

West Virginia
Behavioral Risk Factor
Surveillance System Report
2015



Health Statistics Center Statistical Services Section Epidemiology Division

West Virginia Behavioral Risk Factor Surveillance System Report 2015

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Introduction

Each year since 1984, the West Virginia Behavioral Risk Factor Surveillance System has measured a range of risk factors that can affect health. This report presents state survey results for the year 2015 as well as county data combined for the latest available five years (2011 through 2015).

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 (25.9%) considered their health to be either fair or poor.
- Fair/poor health was most common among groups of adults aged 55-64, 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 or poor health was highest in Boone, Fayette, Lincoln, Logan, McDowell, Mingo, Nicholas, Webster, and Wyoming counties.
- West Virginia ranked the highest in the nation for the prevalence of poor physical health, poor mental health, and activity limitations due to poor physical or mental health.

Impairment

- Over one-fourth of West Virginia adults were disabled because of a physical, mental, or emotional problem (28.3%), which was the highest nationwide.
- ♦ More than half of adults with an annual household income of less than \$15,000 were disabled (53.5%)
- ♦ The prevalence of disability was highest in Boone, Logan, McDowell, Mingo, Webster, and Wyoming counties.
- ♦ About 13.1% 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, 36.6% use special equipment, the 3rd highest in the nation.

- ◆ The prevalence of difficulty concentrating, remembering, or making decisions was 14.6% among West Virginians, compared to 10.3% nationally, which ranked the State 4th highest nationally.
- Over one-fifth of West Virginians had serious difficulty walking or climbing stairs (22.7%).
- ♦ Approximately 5.6% of West Virginia adults had difficulty bathing or dressing.
- ♦ The prevalence of having difficulty doing errands alone among West Virginians was 11.6%, significantly higher than the national prevalence of 7.0%.
- ♦ Approximately 8.0% of West Virginia adults are blind or have serious vision impairment, the 3rd highest in the nation.

Health Care Access

- ♦ The prevalence of West Virginia adults (18-64) with no health care coverage dropped nearly 50% from 2013 (23.7%) to 2014 (13.0%) and over 25% from 2014 to 2015 (9.6%).
- More than one-fifth of all adults do not have a personal doctor or health care provider (21.0%).
- Approximately 13.8% of West Virginia adults could not afford needed medical care in the past year.
- About one-fifth of West Virginia adults did not have a routine checkup in the past year (20.2%).
- Nearly 50% of West Virginia adults have private insurance (46.5%), followed by Medicare (23.9%) and Medicaid (16.6%).

Weight Status

- ♦ The prevalence of obesity in West Virginia was 35.6%, the 4th highest in the nation.
- The prevalence of obesity was significantly higher in Logan and McDowell counties than in the rest of the State.
- Over two-thirds (71.1%) of West Virginia adults were either overweight or obese, the highest in the U.S.
- ◆ The prevalence of overweight or obese was highest among men, those aged 45-54, those with a high school education, and those with an annual household income of \$50,000-\$74,999.

Physical Activity

- Over one-fourth of West Virginia adults (30.8%) participate in no leisure-time physical activity or exercise which ranked West Virginia 9th highest in the nation.
- ♦ The prevalence of physical inactivity was significantly higher among females than males.
- Physical inactivity was highest among those aged 65 and older, those with less than a high school education, and those with annual household income of less than \$15,000.
- ♦ The prevalence of physical inactivity was significantly higher in Clay, Logan, Mason, Mingo, and Wyoming counties than the rest of the State.
- ♦ Approximately 32.8% of adults in the State are highly active and 14.8% are active.
- ♦ While 34.2% of West Virginia adults met only aerobic activity guidelines, 7.1% met only muscle strengthening guidelines, and 13.8% met both guidelines.

Nutrition

- ♦ Nine out of every 10 adults (91.7%) in West Virginia consume fewer than five servings of fruits and vegetables daily which ranked West Virginia the 2nd highest in the nation.
- The highest prevalence of consuming fewer than five servings of fruits and vegetables daily was found among those with less than a high school education and an annual household income less than \$25,000.
- The prevalence of consuming fewer than five servings of fruit and vegetables daily was significantly higher in Gilmer, Lincoln, Mason, and Mingo counties than the rest of the State.

Tobacco Use

- More than one-fourth of adults (25.7%) currently smoke cigarettes every day or some days which ranked West Virginia the 3rd highest nationally.
- ♦ The prevalence of current smoking was highest among those aged 25-34, those with less than a high school education, and those with an annual household income of less than \$15,000.
- ◆ The prevalence of current cigarette smoking was highest in Logan and Webster counties.
- Approximately 55.8% of current smokers had tried to quit smoking in the past year which was the 5th lowest in the nation.
- West Virginia ranked the highest in the nation in the prevalence of smokeless tobacco use (9.3%) among adults.

