**	10.2-19.4
$35,000 - 49,999	128	**17.9**	9.6-26.3	141	**20.0**	11.5-28.6	269	**18.9**	12.9-24.9
$50,000 - 74,999	94	***11.7**	4.8-18.6	153	**21.6**	13.1-30.1	247	**17.3**	11.5-23.0
$75,000+	133	**14.3**	6.6-22.0	141	**12.5**	6.3-18.6	274	**13.4**	8.4-18.5

* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 5.

CHAPTER 18: DISABILITY

Physical, Mental or Emotional Disability

Definition

Responding "Yes" to the question "Are you limited in any way in any activities because of physical, mental, or emotional problems?"

Prevalence

WV: 27.6% (95% CI: 26.3-29.0)
U.S.: 19.8% (95% CI: 19.6-20.1)
The West Virginia prevalence of disability was significantly higher than the U.S. prevalence. West Virginia ranked the highest among 53 BRFSS participants.

Gender

Men: 27.9% (95% CI: 25.9-29.9)
Women: 27.4% (95% CI: 25.6-29.1)
There was no gender difference in the prevalence of disability.

Race/Ethnicity

White, Non-Hispanic: 27.9% (95% CI: 26.6-29.3)
Black, Non-Hispanic: 25.8% (95% CI: 16.7-34.9)
Other, Non-Hispanic: *19.0% (95% CI: 6.7-31.2)
Multiracial, Non-Hispanic: *32.5% (95% CI: 22.0-43.1)
Hispanic: *13.0% (95% CI: 4.3-21.7)
The prevalence of disability was significantly higher among White, Non-Hispanics than among Hispanics. There were no other race/ethnicity differences in the prevalence of disability.
* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 5.

Age

The prevalence of disability generally increased with age and was significantly higher among those 55-64 (39.4%) than among all other age groups under 55.

Education

The prevalence of disability was significantly higher among those with less than a high school education (40.4%) than among all other educational attainment groups.

Household Income

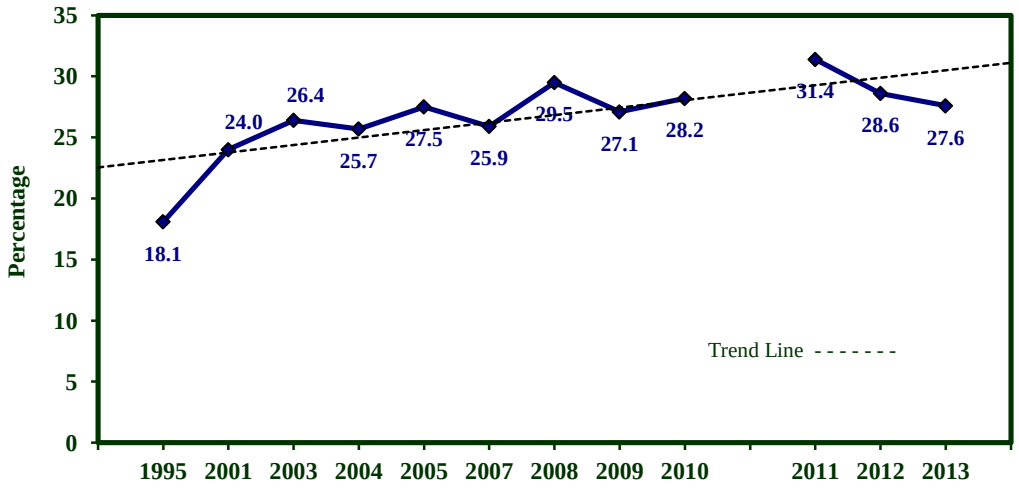
The prevalence of disability was highest among those with an annual household income of less than $15,000 (49.8%) and was significantly higher than the prevalence among all other income brackets. The prevalence of disability was lowest among those with a household income of $75,000 or more per year (13.3%) and was significantly lower than all other income brackets.

Table 18.1 Disability Prevalence by Demographic Characteristics: WVBRFSS, 2013

Characteristic	Men			Women			Total		
	# Resp.	%	95% CI	# Resp.	%	95% CI	# Resp.	%	95% CI
TOTAL	2,443	**27.9**	25.9-29.9	3,421	**27.4**	25.6-29.1	5,864	**27.6**	26.3-29.0
Age									
18-24	135	***6.6**	2.7-10.5	168	**11.7**	6.7-16.7	303	**9.1**	5.9-12.3
25-34	233	**14.0**	9.1-18.9	346	**18.6**	14.0-23.3	579	**16.3**	12.9-19.7
35-44	340	**27.4**	22.0-32.7	443	**22.5**	18.1-27.0	783	**24.9**	21.4-28.4
45-54	465	**30.9**	26.1-35.7	564	**32.6**	28.2-36.9	1,029	**31.7**	28.5-35.0
55-64	582	**41.8**	37.3-46.3	774	**37.1**	33.2-41.0	1,356	**39.4**	36.4-42.4
65+	676	**36.5**	32.3-40.8	1,095	**32.1**	29.0-35.2	1,771	**34.0**	31.5-36.6
Education									
Less than H.S.	349	**37.8**	32.0-43.6	390	**43.5**	37.6-49.4	739	**40.4**	36.3-44.5
H.S. or G.E.D.	939	**28.2**	25.1-31.4	1,330	**27.7**	25.0-30.4	2,269	**28.0**	25.9-30.0
Some Post-H.S.	524	**25.4**	21.3-29.5	883	**25.0**	21.9-28.1	1,407	**25.1**	22.6-27.7
College Graduate	626	**18.4**	15.2-21.7	808	**16.7**	14.0-19.4	1,434	**17.5**	15.4-19.6
Income									
Less than $15,000	269	**52.2**	45.0-59.5	525	**48.0**	42.9-53.2	794	**49.8**	45.6-54.1
$15,000 - 24,999	430	**34.7**	29.5-39.9	619	**32.1**	27.9-36.4	1,049	**33.4**	30.0-36.7
$25,000 - 34,999	298	**31.1**	25.2-37.0	341	**22.9**	17.9-27.8	639	**27.4**	23.5-31.3
$35,000 - 49,999	331	**24.6**	19.3-29.9	367	**21.4**	16.4-26.4	698	**23.1**	19.4-26.7
$50,000 - 74,999	303	**18.0**	13.3-22.7	436	**21.2**	16.9-25.6	739	**19.7**	16.5-22.9
$75,000+	497	**13.4**	10.0-16.8	526	**13.2**	10.0-16.4	1,023	**13.3**	10.9-15.7

* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 5.

Figure 18.1 Disability Prevalence by Year: WVBRFSS, 1990-2013

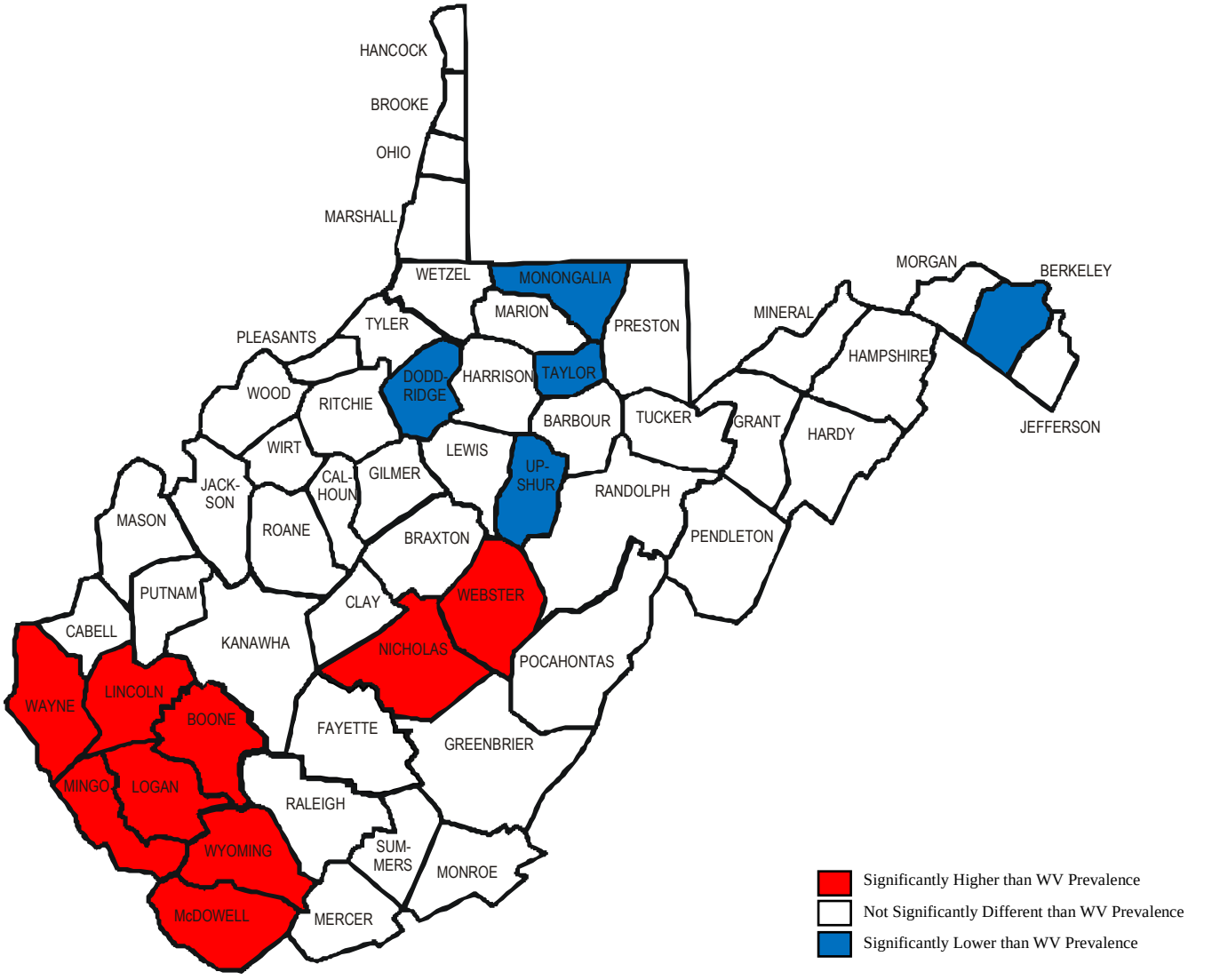


*Due to changes in sample composition and weighting methodology, 2011-2013 results are not directly comparable to previous years.

Figure 18.2 Disability Prevalence by County: WVBRFSS 2009-2013

U.S. Prevalence (2011) – 23.7%

WV Prevalence (2009-2013) – 28.6%
(Significantly Higher than U.S.)



County prevalence estimates are listed in Appendix B.
See an explanation of the county-level data under County-Level Data on page 6.

Use Special Equipment

Definition

Responding "Yes" to the question "Do you now have any health problem that requires you to use special equipment, such as a cane, a wheelchair, a special bed, or a special telephone?"

Prevalence

WV: 11.7% (95% CI: 10.8-12.6)
U.S.: 8.3% (95% CI: 8.2-8.5)
The West Virginia prevalence of the use of special equipment was significantly higher than the U.S. prevalence. West Virginia ranked highest among the 53 BRFSS participants.

Gender

Men: 12.1% (95% CI: 10.6-13.5)
Women: 11.4% (95% CI: 10.2-12.5)
There was no gender difference for the prevalence of the use of special equipment.

Race/Ethnicity

White, Non-Hispanic: 11.7% (95% CI: 10.8-12.7)
Black, Non-Hispanic: 7.8% (95% CI: 3.7-11.9)
Other, Non-Hispanic: *19.1% (95% CI: 6.9-31.4)
Multiracial, Non-Hispanic: 20.4% (95% CI: 11.2-29.5)
Hispanic: *9.0% (95% CI: 1.4-16.6)
There was no race/ethnicity difference in the prevalence of the use of special equipment.
* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 5.

Age

The prevalence of the use of special equipment was significantly higher among those aged 65 and older (23.0%) than among all other age groups.

Education

The prevalence of the use of special equipment was highest among those with less than a high school education (20.0%) and was significantly higher than the prevalence among all other educational attainment groups.

Household Income

The prevalence of the use of special equipment was significantly higher among those with an annual household income of less than $15,000 (23.1%) than among all other income brackets.

Table 18.2 Use Special Equipment by Demographic Characteristics: WVBRFSS, 2013

Characteristic	Men			Women			Total		
	# Resp.	%	95% CI	# Resp.	%	95% CI	# Resp.	%	95% CI
TOTAL	2,453	**12.1**	10.6-13.5	3,428	**11.4**	10.2-12.5	5,881	**11.7**	10.8-12.6
Age									
18-24	135	***1.8**	0.0-4.4	168	***3.0**	0.5-5.5	303	***2.4**	0.6-4.2
25-34	236	***1.4**	0.1-2.7	346	***3.0**	1.1-4.8	582	**2.2**	1.0-3.3
35-44	340	**7.1**	3.9-10.3	443	**4.6**	2.7-6.6	783	**5.9**	4.0-7.8
45-54	465	**13.3**	9.8-16.8	566	**10.5**	7.5-13.5	1,031	**11.9**	9.6-14.2
55-64	586	**19.0**	15.4-22.5	777	**14.3**	11.4-17.2	1,363	**16.6**	14.3-18.9
65+	678	**23.0**	19.2-26.9	1,098	**23.0**	20.2-25.8	1,776	**23.0**	20.7-25.3
Education									
Less than H.S.	351	**19.7**	15.3-24.2	395	**20.4**	16.1-24.6	746	**20.0**	16.9-23.1
H.S. or G.E.D.	942	**10.8**	8.7-12.8	1,331	**12.4**	10.5-14.4	2,273	**11.6**	10.2-13.0
Some Post-H.S.	526	**10.6**	7.9-13.4	883	**8.9**	7.1-10.7	1,409	**9.7**	8.1-11.2
College Graduate	629	**7.9**	5.8-10.0	809	**5.1**	3.7-6.6	1,438	**6.4**	5.2-7.7
Income									
Less than $15,000	269	**24.4**	18.6-30.2	527	**22.2**	18.2-26.1	796	**23.1**	19.8-26.5
$15,000 - 24,999	433	**17.1**	13.2-21.0	621	**13.3**	10.5-16.1	1,054	**15.2**	12.8-17.6
$25,000 - 34,999	300	**14.3**	9.7-18.9	341	**12.5**	8.7-16.3	641	**13.5**	10.4-16.6
$35,000 - 49,999	331	**6.4**	3.9-8.9	367	**6.2**	3.4-9.0	698	**6.3**	4.5-8.2
$50,000 - 74,999	303	**6.9**	3.8-10.0	435	**3.9**	2.0-5.8	738	**5.3**	3.5-7.1
$75,000+	498	**4.0**	2.1-5.9	527	**4.4**	2.3-6.5	1,025	**4.2**	2.7-5.6

* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 5.

Disabled and Use Special Equipment

Definition

Prevalence of the use of special equipment among those reporting they are disabled.

Prevalence

WV: 33.9% (95% CI: 31.4-36.5)
U.S.: 32.1% (95% CI: 31.5-32.6)
The West Virginia prevalence of the use of special equipment among those who are disabled was similar to the U.S. prevalence. West Virginia ranked the 10th highest among the 53 BRFSS participants.

Gender

Men: 35.8% (95% CI: 31.9-39.7)
Women: 32.1% (95% CI: 28.8-35.3)
There was no gender difference for the prevalence of the use of special equipment among those who are disabled.

Race/Ethnicity

No race/ethnicity analysis was conducted due to small sample size.

Age

The prevalence of the use of special equipment among those who are disabled was significantly higher among those aged 65 and older (48.9%) than the prevalence among all other age groups.

Education

The prevalence of the use of special equipment among those who are disabled was highest among those with less than a high school education (40.9%) and was significantly higher than the prevalence among college graduates (26.2%).

Household Income

The prevalence of the use of special equipment among those who are disabled was highest among those with an annual household income of less than $15,000 (41.4%) and was significantly higher than the prevalence among those earning $35,000 or more per year.

Table 18.3 Disabled and Use Special Equipment by Demographic Characteristics: WVBRFSS, 2013

Characteristic	Men			Women			Total		
	# Resp.	%	95% CI	# Resp.	%	95% CI	# Resp.	%	95% CI
TOTAL	769	**35.8**	31.9-39.7	1,034	**32.1**	28.8-35.3	1,803	**33.9**	31.4-36.5
Age									
18-24	11	***0.0**	0.0-0.0	23	***9.3**	0.0-21.7	34	***5.8**	0.0-13.7
25-34	34	***6.1**	0.0-13.3	64	***14.2**	5.1-23.4	98	**10.7**	4.5-16.8
35-44	87	**26.1**	15.5-36.7	100	**13.3**	6.8-19.9	187	**20.2**	13.6-26.9
45-54	139	**37.0**	27.9-46.1	181	**29.8**	22.1-37.5	320	**33.3**	27.3-39.2
55-64	247	**40.7**	33.7-47.6	289	**35.4**	28.9-41.9	536	**38.2**	33.4-42.9
65+	248	**48.9**	41.6-56.1	371	**49.0**	43.1-54.9	619	**48.9**	44.3-53.5
Education									
Less than H.S.	145	**44.3**	35.3-53.3	181	**37.3**	29.3-45.3	326	**40.9**	34.8-46.9
H.S. or G.E.D.	323	**34.0**	28.2-39.8	412	**33.5**	28.2-38.7	735	**33.7**	29.8-37.6
Some Post-H.S.	159	**33.1**	24.9-41.3	270	**27.7**	22.0-33.4	429	**30.1**	25.2-34.9
College Graduate	140	**27.2**	19.2-35.2	169	**25.3**	18.3-32.3	309	**26.2**	20.9-31.6
Income									
Less than $15,000	162	**44.9**	35.9-53.9	280	**38.5**	31.8-45.2	442	**41.4**	35.9-46.8
$15,000 - 24,999	173	**41.8**	33.1-50.5	216	**32.1**	25.1-39.1	389	**37.0**	31.4-42.7
$25,000 - 34,999	105	**33.6**	23.3-43.9	85	**37.0**	25.8-48.1	190	**34.9**	27.2-42.5
$35,000 - 49,999	86	**15.1**	7.6-22.6	81	**22.3**	11.3-33.3	167	**18.2**	11.8-24.7
$50,000 - 74,999	64	**28.9**	15.6-42.3	99	**15.3**	7.5-23.1	163	**21.1**	13.7-28.5
$75,000+	71	**21.7**	10.2-33.2	75	**19.0**	9.3-28.7	146	**20.5**	12.8-28.2

* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 5.

Cognitive Difficulty

Definition

Responding "Yes" to the question "Because of a physical, mental, or emotional condition, do you have serious difficulty concentrating, remembering, or making decisions?"

Prevalence

WV: 15.0% (95% CI: 13.9-16.1)
U.S.: 10.7% (95% CI: 10.5-10.9)
The West Virginia prevalence of cognitive difficulty was significantly higher than the U.S. prevalence. West Virginia ranked the 7th highest among the 53 BRFSS participants.

Gender

Men: 13.8% (95% CI: 12.2-15.4)
Women: 16.2% (95% CI: 14.7-17.7)
There was no gender difference for the prevalence of cognitive difficulty.

Race/Ethnicity

White, Non-Hispanic: 14.8% (95% CI: 13.7-15.9)
Black, Non-Hispanic: 18.4% (95% CI: 9.6-27.1)
Other, Non-Hispanic: *20.5% (95% CI: 7.4-33.7)
Multiracial, Non-Hispanic: 18.0% (95% CI: 10.7-25.4)
Hispanic: *14.0% (95% CI: 3.5-24.6)
There was no race/ethnicity difference in the prevalence of cognitive difficulty.
* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 5.

Age

There was no consistent age difference in the prevalence of cognitive difficulty.

Education

The prevalence of cognitive difficulty was highest among those with less than a high school education (29.4%) and was significantly higher than the prevalence among all other educational attainment levels.

Household Income

The prevalence of cognitive difficulty was highest among those with an income of less than $15,000 (33.7%) and was significantly higher than all other income brackets.

Table 18.4 Cognitive Difficulty by Demographic Characteristics: WVBRFSS, 2013

Characteristic	Men			Women			Total		
	# Resp.	%	95% CI	# Resp.	%	95% CI	# Resp.	%	95% CI
TOTAL	2,443	**13.8**	12.2-15.4	3,414	**16.2**	14.7-17.7	5,857	**15.0**	13.9-16.1
Age									
18-24	134	**11.2**	6.0-16.5	168	**14.5**	8.4-20.7	302	**12.8**	8.8-16.9
25-34	234	**9.1**	4.8-13.3	344	**13.9**	9.9-17.9	578	**11.4**	8.5-14.3
35-44	340	**15.2**	10.8-19.6	442	**20.6**	16.1-25.1	782	**17.9**	14.7-21.0
45-54	464	**18.0**	13.9-22.1	565	**18.9**	15.2-22.5	1,029	**18.4**	15.7-21.2
55-64	579	**15.9**	12.6-19.2	774	**17.6**	14.5-20.6	1,353	**16.7**	14.5-19.0
65+	678	**12.5**	9.5-15.6	1,092	**13.1**	10.7-15.4	1,770	**12.8**	10.9-14.7
Education									
Less than H.S.	350	**26.5**	21.2-31.8	394	**32.8**	27.1-38.5	744	**29.4**	25.5-33.3
H.S. or G.E.D.	934	**13.3**	11.0-15.6	1,328	**16.8**	14.5-19.2	2,262	**15.1**	13.4-16.7
Some Post-H.S.	525	**10.9**	7.7-14.0	879	**12.0**	9.6-14.3	1,404	**11.5**	9.6-13.4
College Graduate	630	**4.5**	2.7-6.2	804	**7.1**	5.2-9.0	1,434	**5.9**	4.6-7.2
Income									
Less than $15,000	264	**36.9**	30.0-43.8	526	**31.4**	26.6-36.1	790	**33.7**	29.7-37.7
$15,000 - 24,999	432	**20.7**	16.0-25.4	616	**19.6**	15.9-23.3	1,048	**20.1**	17.2-23.1
$25,000 - 34,999	300	**11.7**	7.7-15.7	341	**11.4**	7.8-15.1	641	**11.6**	8.8-14.3
$35,000 - 49,999	328	**6.2**	3.1-9.3	367	**10.9**	6.8-14.9	695	**8.4**	5.9-10.9
$50,000 - 74,999	303	**5.2**	2.3-8.1	433	**9.9**	6.2-13.5	736	**7.7**	5.3-10.1
$75,000+	498	**3.8**	1.8-5.7	526	**6.7**	4.1-9.3	1,024	**5.1**	3.5-6.7

Difficulty Walking

Definition

Responding "Yes" to the question "Do you have serious difficulty walking or climbing stairs?"

Prevalence

WV: 21.4% (95% CI: 20.3-22.6)
U.S.: 14.0% (95% CI: 13.8-14.2)
The West Virginia prevalence of difficulty walking was significantly higher than the U.S. prevalence. West Virginia ranked the 3rd highest among the 53 BRFSS participants.

Gender

Men: 20.0% (95% CI: 18.3-21.8)
Women: 22.8% (95% CI: 21.2-24.3)
There was no gender difference for the prevalence of difficulty walking.