Alcohol Consumption

- ♦ The West Virginia heavy drinking prevalence was 3.5% which was the lowest in the nation.
- The prevalence of binge drinking among West Virginia adults was 10.6%, the 2nd lowest in the nation.
- ♦ Binge drinking was highest among men, those aged 18-24, those with some college education or college graduates, and those with a household income of \$75,000 or more per year.
- The prevalence of binge drinking was significantly higher in Jefferson, Monongalia, and Ohio counties than the rest of the State.

Seat Belt Use

- Approximately 4.3% of West Virginia adults seldom or never wear a seat belt when they drive or ride in a car.
- Men had a significantly higher prevalence of seldom or never wear a seat belt when they drive or ride in a car than women.
- The prevalence of seldom or never wear a seatbelt was highest among those aged 25-34, those with less than a high school education, and those with an annual household income less than \$15,000.

Cholesterol Testing

- ♦ About 85.7% of West Virginia adults have ever had their cholesterol checked.
- Among those who had their cholesterol checked, 82.3% had it checked in the past 5 years.

Diabetes Testing

Among West Virginia adults who do not have diabetes, 64.5% have had a diabetes test in the past 3 years.

HIV Testing

- Over one-third of West Virginia adults (36.7%) have been tested for HIV.
- ♦ The prevalence of HIV testing was highest among those between the ages of 25-44 and those with some post high school education or a college degree.

Immunization

- ♦ About 47.3% of all adults and 69.1% of seniors had a flu vaccine in the past 12 months.
- ♦ The prevalence of ever had a pneumonia vaccination was 38.2% among all adults and 70.1% among those aged 65 and older.
- ◆ Approximately 63.9% of West Virginia adults have received a tetanus vaccine since 2005 and 21.6% of those reported they had the Tdap vaccine.
- The prevalence of had the shingles vaccine was 22.8% among West Virginia adults.
- ♦ The prevalence of received the HPV vaccine was 16.9% and among those 77.1% had the full course of the vaccine.
- ♦ Among women aged 18-26, 60.1% had the HPV vaccine and 82.7% had the full course of the vaccine.

Hypertension

- ♦ Approximately 42.7% of West Virginia adults have been told by a health care professional that they have hypertension which ranked the State the highest in the nation.
- The prevalence of hypertension 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.
- The prevalence of hypertension was significantly higher in Lincoln, Logan, McDowell, Mingo, and Wayne counties than in the rest of the State.
- More than three-fourths (79.7%) of those with hypertension are taking medication for it.

High Cholesterol

- ◆ The prevalence of high cholesterol among West Virginia adults was 39.0%, the 9th highest in the nation.
- ♦ The prevalence of high cholesterol was significantly higher among White, Non-Hispanic adults than among Black, Non-Hispanic adults.
- The prevalence of high cholesterol was highest among those aged 55 and older, those with less than a high school education, and those with an annual household income of less than \$15,000.
- Barbour, Clay, McDowell, Mingo, Monroe, Summers, and Webster counties had a significantly higher prevalence of high cholesterol than the State as a whole.

Cardiovascular Disease

- ♦ West Virginia ranked the highest in the nation in the prevalence of heart attack (7.0%), coronary heart disease (7.4%), and stroke (4.7%).
- The overall cardiovascular disease prevalence was highest in the nation at 14.0%.
- The prevalence of cardiovascular disease was highest among men, those aged 65 and older, those
 with less than a high school education, and those with an annual household income less than
 \$15,000.
- ♦ The prevalence of cardiovascular disease was significantly higher in Boone, Logan, McDowell, Mingo, and Wyoming counties than the State as a whole.

Diabetes

- More than 1 in 10 West Virginia adults had diabetes (14.5%) which ranked West Virginia the 3rd 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.
- The prevalence of diabetes was significantly higher in Grant, Logan, McDowell, and Wayne counties than the State as a whole.
- ♦ Approximately 9.7% of West Virginia adults had borderline or pre-diabetes.
- The prevalence of borderline or pre-diabetes was highest among those aged 55 and older, those with less than a high school education, and those with a household income of less than \$15,000 a year.

Cancer

- ♦ Approximately 7.7% of West Virginia adults had skin cancer and 7.9% had some other type of cancer.
- About 1 in 8 West Virginia adults are cancer survivors (14.1%) which ranked West Virginia the 3rd highest for overall cancer prevalence.
- The prevalence of cancer was significantly higher among White, Non-Hispanic adults than among Black, Non-Hispanic adults; Other, Non-Hispanic adults; and Hispanic adults.
- Cancer prevalence was highest among adults aged 65 and older, those with less than a high school education, and those with an annual household income of less than \$15,000.
- Cancer prevalence was significantly higher in Wayne County than the rest of the state.