Race/Ethnicity

White, Non-Hispanic: 21.6% (95% CI: 20.4-22.9)
Black, Non-Hispanic: 20.0% (95% CI: 12.8-27.1)
Other, Non-Hispanic: *17.7% (95% CI: 5.5-29.8)
Multiracial, Non-Hispanic: *29.9% (95% CI: 19.2-40.6)
Hispanic: *11.3% (95% CI: 2.4-20.1)
The prevalence of having difficulty walking was significantly higher among White, Non-Hispanics than among Hispanics.
* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 5.

Age

The prevalence of difficulty walking increased with age and was highest among those 65 and older (35.1%), significantly higher than those under 55.

Education

The prevalence of difficulty walking was highest among those with less than a high school education (37.6%) and was significantly higher than the prevalence among all other educational attainment levels.

Household Income

The prevalence of the difficulty walking was highest among those with an income of less than $15,000 (42.4%) , significantly higher than all other income levels.

Table 18.5 Difficulty Walking by Demographic Characteristics: WVBRFSS, 2013

Characteristic	Men			Women			Total		
	# Resp.	%	95% CI	# Resp.	%	95% CI	# Resp.	%	95% CI
TOTAL	2,452	**20.0**	18.3-21.8	3,423	**22.8**	21.2-24.3	5,875	**21.4**	20.3-22.6
Age									
18-24	135	***1.7**	0.0-3.7	168	***4.7**	1.2-8.3	303	***3.2**	1.2-5.2
25-34	236	**5.9**	2.8-9.0	345	**4.1**	2.2-6.0	581	**5.0**	3.2-6.8
35-44	341	**14.4**	10.2-18.6	443	**12.4**	8.7-16.1	784	**13.4**	10.6-16.2
45-54	464	**25.9**	21.3-30.5	565	**24.7**	20.7-28.7	1,029	**25.3**	22.2-28.4
55-64	584	**34.4**	30.0-38.7	776	**32.4**	28.6-36.2	1,360	**33.4**	30.5-36.3
65+	679	**28.7**	24.6-32.7	1,097	**40.3**	37.0-43.6	1,776	**35.1**	32.5-37.8
Education									
Less than H.S.	351	**33.2**	27.7-38.8	395	**42.8**	37.0-48.6	746	**37.6**	33.6-41.6
H.S. or G.E.D.	940	**20.5**	17.8-23.3	1,328	**25.9**	23.4-28.5	2,268	**23.2**	21.3-25.1
Some Post-H.S.	526	**16.2**	13.0-19.4	882	**15.7**	13.3-18.1	1,408	**15.9**	14.0-17.9
College Graduate	631	**8.4**	6.2-10.5	808	**9.4**	7.4-11.5	1,439	**8.9**	7.5-10.4
Income									
Less than $15,000	269	**45.4**	38.3-52.4	527	**40.1**	35.2-45.1	796	**42.4**	38.2-46.5
$15,000 - 24,999	432	**25.4**	20.9-29.8	620	**31.1**	27.0-35.3	1,052	**28.3**	25.3-31.4
$25,000 - 34,999	300	**21.0**	15.9-26.1	339	**19.4**	14.8-24.0	639	**20.3**	16.8-23.8
$35,000 - 49,999	330	**15.8**	11.4-20.2	367	**15.8**	11.5-20.0	697	**15.8**	12.7-18.8
$50,000 - 74,999	303	**12.2**	8.1-16.2	435	**13.7**	10.0-17.5	738	**13.0**	10.2-15.7
$75,000+	497	**6.6**	4.0-9.1	527	**6.9**	4.6-9.2	1,024	**6.7**	4.9-8.5

* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 5.

Difficulty Dressing or Bathing

Definition

Responding "Yes" to the question "Do you have difficulty dressing or bathing?"

Prevalence

WV: 5.5% (95% CI: 4.9-6.2)
U.S.: 3.9% (95% CI: 3.7-4.0)
The West Virginia prevalence of difficulty dressing or bathing is significantly higher than the U.S. prevalence. West Virginia ranked the 6th highest among the 53 BRFSS participants.

Gender

Men: 5.7% (95% CI: 4.7-6.7)
Women: 5.4% (95% CI: 4.5-6.2)
There was no gender difference for the prevalence of difficulty dressing or bathing.

Race/Ethnicity

White, Non-Hispanic: 5.4% (95% CI: 4.8-6.1)
Black, Non-Hispanic: *9.4% (95% CI: 3.2-15.5)
Other, Non-Hispanic: *1.9% (95% CI: 0.0-5.6)
Multiracial, Non-Hispanic: *6.7% (95% CI: 2.5-10.9)
Hispanic: *2.4% (95% CI: 0.0-5.5)
There was no race/ethnicity difference in the prevalence of difficulty dressing or bathing.
* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 5.

Age

The prevalence of difficulty dressing or bathing was lowest among those 18-24 (1.4%) and highest among those 55-64 (8.3%), a significant difference.

Education

The prevalence of difficulty dressing or bathing was highest among those with less than a high school education (9.7%) and was significantly higher than the prevalence among all other educational attainment levels.

Household Income

The prevalence of the difficulty dressing or bathing was highest among those with an income of less than $15,000 (12.3%) , significantly higher than all other income levels.

Table 18.6 Difficulty Dressing or Bathing by Demographic Characteristics: WVBRFSS, 2013

Characteristic	Men			Women			Total		
	# Resp.	%	95% CI	# Resp.	%	95% CI	# Resp.	%	95% CI
TOTAL	2,453	**5.7**	4.7-6.7	3,423	**5.4**	4.5-6.2	5,876	**5.5**	4.9-6.2
Age									
18-24	135	***1.3**	0.0-3.8	167	***1.5**	0.0-3.2	302	***1.4**	0.0-2.9
25-34	236	***2.3**	0.1-4.4	346	***2.2**	0.7-3.6	582	***2.2**	0.9-3.5
35-44	341	**4.0**	1.7-6.3	443	**3.0**	1.3-4.7	784	**3.5**	2.1-4.9
45-54	464	**7.5**	4.7-10.2	565	**8.1**	5.5-10.8	1,029	**7.8**	5.9-9.7
55-64	585	**9.3**	6.7-11.9	776	**7.4**	5.2-9.5	1,361	**8.3**	6.6-10.0
65+	679	**7.7**	5.2-10.2	1,097	**7.1**	5.2-8.9	1,776	**7.3**	5.8-8.8
Education									
Less than H.S.	352	**9.6**	6.1-13.1	395	**9.9**	6.7-13.1	747	**9.7**	7.3-12.1
H.S. or G.E.D.	941	**5.4**	3.9-6.9	1,330	**6.7**	5.2-8.2	2,271	**6.1**	5.0-7.1
Some Post-H.S.	526	**4.8**	3.1-6.5	881	**3.3**	2.1-4.4	1,407	**4.0**	3.0-4.9
College Graduate	630	**2.6**	1.2-3.9	807	**1.6**	0.7-2.5	1,437	**2.1**	1.3-2.9
Income									
Less than $15,000	269	**12.2**	8.0-16.4	527	**12.4**	9.2-15.7	796	**12.3**	9.8-14.9
$15,000 - 24,999	433	**9.6**	6.5-12.8	619	**5.4**	3.6-7.2	1,052	**7.5**	5.6-9.3
$25,000 - 34,999	300	**5.3**	2.6-8.1	340	**4.9**	2.3-7.4	640	**5.1**	3.2-7.0
$35,000 - 49,999	330	***3.4**	0.9-5.9	366	***3.1**	0.9-5.3	696	**3.3**	1.6-5.0
$50,000 - 74,999	303	***3.6**	1.1-6.0	435	***1.7**	0.2-3.3	738	**2.6**	1.2-4.0
$75,000+	498	***1.3**	0.2-2.3	527	***1.5**	0.3-2.8	1,025	**1.4**	0.6-2.2

* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 5.

Difficulty Doing Errands Alone

Definition

Responding "Yes" to the question "Because of a physical, mental, or emotional condition, do you have difficulty doing errands alone such as visiting a doctor's office or shopping?

Prevalence

WV: 11.1% (95% CI: 10.1-12.0)
U.S.: 6.8% (95% CI: 6.7-7.0)
The West Virginia prevalence of difficulty doing errands alone was significantly higher than the U.S. prevalence. West Virginia ranked the 3rd highest among the 53 BRFSS participants.

Gender

Men: 10.8% (95% CI: 9.3-12.2)
Women: 11.4% (95% CI: 10.2-12.6)
There was no gender difference for the prevalence of difficulty doing errands alone.

Race/Ethnicity

White, Non-Hispanic: 11.2% (95% CI: 10.2-12.2)
Black, Non-Hispanic: 11.5% (95% CI: 5.0-18.0)
Other, Non-Hispanic: *6.0% (95% CI: 0.0-12.8)
Multiracial, Non-Hispanic: 12.1% (95% CI: 6.4-17.7)
Hispanic: *4.6% (95% CI: 0.0-10.1)
There was no race/ethnicity difference in the prevalence of difficulty doing errands alone.
* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 5.

Age

The prevalence of difficulty doing errands alone was lowest among those 18-24 (4.9%) and highest among those 65 and older (15.8%), a significant difference.

Education

The prevalence of difficulty doing errands alone was highest among those with less than a high school education (23.4%) and was significantly higher than the prevalence among all other educational attainment levels.

Household Income

The prevalence of the difficulty dong errands alone was highest among those with an income of less than $15,000 (25.5%), significantly higher than all other income levels.

Table 18.7 Difficulty Doing Errands Alone by Demographic Characteristics: WVBRFSS, 2013

Characteristic	Men			Women			Total		
	# Resp.	%	95% CI	# Resp.	%	95% CI	# Resp.	%	95% CI
TOTAL	2,450	**10.8**	9.3-12.2	3,416	**11.4**	10.2-12.6	5,866	**11.1**	10.1-12.0
Age									
18-24	135	***5.0**	0.6-9.5	166	***4.7**	1.1-8.3	301	***4.9**	2.0-7.8
25-34	236	**7.4**	3.5-11.2	346	**3.9**	1.9-6.0	582	**5.7**	3.5-7.9
35-44	340	**9.6**	5.8-13.4	442	**8.2**	5.2-11.2	782	**8.9**	6.5-11.3
45-54	464	**12.5**	9.0-16.0	564	**13.5**	10.2-16.7	1,028	**13.0**	10.6-15.4
55-64	583	**13.7**	10.7-16.8	773	**14.2**	11.2-17.1	1,356	**13.9**	11.8-16.1
65+	679	**13.8**	10.6-17.0	1,096	**17.4**	14.8-19.9	1,775	**15.8**	13.8-17.8
Education									
Less than H.S.	352	**22.5**	17.3-27.7	393	**24.4**	19.5-29.2	745	**23.4**	19.8-26.9
H.S. or G.E.D.	941	**9.8**	7.8-11.8	1,327	**13.0**	11.0-15.0	2,268	**11.4**	10.0-12.8
Some Post-H.S.	524	**8.0**	5.5-10.5	880	**6.9**	5.3-8.5	1,404	**7.4**	6.0-8.8
College Graduate	629	**2.9**	1.6-4.1	806	**3.7**	2.4-4.9	1,435	**3.3**	2.4-4.2
Income									
Less than $15,000	268	**29.8**	23.2-36.4	527	**22.4**	18.4-26.4	795	**25.5**	21.9-29.2
$15,000 - 24,999	432	**12.4**	8.9-16.0	615	**14.8**	11.6-17.9	1,047	**13.6**	11.3-16.0
$25,000 - 34,999	300	**10.2**	6.1-14.3	340	**10.1**	6.8-13.4	640	**10.2**	7.5-12.9
$35,000 - 49,999	330	**5.8**	2.9-8.7	367	**4.9**	2.3-7.5	697	**5.4**	3.4-7.3
$50,000 - 74,999	303	***3.5**	1.1-6.0	434	**5.1**	2.3-7.8	737	**4.4**	2.5-6.2
$75,000+	498	***2.2**	0.4-3.9	527	**2.1**	0.9-3.4	1,025	**2.1**	1.1-3.2

* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 5.

CHAPTER 19: KIDNEY DISEASE

Kidney Disease Prevalence

Definition

Responding "Yes" to the question "Has a doctor, nurse, or other health professional ever told you that you have kidney disease?"

Prevalence

WV: 3.3% (95% CI: 2.8-3.8)
U.S.: 2.6% (95% CI: 2.5-2.7)
The West Virginia prevalence of kidney disease was significantly higher than the U.S. prevalence. West Virginia ranked the 7th highest among the 53 BRFSS participants.

Gender

Men: 3.1% (95% CI: 2.4-3.8)
Women: 3.5% (95% CI: 2.9-4.2)
There was no gender difference in the prevalence of kidney disease.

Race/Ethnicity

White, Non-Hispanic: 3.4% (95% CI: 2.9-3.9)
Black, Non-Hispanic: *1.7% (95% CI: 0.0-3.4)
Other, Non-Hispanic: *7.5% (95% CI: 0.0-16.0)
Multiracial, Non-Hispanic: *1.3% (95% CI: 0.0-2.7)
Hispanic: *1.8% (95% CI: 0.0-5.2)
There was no race/ethnicity difference in the prevalence of kidney disease.
* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 5.

Age

The prevalence of kidney disease was highest among adults aged 65 and older (6.5%) and was significantly higher than those under 55.

Education

The prevalence of kidney disease was significantly higher among those with less than a high school education (5.1%) than among college graduates (2.2%)

Household Income

The prevalence of kidney disease was significantly lower among those with annual income of $75,000 or more (1.5%) than among those with an income of $35,000 or less.

Table 19.1 Kidney Disease Prevalence by Demographic Characteristics: WVBRFSS, 2013

Characteristic	Men			Women			Total		
	# Resp.	%	95% CI	# Resp.	%	95% CI	# Resp.	%	95% CI
TOTAL	2,456	**3.1**	2.4-3.8	3,426	**3.5**	2.9-4.2	5,882	**3.3**	2.8-3.8
Age									
18-24	136	***0.0**	0.0-0.0	169	***0.0**	0.0-0.0	305	***0.0**	0.0-0.0
25-34	236	***0.4**	0.0-1.2	346	***2.3**	0.6-4.0	582	***1.4**	0.4-2.3
35-44	342	***3.9**	1.4-6.4	443	***1.9**	0.6-3.3	785	**2.9**	1.5-4.4
45-54	466	***2.3**	0.7-3.9	567	**2.9**	1.5-4.4	1,033	**2.6**	1.5-3.7
55-64	587	**4.6**	2.8-6.4	777	**3.6**	2.0-5.3	1,364	**4.1**	2.9-5.3
65+	675	**5.5**	3.7-7.3	1,095	**7.4**	5.6-9.2	1,770	**6.5**	5.3-7.8
Education									
Less than H.S.	351	**4.2**	1.9-6.5	395	**6.1**	3.7-8.6	746	**5.1**	3.4-6.7
H.S. or G.E.D.	939	**2.6**	1.6-3.6	1,331	**4.1**	3.0-5.3	2,270	**3.4**	2.6-4.1
Some Post-H.S.	529	**3.3**	1.9-4.8	880	**2.3**	1.3-3.3	1,409	**2.8**	1.9-3.6
College Graduate	632	**2.6**	1.4-3.9	809	**1.9**	1.0-2.8	1,441	**2.2**	1.5-3.0
Income									
Less than $15,000	270	***4.7**	1.6-7.7	527	**5.9**	3.4-8.4	797	**5.4**	3.4-7.3
$15,000 - 24,999	431	**3.8**	1.8-5.8	619	**5.3**	3.4-7.2	1,050	**4.6**	3.2-6.0
$25,000 - 34,999	300	**5.1**	2.6-7.6	341	**3.7**	1.7-5.7	641	**4.5**	2.8-6.1
$35,000 - 49,999	332	***1.5**	0.1-2.9	368	**1.7**	0.5-2.9	700	**1.6**	0.7-2.5
$50,000 - 74,999	303	**4.2**	1.9-6.5	437	***0.6**	0.0-1.3	740	**2.3**	1.1-3.4
$75,000+	498	***1.0**	0.2-1.8	527	**2.2**	0.9-3.4	1,025	**1.5**	0.8-2.3

* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 5.

CHAPTER 20: VISION IMPAIRMENT

Prevalence of Vision Impairment

Definition

Responding "Yes" to the question "Are you blind or do you have serious difficulty seeing, even when wearing glasses?"

Prevalence

WV: 6.9% (95% CI: 6.2-7.6)
U.S.: 5.0% (95% CI: 4.9-5.2)
The West Virginia prevalence of vision impairment was significantly higher than the U.S. prevalence. West Virginia ranked the 8th highest among 53 BRFSS participants.

Gender

Men: 6.0% (95% CI: 4.7-7.1)
Women: 7.7% (95% CI: 6.8-8.7)
There was no gender difference in the prevalence of vision impairment.

Race/Ethnicity

White, Non-Hispanic: 6.8% (95% CI: 6.0-7.5)
Black, Non-Hispanic: *9.4% (95% CI: 2.7-16.1)
Other, Non-Hispanic: *16.2% (95% CI: 4.5-27.9)
Multiracial, Non-Hispanic: *7.7% (95% CI: 2.9-12.6)
Hispanic: *3.9% (95% CI: 0.0-8.7)
There was no race/ethnicity difference in the prevalence of vision impairment.
* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 5.

Age

The prevalence of vision impairment was significantly higher among those 45 and older than for those under 45.

Education

The prevalence of vision impairment was significantly higher among those with less than a high school education (13.8%) than among all other educational attainment groups.

Household Income

The prevalence of vision impairment was significantly higher among those with an annual household income of less than $15,000 (15.6%) than among all other income brackets.

Table 20.1 Prevalence of Blindness by Demographic Characteristics: WVBRFSS, 2013

Characteristic	Men			Women			Total		
	# Resp.	%	95% CI	# Resp.	%	95% CI	# Resp.	%	95% CI
TOTAL	2,455	**6.0**	4.9-7.1	3,424	**7.7**	6.8-8.7	5,879	**6.9**	6.2-7.6
Age									
18-24	135	***2.1**	0.0-4.8	168	***5.6**	2.3-8.9	303	**3.8**	1.7-5.9
25-34	236	***2.8**	0.0-5.8	346	***2.8**	1.1-4.6	582	**2.8**	1.1-4.6
35-44	341	***2.7**	0.9-4.5	442	**5.4**	3.1-7.7	783	**4.0**	2.6-5.5
45-54	464	**8.9**	5.9-11.8	566	**9.0**	6.5-11.4	1,030	**8.9**	7.0-10.8
55-64	586	**7.2**	4.8-9.5	777	**10.1**	7.7-12.5	1,363	**8.6**	7.0-10.3
65+	679	**10.0**	7.4-12.6	1,096	**10.6**	8.4-12.7	1,775	**10.3**	8.6-12.0
Education									
Less than H.S.	351	**11.6**	8.2-15.0	394	**16.4**	12.4-20.3	745	**13.8**	11.2-16.4
H.S. or G.E.D.	942	**5.2**	3.8-6.6	1,331	**8.1**	6.5-9.6	2,273	**6.6**	5.6-7.7
Some Post-H.S.	526	**5.5**	3.0-8.0	882	**5.8**	4.3-7.3	1,408	**5.7**	4.3-7.1
College Graduate	631	**2.2**	1.0-3.4	807	**2.3**	1.3-3.2	1,438	**2.3**	1.5-3.0
Income									
Less than $15,000	268	**14.8**	10.2-19.4	526	**16.1**	12.6-19.7	794	**15.6**	12.7-18.4
$15,000 - 24,999	433	**8.2**	5.0-11.4	620	**7.9**	5.8-10.1	1,053	**8.1**	6.2-10.0
$25,000 - 34,999	300	**7.0**	3.4-10.6	341	**7.3**	4.2-10.4	641	**7.2**	4.7-9.6
$35,000 - 49,999	331	**3.8**	1.6-6.0	367	**4.5**	2.3-6.6	698	**4.1**	2.6-5.7
$50,000 - 74,999	303	***4.2**	1.5-6.9	435	**3.3**	1.5-5.1	738	**3.7**	2.1-5.3
$75,000+	498	***1.0**	0.2-1.9	527	***2.2**	0.8-3.6	1,025	**1.6**	0.8-2.4

* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 5.

CHAPTER 21: DEPRESSION

Prevalence of Depression

Definition

Responding "Yes" to the question "Has a doctor, nurse, or other health professional ever told you that you have a depressive disorder (including depression, major depression, dysthymia, or minor depression)?"

Prevalence

WV: 22.0% (95% CI: 20.7-23.2)
U.S.: 17.7% (95% CI: 17.5-17.9)
The West Virginia prevalence of depression was significantly higher than the U.S. prevalence. West Virginia ranked the 9th highest among 53 BRFSS participants.

Gender

Men: 16.4% (95% CI: 14.7-18.1)
Women: 27.3% (95% CI: 25.5-29.0)
The prevalence of depression was significantly higher among women than among men.

Race/Ethnicity

White, Non-Hispanic: 22.1% (95% CI: 20.8-23.4)
Black, Non-Hispanic: 16.3% (95% CI: 9.5-23.1)
Other, Non-Hispanic: *18.2% (95% CI: 6.0-30.5)
Multiracial, Non-Hispanic: *36.9% (95% CI: 24.5-49.3)
Hispanic: *21.9% (95% CI: 10.6-33.1)
The prevalence of depression was significantly higher among Multiracial, Non-Hispanics than among White, Non-Hispanics or among Black, Non-Hispanics.
* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 5.

Age

The prevalence of depression varied quite a bit by age. The prevalence of depression was highest for the 35-44 year old age group (29.6%) and lowest among those aged 18-24 (12.6%). The prevalence of depression was significantly lower among the 18-24 and 65 and older age brackets than among all others.

Education

The prevalence of depression was significantly higher among those with less than a high school education (28.3%) than among college graduates (16.0%). The prevalence of depression was significantly lower among college graduates than among all other educational attainment groups.

Household Income

The prevalence of depression also was significantly higher among those with an annual household income of less than $15,000 (40.0%) than among all other income brackets.

Table 21.1 Depression Prevalence by Demographic Characteristics: WVBRFSS, 2013

Characteristic	Men			Women			Total		
	# Resp.	%	95% CI	# Resp.	%	95% CI	# Resp.	%	95% CI
TOTAL	2,448	**16.4**	14.7-18.1	3,428	**27.3**	25.5-29.0	5,876	**22.0**	20.7-23.2
Age									
18-24	136	***6.7**	2.6-10.7	169	**19.0**	13.0-25.1	305	**12.6**	9.0-16.3
25-34	236	**12.8**	8.4-17.2	347	**30.2**	24.9-35.6	583	**21.4**	17.8-24.9
35-44	341	**24.1**	19.0-29.2	443	**35.1**	30.1-40.1	784	**29.6**	26.0-33.2
45-54	466	**17.8**	13.8-21.7	565	**31.9**	27.6-36.2	1,031	**24.9**	21.9-27.8
55-64	582	**22.5**	18.7-26.3	777	**31.9**	28.1-35.6	1,359	**27.2**	24.6-29.9
65+	673	**12.8**	10.0-15.6	1,097	**18.2**	15.7-20.7	1,770	**15.8**	14.0-17.7
Education									
Less than H.S.	347	**21.1**	16.4-25.9	396	**36.8**	31.3-42.4	743	**28.3**	24.6-32.0
H.S. or G.E.D.	937	**16.1**	13.5-18.7	1,331	**27.0**	24.2-29.8	2,268	**21.5**	19.6-23.5
Some Post-H.S.	528	**17.0**	13.6-20.4	882	**26.6**	23.3-29.8	1,410	**22.3**	19.9-24.7
College Graduate	631	**10.8**	8.2-13.3	809	**20.6**	17.4-23.7	1,440	**16.0**	13.9-18.0
Income									
Less than $15,000	266	**35.4**	28.6-42.1	522	**43.4**	38.3-48.5	788	**40.0**	35.9-44.1
$15,000 - 24,999	430	**21.4**	17.1-25.7	620	**33.2**	28.8-37.6	1,050	**27.5**	24.3-30.6
$25,000 - 34,999	300	**13.5**	9.4-17.5	342	**21.2**	16.4-26.0	642	**16.9**	13.8-20.1
$35,000 - 49,999	331	**15.2**	10.8-19.7	367	**25.7**	20.5-31.0	698	**20.2**	16.7-23.6
$50,000 - 74,999	302	**8.7**	5.4-12.0	437	**21.3**	16.8-25.8	739	**15.5**	12.5-18.4
$75,000+	497	**9.6**	6.5-12.8	528	**16.4**	12.8-20.1	1,025	**12.8**	10.4-15.1

* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 5.

CHAPTER 22: HIV

HIV Testing Prevalence

Definition

Persons responding "Yes" to the question "Have you ever been tested for HIV? Do not count tests you may have had as part of a blood donation. Include testing fluid from your mouth."

Prevalence

WV: 32.7% (95% CI: 31.2-34.2)
U.S.: 37.7% (95% CI: 37.4-38.0)
The West Virginia prevalence of HIV testing was significantly lower than the U.S. prevalence. West Virginia ranked the 24th lowest among the 53 BRFSS participants.

Gender

Men: 32.0% (95% CI: 29.7-34.3)
Women: 33.3% (95% CI: 31.3-35.2)
There was no gender difference in the prevalence of HIV testing.

Race/Ethnicity

White, Non-Hispanic: 31.7% (95% CI: 30.1-33.2)
Black, Non-Hispanic: *47.2% (95% CI: 35.6-58.9)
Other, Non-Hispanic: *44.4% (95% CI: 27.7-61.1)
Multiracial, Non-Hispanic: *45.3% (95% CI: 32.5-58.0)
Hispanic: *46.8% (95% CI: 31.1-62.6)
The prevalence of HIV testing was significantly higher among Black, Non-Hispanics than among White, Non-Hispanics. There was no other race/ethnicity difference in the prevalence of HIV testing.
* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 5.

Age

The prevalence of HIV testing was highest among those aged 25-34 (53.1%), followed by the 35-44 age group (52.1%) and both of these were significantly higher than all other age groups.

Education

The prevalence of HIV testing was significantly higher among those with some post high school education or a college degree than among those with a high school education or less.

Household Income

The prevalence of HIV testing was highest among those with an annual household income of less than $15,000 (43.5%) and was significantly higher than among those earning $25,000 or more per year.

Table 22.1 HIV Testing by Demographic Characteristics: WVBRFSS, 2013

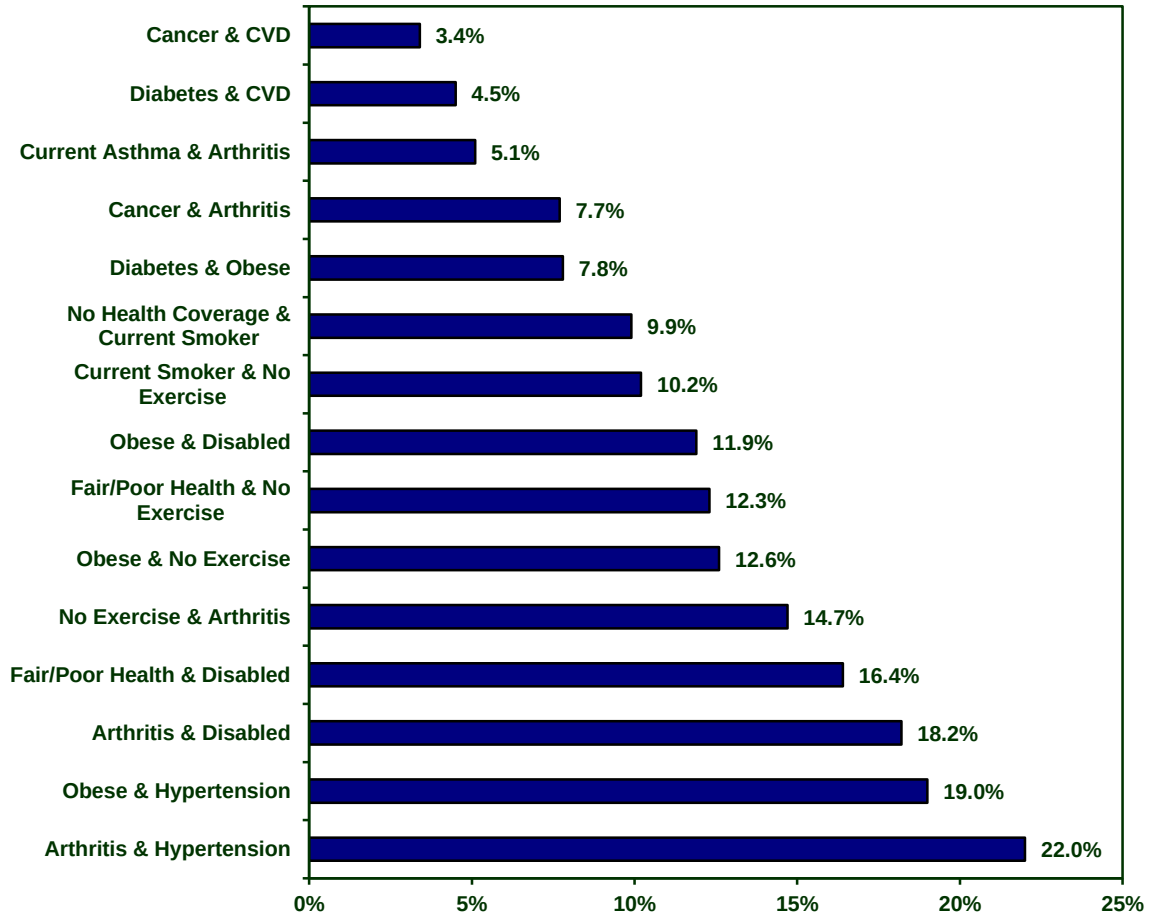
Characteristic	Men			Women			Total		
	# Resp.	%	95% CI	# Resp.	%	95% CI	# Resp.	%	95% CI
TOTAL	2,259	**32.0**	29.7-34.3	3,189	**33.3**	31.3-35.2	5,448	**32.7**	31.2-34.2
Age									
18-24	127	**27.4**	19.1-35.8	156	**38.9**	30.5-47.3	283	**32.9**	26.9-38.9
25-34	223	**42.4**	35.2-49.6	319	**64.5**	58.7-70.4	542	**53.1**	48.4-57.9
35-44	320	**48.3**	42.3-54.4	413	**55.9**	50.5-61.3	733	**52.1**	48.0-56.1
45-54	425	**33.1**	28.2-38.1	534	**32.1**	27.7-36.5	959	**32.6**	29.3-35.9
55-64	547	**24.5**	20.6-28.3	738	**20.9**	17.6-24.3	1,285	**22.7**	20.1-25.2
65+	607	**19.5**	15.8-23.2	1,003	**9.1**	7.2-11.0	1,610	**13.6**	11.6-15.6
Education									
Less than H.S.	317	**28.7**	22.8-34.7	361	**27.5**	21.9-33.1	678	**28.2**	24.0-32.3
H.S. or G.E.D.	863	**29.3**	25.8-32.9	1,229	**28.4**	25.4-31.4	2,092	**28.9**	26.5-31.2
Some Post-H.S.	490	**38.0**	32.9-43.0	821	**40.9**	37.0-44.8	1,311	**39.6**	36.5-42.7
College Graduate	586	**33.9**	29.5-38.2	769	**37.0**	32.9-41.1	1,355	**35.5**	32.6-38.5
Income									
Less than $15,000	249	**47.3**	39.8-54.9	489	**40.6**	35.4-45.9	738	**43.5**	39.1-48.0
$15,000 - 24,999	404	**36.2**	30.6-41.8	569	**35.2**	30.4-40.0	973	**35.7**	32.0-39.3
$25,000 - 34,999	281	**29.2**	23.0-35.5	319	**23.8**	18.4-29.2	600	**26.8**	22.6-31.0
$35,000 - 49,999	303	**33.5**	27.1-39.8	349	**31.6**	25.7-37.4	652	**32.6**	28.2-36.9
$50,000 - 74,999	281	**25.5**	19.6-31.5	413	**33.5**	28.2-38.7	694	**29.8**	25.8-33.8
$75,000+	459	**31.5**	26.4-36.7	506	**39.2**	34.1-44.2	965	**35.1**	31.4-38.7

CHAPTER 23: COMORBIDITIES

Comorbid Health Conditions and Risk Factors

Many behavior risk factors and health conditions are interrelated. For example, physical activity and nutrition are related to obesity, which is related to cardiovascular disease. Comorbidity is the presence of more than one health condition or risk factor in an individual at the same time. Identifying common comorbid factors is important to understanding how to prevent and reduce serious health conditions and chronic diseases. The purpose of this chapter is to introduce some of the common comorbidities among West Virginia adults in 2013 (see Figure 23.1 and Table 23.1). For definitions of risk factors and health conditions please refer to the appropriate chapter in this report.

Figure 23.1 Common Comorbid Conditions: WVBRFSS, 2013



Percentage of Adults with Both Conditions/Risk Factors

Table 23.1 Comorbidities: The Prevalence of Multiple Risk Behaviors and/or Health Conditions Among Adults: WVBRFSS, 2013

% of Total Population	Fair/Poor Health	No Health Coverage	No Exercise	Obese	Current Smoker	Hyper-tension	CVD	Diabetes	Current Asthma	Disabled	Cancer	Arthritis
Fair/Poor Health	**25.7** (24.4-27.0)	**4.8** (4.1-5.5)	**12.3** (11.4-13.3)	**11.2** (10.3-12.2)	**9.0** (8.1-9.9)	**15.9** (14.8-16.9)	**7.8** (7.1-8.6)	**7.1** (6.4-7.8)	**4.2** (3.6-4.8)	**16.4** (15.3-17.5)	**5.3** (4.7-5.9)	**15.8** (14.7-16.8)
No Health Coverage	**4.8** (4.1-5.5)	**18.8** (17.4-20.1)	**5.8** (5.0-6.6)	**6.3** (5.5-7.2)	**8.9** (7.9-9.9)	**4.8** (4.1-5.5)	**1.1** (0.8-1.4)	**1.3** (1.0-1.6)	**1.6** (1.3-2.0)	**4.4** (3.7-5.0)	**1.1** (0.8-1.4)	**4.7** (4.1-5.4)
No Exercise	**12.3** (11.4-13.3)	**5.8** (5.0-6.6)	**31.4** (30.0-32.9)	**12.6** (11.6-13.6)	**10.2** (9.2-11.2)	**15.6** (14.5-16.6)	**6.0** (5.4-6.7)	**5.8** (5.1-6.4)	**3.4** (2.8-3.9)	**12.6** (11.6-13.5)	**5.3** (4.7-5.9)	**14.7** (13.7-15.7)
Obese	**11.2** (10.3-12.2)	**6.3** (5.5-7.2)	**12.6** (11.6-13.6)	**35.1** (33.6-36.6)	**8.4** (7.5-9.4)	**19.0** (17.8-20.2)	**5.6** (5.0-6.3)	**7.8** (7.0-8.5)	**3.9** (3.3-4.5)	**11.9** (11.0-12.9)	**3.8** (3.3-4.3)	**15.4** (14.3-16.4)
Current Smoker	**9.0** (8.1-9.9	**8.9** (7.9-9.9)	**10.2** (9.2-11.2)	**8.4** (7.5-9.4)	**27.3** (25.8-28.7)	**9.3** (8.4-10.2)	**3.7** (3.2-4.3)	**2.7** (2.2-3.2)	**3.0** (2.5-3.5)	**9.6** (8.7-10.5)	**2.8** (2.4-3.3)	**9.4** (8.5-10.3)
Hypertension	**15.9** (14.8-16.9)	**4.8** (4.1-5.5)	**15.6** (14.5-16.6)	**19.0** (17.8-20.2)	**9.3** (8.4-10.2)	**41.0** (39.5-42.4)	**9.9** (9.1-10.8)	**10.2** (9.3-11.0)	**4.6** (4.0-5.2)	**16.0** (14.9-17.0)	**8.1** (7.4-8.8)	**22.0** (20.9-23.2)
CVD	**7.8** (7.1-8.6)	**1.1** (0.8-1.4)	**6.0** (5.4-6.7)	**5.6** (5.0-6.3)	**3.7** (3.2-4.3)	**9.9** (9.1-10.8)	**13.7** (12.8-14.7)	**4.5** (3.9--5.0)	**1.9** (1.5-2.2)	**7.7** (6.9-8.4)	**3.4** (3.0-3.9)	**9.0** (8.2-9.8)
Diabetes	**7.1** (6.4-7.8)	**1.3** (1.0-1.6)	**5.8** (5.1-6.4)	**7.8** (7.0-8.5)	**2.7** (2.2-3.2)	**10.2** (9.3-11.0)	**4.5** (3.9-5.0)	**13.0** (12.1-14.0)	**1.9** (1.5-2.2)	**6.6** (5.9-7.3)	**2.7** (2.3-3.1)	**8.4** (7.6-9.1)
Current Asthma	**4.2** (3.6-4.8)	**1.6** (1.3-2.0)	**3.4** (2.8-3.9)	**3.9** (3.3-4.5)	**3.0** (2.5-3.5)	**4.6** (4.0-5.2)	**1.9** (1.5-2.2)	**1.9** (1.5-2.2)	**9.0** (8.2-9.9)	**4.6** (4.0-5.2)	**1.2** (0.9-1.4)	**5.1** (4.5-5.7)
Disabled	**16.4** (15.3-17.5)	**4.4** (3.7-5.0)	**12.6** (11.6-13.5)	**11.9** (11.0-12.9)	**9.6** (8.7-10.5)	**16.0** (14.9-17.0)	**7.7** (6.9-8.4)	**6.6** (5.9-7.3)	**4.6** (4.0-5.2)	**27.6** (26.3-29.0)	**5.3** (4.7-5.9)	**18.2** (17.1-19.3)
Cancer	**5.3** (4.7-5.9)	**1.1** (0.8-1.4)	**5.3** (4.7-5.9)	**3.8** (3.3-4.3)	**2.8** (2.4-3.3)	**8.1** (7.4-8.8)	**3.4** (3.0-3.9)	**2.7** (2.3-3.1)	**1.2** (0.9-1.4)	**5.3** (4.7-5.9)	**13.0** (12.2-13.9)	**7.7** (7.0-8.4)
Arthritis	**15.8** (14.7-16.8)	**4.7** (4.1-5.4)	**14.7** (13.7-15.7)	**15.4** (14.3-16.4)	**9.4** (8.5-10.3)	**22.0** (20.9-23.2)	**9.0** (8.2-9.8)	**8.4** (7.6-9.1)	**5.1** (4.5-5.7)	**18.2** (17.1-19.3)	**7.7** (7.0-8.4)	**36.2** (34.8-37.6)

*Table interpretation: Each cell represents the percentage of WV adults with **both** of the conditions/risk factors*
*For example, 5.1% of WV adults have **both** asthma and arthritis.*

Appendix A

Behavioral Risk Factor Prevalences in 50 States, District of Columbia, and Territories[a]
United States, 2013

State	Fair or Poor Health		Depression		Physical Inactivity		Obesity		Current Smoking		Cardiovascular Disease		Hypertension		Diabetes		Arthritis		Cancer	
	%	Rank	%	Rank	%	Rank	%	Rank	%	Rank	%	Rank	%	Rank	%	Rank	%	Rank	%	Rank
Alabama	22.8	7	21.8	11	31.5	8	32.4	8	21.5	14	12.0	3	40.3	3	13.8	3	32.2	2	13.8	4
Alaska	15.0	38	16.3	44	22.3	45	28.4	28	22.6	10	6.4	51	29.8	40	7.1	52	22.7	44	8.2	50
Arizona	16.7	28	18.0	36	25.2	30	26.8	36	16.3	44	8.9	20	30.7	33	10.7	18	24.0	37	12.3	18
Arkansas	24.1	4	23.1	6	34.4	4	34.6	3	25.9	4	11.1	6	38.7	8	11.5	9	30.0	8	13.8	3
California	18.9	17	13.1	51	21.4	47	24.1	49	12.5	51	6.5	48	28.7	47	10.2	23	20.4	48	9.9	44
Colorado	13.1	47	18.2	33	17.9	53	21.3	53	17.7	35	5.7	53	26.3	52	6.5	53	22.2	45	11.3	29
Connecticut	13.2	46	17.5	39	24.9	33	25.0	45	15.5	49	7.7	39	31.3	29	8.3	45	23.7	39	12.4	16
Delaware	17.3	24	17.7	37	27.8	16	31.0	13	19.6	23	9.2	19	35.6	11	11.1	12	26.2	22	12.7	13
D.C.	12.7	48	20.9	15	19.5	51	22.8	51	18.8	30	7.6	41	28.4	50	7.8	47	19.5	52	7.3	51
Florida	19.5	13	16.8	42	27.7	17	26.4	40	16.8	39	10.3	9	34.6	15	11.2	11	26.0	24	14.7	1
Georgia	19.1	16	17.3	40	27.2	19	30.3	18	18.8	29	7.8	37	35.0	13	10.8	16	24.1	35	10.1	43
Guam	20.3	11	8.7	53	33.0	6	27.0	35	26.5	2	8.0	32	29.6	42	14.1	2	16.1	53	3.8	53
Hawaii	13.8	44	11.4	52	22.1	46	21.8	52	13.3	50	6.5	49	28.5	49	8.4	43	19.9	49	9.0	49
Idaho	14.2	42	20.8	16	23.7	39	29.6	23	17.2	38	7.1	46	29.4	44	8.4	44	24.1	36	12.1	19
Illinois	16.9	27	15.4	48	25.1	31	29.4	25	18.0	34	8.2	30	30.1	38	9.9	25	23.5	41	9.9	45
Indiana	18.1	20	19.5	22	31.0	10	31.8	9	21.9	13	9.2	18	33.5	19	11.0	14	28.0	12	10.4	39
Iowa	14.4	41	19.2	25	28.5	14	31.3	12	19.5	24	8.6	22	31.4	27	9.3	32	24.3	33	12.0	22
Kansas	15.4	34	18.1	34	26.5	25	30.0	20	20.0	21	8.5	24	31.3	28	9.6	31	23.9	38	11.8	24
Kentucky	23.3	5	20.2	17	30.2	11	33.2	5	26.5	3	11.8	4	39.1	6	10.6	19	31.9	3	13.3	8
Louisiana	22.7	8	18.7	28	32.2	7	33.1	6	23.5	8	10.9	7	39.8	5	11.6	8	26.4	20	10.5	37
Maine	14.9	39	23.4	3	23.3	42	28.9	27	20.2	20	8.9	21	33.3	20	9.6	28	30.4	5	13.0	11
Maryland	15.0	37	16.0	47	25.3	29	28.3	29	16.4	43	7.7	38	32.8	21	9.8	27	23.6	40	9.6	46
Massachusetts	13.8	45	19.7	19	23.5	40	23.6	50	16.6	40	7.1	47	29.4	45	8.5	42	24.3	34	11.1	34
Michigan	17.7	22	21.3	12	24.4	34	31.5	11	21.4	15	10.1	10	34.6	14	10.4	22	31.3	4	11.9	23
Minnesota	12.4	52	18.4	30	23.5	41	25.5	43	18.0	33	6.4	50	27.0	51	7.4	50	19.9	50	10.4	41
Mississippi	24.4	3	19.2	24	38.1	2	35.1	2	24.8	5	10.5	8	40.2	4	12.9	5	30.0	7	11.5	28
Missouri	18.4	18	21.3	13	28.3	15	30.4	16	22.1	11	9.8	12	32.0	24	9.6	29	28.4	11	13.4	6
Montana	15.4	35	21.1	14	22.5	43	24.6	47	19.0	28	8.3	28	29.3	46	7.7	49	27.3	16	13.7	5
Nebraska	13.9	43	18.2	32	25.3	28	29.6	24	18.5	32	7.8	36	30.3	37	9.2	37	24.7	31	11.5	27
Nevada	17.2	25	17.6	38	23.7	38	26.2	42	19.4	25	8.4	27	30.6	35	9.6	30	20.9	46	11.2	31
New Hampshire	12.6	50	22.1	8	22.4	44	26.7	37	16.2	45	7.5	43	30.1	39	9.2	35	26.6	18	13.3	7
New Jersey	16.6	29	13.9	50	26.8	22	26.3	41	15.7	48	7.9	34	31.1	32	9.2	34	22.8	43	10.4	40
New Mexico	20.8	9	19.5	21	24.3	35	26.4	39	19.1	26	7.1	45	29.5	43	10.7	17	24.4	32	11.2	32
New York	18.1	21	16.1	45	26.7	23	25.4	44	16.6	42	8.5	23	31.5	26	10.6	20	24.9	30	9.5	47
North Carolina	19.2	14	18.7	27	26.6	24	29.4	26	20.3	19	9.6	15	35.5	12	11.4	10	26.4	21	12.0	21
North Dakota	14.7	40	16.8	41	27.6	18	31.0	14	21.2	16	7.8	35	29.7	41	8.9	39	26.1	23	10.1	42
Ohio	18.1	19	20.2	18	28.5	13	30.4	17	23.4	9	9.8	13	33.5	18	10.4	21	29.8	9	11.1	35
Oklahoma	20.6	10	23.4	4	33.0	5	32.5	7	23.7	7	9.9	11	37.5	10	11.0	13	27.2	17	11.7	26
Oregon	17.4	23	26.6	1	18.5	52	26.5	38	17.3	37	8.5	25	31.8	25	9.2	36	27.8	14	14.3	2
Pennsylvania	16.9	26	18.3	31	26.3	26	30.0	19	21.0	17	9.6	16	33.7	17	10.1	24	29.8	10	11.3	30
Puerto Rico	35.4	1	18.8	26	48.0	1	27.9	30	10.8	52	11.7	5	42.3	1	14.9	1	23.3	42	5.0	52
Rhode Island	16.2	30	22.2	7	26.9	20	27.3	32	17.4	36	8.4	26	33.8	16	9.3	33	27.5	15	11.8	25
South Carolina	19.7	12	19.6	20	26.9	21	31.7	10	22.0	12	9.7	14	38.4	9	12.5	6	30.2	6	13.1	9
South Dakota	12.6	49	14.5	49	23.8	36	29.9	21	19.6	22	9.5	17	30.7	34	9.1	38	25.3	26	12.0	20
Tennessee	23.1	6	19.3	23	37.2	3	33.7	4	24.3	6	12.5	2	38.8	7	12.2	7	26.4	19	13.0	12
Texas	19.2	15	16.0	46	30.1	12	30.9	15	15.9	47	7.2	44	31.2	30	10.9	15	20.7	47	9.0	48
Utah	12.5	51	21.9	10	20.6	48	24.1	48	10.3	53	5.9	52	24.2	53	7.1	51	19.5	51	11.2	33
Vermont	12.1	53	23.2	5	20.5	49	24.7	46	16.6	41	8.0	31	31.1	31	7.8	48	27.8	13	12.6	15
Virginia	15.9	31	16.5	43	25.5	27	27.2	33	19.0	27	7.7	40	32.5	22	9.8	26	25.0	29	10.5	38
Washington	15.7	32	23.5	2	20.0	50	27.2	34	16.1	46	7.5	42	30.4	36	8.6	41	25.4	25	12.3	17
West Virginia	25.7	2	22.0	9	31.4	9	35.1	1	27.3	1	13.7	1	41.0	2	13.0	4	36.2	1	13.0	10
Wisconsin	15.4	33	18.1	35	23.8	37	29.8	22	18.7	31	8.0	33	32.3	23	8.2	46	25.1	28	10.7	36
Wyoming	15.2	36	18.7	29	25.1	32	27.8	31	20.6	18	8.2	29	28.7	48	8.6	40	25.1	27	12.7	14
United States	**18.2**		**17.7**		**26.6**		**28.3**		**18.1**		**8.6**		**32.5**		**10.3**		**25.0**		**11.1**	

Source: Centers for Disease Control & Prevention, 2013 Behavioral Risk Factor Surveillance System data; West Virginia Health Statistics Center, 2014

a. 53 states/territories conducted the survey.

Appendix B
2009-2013 WV Behavioral Risk Factors and Health Conditions by County

County	Fair or Poor Health			No Health Insurance Ages 18-64			No Leisure Exercise			Obesity			Disability		
	%	Rank	Sig.	%	Rank	Sig.	%	Rank	Sig.	%	Rank	Sig.	%	Rank	Sig.
Barbour	25.7	24	ns	*39.2	2	H	36.2	16	ns	30.1	48	ns	24.9	45	ns
Berkeley	19.9	49	L	22.6	32	ns	27.1	48	L	34.0	25	ns	22.5	49	L
Boone	37.2	4	H	25.5	21	ns	36.5	11	ns	32.1	40	ns	36.8	7	H
Braxton	32.3	9	H	29.3	12	ns	36.9	9	ns	30.2	47	ns	31.7	16	ns
Brooke	24.6	29	ns	20.4	44	ns	34.5	26	ns	37.4	14	ns	27.7	32	ns
Cabell	23.0	35	ns	22.0	34	ns	30.5	40	ns	33.2	33	ns	28.1	28	ns
Calhoun	28.7	15	ns	*33.1	6	ns	32.2	35	ns	32.0	41	ns	24.9	44	ns
Clay	*38.8	2	H	*31.7	8	ns	35.8	20	ns	*36.4	16	ns	*35.1	10	ns
Doddridge	21.5	43	ns	*36.4	3	ns	33.8	28	ns	32.4	38	ns	17.8	55	L
Fayette	26.3	22	ns	27.9	16	ns	36.3	14	ns	37.5	13	ns	29.9	24	ns
Gilmer	*20.5	47	ns	*48.4	1	H	*23.7	53	ns	*42.8	3	ns	*38.4	3	ns
Grant	28.6	16	ns	*29.5	11	ns	35.3	23	ns	*43.1	2	ns	32.7	12	ns
Greenbrier	24.7	27	ns	28.6	14	ns	33.6	29	ns	28.6	52	ns	30.1	22	ns
Hampshire	28.0	17	ns	17.9	50	ns	33.1	31	ns	35.4	19	ns	30.4	21	ns
Hancock	23.4	32	ns	16.4	51	L	32.7	32	ns	31.6	43	ns	25.0	42	ns
Hardy	23.2	33	ns	13.0	55	L	36.0	19	ns	38.5	11	ns	24.4	47	ns
Harrison	21.6	42	ns	20.5	43	ns	33.5	30	ns	32.6	37	ns	29.1	27	ns
Jackson	22.4	38	ns	18.4	47	ns	30.5	41	ns	33.0	34	ns	28.0	30	ns
Jefferson	15.6	54	L	15.2	53	L	26.9	49	L	33.6	30	ns	25.2	41	ns
Kanawha	23.5	30	ns	21.2	40	ns	30.9	39	ns	32.7	35	ns	27.3	33	ns
Lewis	27.6	18	ns	21.4	39	ns	30.3	43	ns	34.2	24	ns	25.4	40	ns
Lincoln	31.1	10	ns	20.8	41	ns	40.4	5	H	41.5	4	H	35.6	8	H
Logan	33.8	7	H	26.8	19	ns	41.3	4	H	40.8	5	H	38.3	4	H
Marion	21.2	45	ns	26.5	20	ns	29.4	45	ns	29.7	49	ns	26.2	37	ns
Marshall	20.1	48	L	23.3	27	ns	30.0	44	ns	32.3	39	ns	25.0	43	ns
Mason	22.9	36	ns	21.8	36	ns	36.9	8	ns	37.3	15	ns	29.4	26	ns
McDowell	39.6	1	H	29.6	10	ns	41.8	3	H	39.1	9	ns	37.6	6	H
Mercer	26.1	23	ns	21.9	35	ns	35.6	22	ns	34.6	21	ns	30.0	23	ns
Mineral	19.4	51	L	17.9	49	ns	24.3	51	L	33.4	31	ns	27.8	31	ns
Mingo	36.5	6	H	21.7	37	ns	42.6	2	H	35.6	18	ns	34.7	11	H
Monongalia	13.9	55	L	13.6	54	L	23.4	54	L	24.6	53	L	19.9	54	L
Monroe	26.3	21	ns	24.7	23	ns	35.1	24	ns	33.2	32	ns	32.5	14	ns
Morgan	21.3	44	ns	23.0	28	ns	32.5	33	ns	30.5	46	ns	28.0	29	ns
Nicholas	29.9	12	ns	29.3	13	ns	36.0	18	ns	34.0	26	ns	35.4	9	H
Ohio	16.3	53	L	20.0	46	ns	23.1	55	L	24.5	54	L	24.1	48	ns
Pendleton	22.0	40	ns	*24.6	24	ns	*31.0	37	ns	*39.7	7	ns	25.4	39	ns
Pleasants	18.9	52	ns	*18.4	48	ns	26.4	50	ns	*31.3	44	ns	21.7	52	ns
Pocahontas	24.6	28	ns	*32.4	7	ns	23.9	52	L	22.8	55	L	29.5	25	ns
Preston	26.9	20	ns	22.7	30	ns	34.6	25	ns	35.1	20	ns	26.6	36	ns
Putnam	21.7	41	ns	16.3	52	L	28.2	46	L	28.9	51	ns	24.7	46	ns
Raleigh	30.3	11	H	23.7	26	ns	34.2	27	ns	32.6	36	ns	32.3	15	ns
Randolph	23.5	31	ns	24.9	22	ns	31.9	36	ns	33.7	29	ns	30.7	20	ns
Ritchie	27.2	19	ns	*31.5	9	ns	36.2	15	ns	*38.9	10	ns	32.7	13	ns
Roane	33.5	8	H	24.1	25	ns	35.7	21	ns	40.3	6	ns	30.7	19	ns
Summers	28.9	14	ns	22.4	33	ns	36.4	13	ns	34.6	22	ns	31.1	18	ns
Taylor	22.2	39	ns	20.4	45	ns	38.5	7	ns	30.9	45	ns	20.2	53	L
Tucker	19.8	50	ns	*28.0	15	ns	*38.7	6	ns	29.2	50	ns	22.2	51	ns
Tyler	21.0	46	ns	*34.8	4	ns	36.0	17	ns	*38.2	12	ns	25.7	38	ns
Upshur	22.5	37	ns	27.4	18	ns	30.4	42	ns	31.8	42	ns	22.2	50	L
Wayne	29.4	13	ns	21.4	38	ns	36.4	12	ns	33.8	28	ns	38.1	5	H
Webster	38.5	3	H	*33.4	5	ns	36.9	10	ns	*39.4	8	ns	*44.9	1	H
Wetzel	25.5	26	ns	20.5	42	ns	32.5	34	ns	34.4	23	ns	27.3	34	ns
Wirt	23.0	34	ns	*27.5	17	ns	*27.9	47	ns	*47.7	1	H	*26.7	35	ns
Wood	25.6	25	ns	22.8	29	ns	31.0	38	ns	33.8	27	ns	31.6	17	ns
Wyoming	37.2	5	H	22.7	31	ns	44.7	1	H	36.3	17	ns	41.5	2	H
WV / U.S.[a] / Sig.	**24.6**	**18.2**	**H**	**23.2**	**21.8**	**H**	**32.7**	**25.7**	**H**	**33.2**	**27.4**	**H**	**33.2**	**27.4**	**H**

Source: West Virginia Behavioral Risk Factor Surveillance System (WVBRFSS), West Virginia Health Statistics Center, 2014.

Sig. - Indicates whether county prevalence estimate is significantly different than WV prevalence. H = significantly higher, ns = not significantly different, L = significantly lower.

* Unreliable prevalence estimate - use caution when reporting and interpreting. See discussion on page 5 about unreliable estimates.

a. U.S. prevalence for all indicators is 2011.

Appendix B, continued
2009-2013 WV Behavioral Risk Factors and Health Conditions by County

County	Cigarette Smoking[a]			Binge Drinking[a]			Hypertension[b]			Less Than 5 Servings of Fruit and Vegetables Daily[b]		
	%	Rank	Sig.	%	Rank	Sig.	%	Rank	Sig.	%	Rank	Sig.
Barbour	26.3	38	ns	5.2	52	L	40.4	16	ns	84.1	36	ns
Berkeley	28.7	23	ns	11.7	13	ns	27.9	53	L	84.9	30	ns
Boone	31.3	11	ns	9.1	26	ns	44.5	5	H	87.9	14	ns
Braxton	24.3	44	ns	*5.9	47	ns	34.2	42	ns	83.3	43	ns
Brooke	30.1	13	ns	11.3	14	ns	33.8	43	ns	85.0	29	ns
Cabell	29.3	19	ns	11.0	17	ns	33.7	44	ns	84.0	37	ns
Calhoun	*39.9	1	H	15.9	2	ns	35.4	36	ns	83.2	44	ns
Clay	*28.9	21	ns	*2.9	55	L	41.2	12	ns	91.5	2	H
Doddridge	28.0	26	ns	*6.7	42	ns	23.8	55	L	86.5	19	ns
Fayette	30.0	15	ns	9.9	22	ns	38.5	26	ns	83.8	40	ns
Gilmer	*35.8	3	ns	*14.3	5	ns	*34.9	37	ns	94.9	1	H
Grant	17.1	55	L	*5.4	51	L	42.0	11	ns	81.1	50	ns
Greenbrier	25.1	41	ns	10.3	21	ns	39.7	17	ns	85.2	27	ns
Hampshire	34.1	4	ns	12.5	11	ns	34.9	38	ns	78.7	55	ns
Hancock	27.3	30	ns	10.9	19	ns	34.6	40	ns	84.6	33	ns
Hardy	26.7	34	ns	6.6	43	ns	36.3	33	ns	82.3	47	ns
Harrison	24.3	45	ns	7.6	36	ns	34.4	41	ns	84.7	31	ns
Jackson	26.9	33	ns	6.2	46	L	40.6	14	ns	87.0	16	ns
Jefferson	27.3	29	ns	14.2	7	ns	31.2	51	ns	82.1	49	ns
Kanawha	25.5	40	ns	10.5	20	ns	37.2	30	ns	85.0	28	ns
Lewis	26.4	36	ns	*3.5	54	L	38.8	23	ns	84.6	32	ns
Lincoln	28.3	25	ns	12.9	10	ns	43.0	9	ns	90.3	3	H
Logan	32.6	7	ns	7.6	37	ns	45.3	4	H	88.0	12	ns
Marion	22.6	49	L	11.2	16	ns	32.3	48	ns	84.3	34	ns
Marshall	24.7	43	ns	14.2	6	ns	32.6	46	ns	82.5	46	ns
Mason	30.9	12	ns	8.9	27	ns	40.9	13	ns	89.5	5	H
McDowell	31.9	9	ns	*8.7	31	ns	45.3	3	H	84.1	35	ns
Mercer	29.6	16	ns	7.3	38	ns	39.2	19	ns	86.6	17	ns
Mineral	22.8	48	ns	10.9	18	ns	35.7	35	ns	86.5	20	ns
Mingo	32.5	8	ns	6.7	41	ns	47.5	2	H	89.0	8	ns
Monongalia	18.1	54	L	22.2	1	H	25.9	54	L	83.9	39	ns
Monroe	23.1	47	ns	7.7	35	ns	40.6	15	ns	79.4	53	ns
Morgan	26.4	37	ns	7.3	39	ns	38.9	20	ns	85.8	24	ns
Nicholas	30.1	14	ns	8.8	30	ns	37.5	29	ns	89.5	6	H
Ohio	27.3	28	ns	15.8	3	H	31.3	50	ns	88.2	10	ns
Pendleton	20.1	52	ns	*6.5	44	ns	*32.6	47	ns	81.0	51	ns
Pleasants	21.0	51	ns	*8.8	28	ns	*29.7	52	ns	86.4	21	ns
Pocahontas	24.8	42	ns	11.2	15	ns	32.2	49	ns	79.5	52	ns
Preston	28.5	24	ns	8.8	29	ns	33.6	45	ns	85.6	25	ns
Putnam	22.0	50	L	9.5	24	ns	38.8	22	ns	85.6	26	ns
Raleigh	27.7	27	ns	7.0	40	L	37.7	28	ns	86.0	23	ns
Randolph	25.5	39	ns	8.6	32	ns	35.9	34	ns	84.0	38	ns
Ritchie	32.7	6	ns	*8.2	33	ns	44.3	6	ns	88.6	9	ns
Roane	36.3	2	H	12.1	12	ns	37.2	31	ns	86.4	22	ns
Summers	23.4	46	ns	*5.7	48	ns	38.7	24	ns	82.6	45	ns
Taylor	27.2	31	ns	13.9	9	ns	37.9	27	ns	82.2	48	ns
Tucker	*27.1	32	ns	*5.6	49	ns	*47.9	1	H	79.1	54	ns
Tyler	29.0	20	ns	14.2	8	ns	*38.8	21	ns	86.6	18	ns
Upshur	19.7	53	L	7.9	34	ns	34.8	39	ns	83.5	41	ns
Wayne	29.3	18	ns	9.6	23	ns	42.3	10	H	87.9	13	ns
Webster	31.7	10	ns	*4.6	53	L	43.4	7	ns	89.9	4	ns
Wetzel	28.8	22	ns	*5.5	50	L	38.7	25	ns	87.7	15	ns
Wirt	*26.6	35	ns	*14.5	4	ns	*39.4	18	ns	89.0	7	ns
Wood	29.5	17	ns	9.2	25	ns	36.8	32	ns	83.4	42	ns
Wyoming	32.8	5	ns	6.3	45	ns	43.3	8	ns	88.2	11	ns
WV / U.S.[a] / Sig.	**85.1**	**82.4**	**H**	**9.9**	**18.3**	**L**	**39.0**	**29.3**	**H**	**85.1**	**76.3**	**H**

Source: West Virginia Behavioral Risk Factor Surveillance System (WVBRFSS), West Virginia Health Statistics Center, 2014.

Sig. - Indicates whether county prevalence estimate is significantly different than WV prevalence. H = significantly higher, ns = not significantly different, L = significantly lower.

* Unreliable prevalence estimate - use caution when reporting and interpreting. See discussion on page 5 about unreliable estimates.

a. U.S. prevalence for most indicators is 2011.

b. U.S. prevalence for hypertension and fruit and vegetable consumption is 2009.

Appendix B, continued
2009-2013 WV Behavioral Risk Factors and Health Conditions by County

County	Cardiovascular Disease			Diabetes			Cancer			Current Asthma			Arthritis		
	%	Rank	Sig.	%	Rank	Sig.	%	Rank	Sig.	%	Rank	Sig.	%	Rank	Sig.
Barbour	12.8	31	ns	11.5	37	ns	10.5	38	ns	7.6	42	ns	34.4	41	ns
Berkeley	10.4	45	L	9.9	47	L	8.2	53	L	8.0	37	ns	30.4	51	L
Boone	19.8	1	H	14.8	12	ns	12.8	14	ns	10.2	20	ns	41.0	13	ns
Braxton	15.2	15	ns	16.1	8	ns	14.3	5	ns	10.8	16	ns	36.4	31	ns
Brooke	13.5	24	ns	15.3	11	ns	11.3	32	ns	9.0	27	ns	38.1	25	ns
Cabell	12.4	33	ns	13.1	21	ns	11.6	28	ns	11.3	10	ns	31.4	49	L
Calhoun	*10.2	48	ns	15.9	9	ns	9.9	42	ns	*8.9	30	ns	*36.8	29	ns
Clay	16.8	6	ns	15.8	10	ns	10.2	39	ns	*14.5	3	ns	*36.5	30	ns
Doddridge	*8.3	53	ns	8.5	52	ns	9.8	43	ns	*4.3	54	L	*35.7	34	ns
Fayette	12.9	29	ns	12.2	30	ns	14.1	6	ns	8.9	29	ns	41.2	12	ns
Gilmer	*10.3	47	ns	*7.1	55	ns	*6.4	55	L	*12.0	7	ns	*28.4	53	ns
Grant	16.7	7	ns	21.8	1	H	12.7	17	ns	*15.2	1	ns	43.8	5	ns
Greenbrier	11.6	39	ns	11.6	36	ns	12.7	16	ns	8.5	34	ns	39.0	21	ns
Hampshire	10.7	42	ns	10.2	44	ns	11.9	25	ns	9.9	22	ns	35.7	35	ns
Hancock	12.1	34	ns	11.7	34	ns	9.7	44	ns	7.8	39	ns	32.6	47	ns
Hardy	12.1	35	ns	12.6	25	ns	10.6	37	ns	5.4	53	L	35.2	37	ns
Harrison	13.3	26	ns	12.6	26	ns	13.0	10	ns	10.2	21	ns	38.6	24	ns
Jackson	12.1	36	ns	13.0	22	ns	12.2	22	ns	5.6	52	L	36.2	32	ns
Jefferson	8.5	52	L	11.3	39	ns	8.8	51	L	9.6	23	ns	26.3	54	L
Kanawha	13.3	25	ns	12.5	27	ns	11.3	33	ns	7.9	38	ns	33.1	44	ns
Lewis	15.4	14	ns	12.7	23	ns	9.7	45	ns	8.9	28	ns	32.8	46	ns
Lincoln	14.0	19	ns	13.8	18	ns	14.6	4	ns	8.5	35	ns	42.7	8	ns
Logan	18.3	2	H	18.3	4	H	11.2	34	ns	8.9	31	ns	43.2	6	H
Marion	12.0	37	ns	11.3	40	ns	11.4	31	ns	11.0	13	ns	32.0	48	ns
Marshall	13.8	21	ns	10.1	45	ns	12.3	21	ns	10.6	17	ns	41.8	10	H
Mason	13.0	28	ns	9.8	49	ns	15.0	3	ns	10.9	14	ns	39.6	18	ns
McDowell	18.3	3	H	20.0	3	H	11.9	24	ns	15.2	2	ns	46.0	1	H
Mercer	12.8	30	ns	14.3	15	ns	13.0	11	ns	8.8	33	ns	39.9	16	ns
Mineral	10.3	46	ns	9.2	50	ns	11.5	29	ns	11.5	8	ns	36.0	33	ns
Mingo	17.6	4	ns	13.2	20	ns	11.0	35	ns	6.2	50	ns	43.1	7	H
Monongalia	7.5	55	L	8.2	53	L	8.9	50	L	6.5	47	L	20.6	55	L
Monroe	15.6	11	ns	12.4	28	ns	12.2	23	ns	*5.8	51	ns	42.4	9	ns
Morgan	13.7	22	ns	10.7	43	ns	12.4	20	ns	8.3	36	ns	31.1	50	ns
Nicholas	15.4	13	ns	12.0	31	ns	10.1	40	ns	7.6	40	ns	43.9	4	H
Ohio	10.9	41	ns	11.0	42	ns	11.7	27	ns	9.1	25	ns	33.6	42	ns
Pendleton	14.4	18	ns	13.3	19	ns	11.8	26	ns	*13.3	5	ns	*40.3	15	ns
Pleasants	*8.1	54	ns	14.4	14	ns	10.0	41	ns	*3.1	55	L	29.2	52	ns
Pocahontas	14.8	17	ns	9.8	48	ns	8.9	49	ns	*6.4	48	ns	37.7	26	ns
Preston	10.4	44	ns	8.1	54	L	9.1	47	ns	7.0	44	ns	34.5	40	ns
Putnam	11.1	40	ns	11.6	35	ns	12.4	19	ns	6.4	49	L	33.5	43	ns
Raleigh	16.1	8	H	12.7	24	ns	12.8	15	ns	10.8	15	ns	37.3	28	ns
Randolph	11.9	38	ns	11.3	38	ns	12.9	12	ns	11.1	12	ns	35.1	38	ns
Ritchie	9.3	50	ns	13.9	17	ns	9.0	48	ns	*10.5	18	ns	38.8	23	ns
Roane	15.9	10	ns	16.3	7	ns	13.2	7	ns	9.4	24	ns	35.4	36	ns
Summers	13.9	20	ns	12.2	29	ns	6.6	54	L	11.4	9	ns	39.0	22	ns
Taylor	10.4	43	ns	9.2	51	ns	15.1	2	ns	8.8	32	ns	34.7	39	ns
Tucker	*9.2	51	ns	12.0	32	ns	9.6	46	ns	11.2	11	ns	*39.7	17	ns
Tyler	13.1	27	ns	11.2	41	ns	16.5	1	ns	*7.6	41	ns	40.6	14	ns
Upshur	9.6	49	ns	10.0	46	ns	10.9	36	ns	12.8	6	ns	32.8	45	ns
Wayne	15.6	12	ns	14.8	13	ns	12.9	13	ns	10.4	19	ns	39.3	20	ns
Webster	15.0	16	ns	17.7	5	ns	11.4	30	ns	13.5	4	ns	45.7	2	ns
Wetzel	17.1	5	ns	11.9	33	ns	13.0	9	ns	9.0	26	ns	39.3	19	ns
Wirt	13.6	23	ns	*20.8	2	ns	*8.5	52	ns	*7.0	45	ns	*41.3	11	ns
Wood	12.7	32	ns	14.0	16	ns	13.1	8	ns	7.0	46	ns	37.5	27	ns
Wyoming	15.9	9	ns	17.4	6	H	12.6	18	ns	7.3	43	ns	44.7	3	H
WV / U.S.[a] / Sig.	**13.0**	**8.4**	**H**	**12.4**	**9.8**	**H**	**11.7**	**11.1**	**H**	**8.9**	**8.8**	**ns**	**35.7**	**24.8**	**H**

Source: West Virginia Behavioral Risk Factor Surveillance System (WVBRFSS), West Virginia Health Statistics Center, 2014.

Sig. - Indicates whether county prevalence estimate is significantly different than WV prevalence. H = significantly higher, ns = not significantly different, L = significantly lower.

* Unreliable prevalence estimate - use caution when reporting and interpreting. See discussion on page 5 about unreliable estimates.

a. U.S. prevalence for all indicators is 2011.