Respiratory Diseases

- ♦ Approximately 15.1% of West Virginia adults have ever been diagnosed with asthma and 10.8% 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 with less than a high school education and those with an annual household income of less than \$15,000.
- The prevalence of current asthma was significantly higher in McDowell County than the rest of the State.
- ♦ The prevalence of chronic obstructive pulmonary disease or COPD in West Virginia was 13.3%, the highest in the nation.

- The prevalence of COPD was highest among adults aged 65 and older, those with less than a high school education, and those with an annual household income of less than \$15,000.
- ♦ The prevalence of COPD was significantly higher in Fayette, Logan, McDowell, Mercer, Mingo, and Webster counties than the rest of the State.

Arthritis

- ♦ More than 1 in 3 West Virginia adults had arthritis (38.0%) which ranked West Virginia highest in the nation.
- Arthritis prevalence 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.
- ♦ The prevalence of arthritis was highest in Fayette, Lincoln, Logan, McDowell, Nicholas, Webster, and Wyoming counties.
- ♦ Among those with arthritis, 57.3% experienced activity limitations.
- ♦ Approximately 45.6% of those with arthritis experienced work limitations and 26.7% experienced social activity limitations.

Kidney Disease

- ♦ The prevalence of kidney disease in West Virginia was 3.6% and was the 3rd highest in the nation.
- ♦ Kidney disease prevalence was highest among seniors, those with low educational attainment, and those with low income.

Comorbidities

- Approximately 1 in 5 West Virginia adults (19.9%) were both disabled and had arthritis.
- ♦ About 16.9% of adults experienced fair/poor health and were disabled.
- ♦ Approximately 14.5% of adults had arthritis and did not exercise.
- About 1 in 8 West Virginia adults (12.9%) were obese and did not exercise.
- ♦ About 8.1% of West Virginia adults were obese and had diabetes.
- Approximately 4.7% of West Virginia adults had both cardiovascular disease and diabetes.
- Approximately 2.5% of adults were current smokers and had no health care coverage.

Depression & Anxiety

- ♦ About 23.1% of West Virginia adults had depression which was significantly higher than the U.S. prevalence of 17%.
- 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 a household income less than \$15,000 per year.
- ♦ The prevalence of depression was highest in Boone, Fayette, Mercer, and Wayne counties.
- ♦ Approximately 13.7% of West Virginia adults are experiencing symptoms of current depression.
- More than 1 in 5 (21.0%) West Virginia adults have been diagnosed with anxiety.
- ♦ Approximately 16.8% of West Virginia adults are currently receiving treatment for a mental health condition.

Cognitive Decline

- ♦ The prevalence of confusion or memory loss in the past year among West Virginia adults aged 45 and older was 10.0%.
- The prevalence of cognitive decline was highest among those with less than a high school education and those whole household income was less than \$15,000 a year.
- Approximately 17.2% had to give up day-to-day household activities or chores due to cognitive decline, 16.2% reported they needed assistance with these activities, and 13.9% rarely or never received the help they needed.
- About 18.3% of those with cognitive decline reported it interfered with work or social activities.
- Nearly half (46.5%) of those with confusion or memory loss discussed their cognitive decline with a doctor.

ESTIMATED NUMBER OF PERSONS WITH DISEASE OR RISK FACTOR

Table ES.1 below shows selected risk factor prevalence and the corresponding number of West Virginians who are estimated to have the risk factor or disease.

Table ES.1 Percentage and Number of Persons Estimated with Disease or Risk Factor (Among Adults Aged 18 and Older or Appropriate Subset): WVBRFSS 2015

Risk Factor/Chronic Disease/Health- Related Factor	Percentage Prevalence Estimate (%)	Estimated Number of Adults
General Health Is Fair or Poor	25.9	380,241
Poor Physical Health	18.6	269,732
Poor Mental Health	15.6	225,148
Disability	28.3	410,309
Use Special Equipment	13.1	190,818
Special Equipment Use Among Disabled	36.6	149,954
Cognitive Difficulty	14.6	210,944
Difficulty Walking	22.7	327,502
Difficulty Dressing or Bathing	5.6	80,626
Difficulty Doing Errands Alone	11.6	166,937
Vision Impairment	8.0	115,854
No Health Care Coverage (Ages 18-64)	9.6	107,380
No Personal Doctor or Health Care Provider	21.0	308,452
Unable to Afford Needed Medical Care	13.8	202,718
No Routine Medical Checkup in Past Year	20.2	292,976
Overweight (BMI 25.0-29.9)	35.5	479,476
Obesity (BMI 30.0+)	35.6	480,517
Overweight or Obese (BMI 25.0+)	71.1	959,993
No Leisure-time Physical Activity	30.8	433,562
Consumed < 5 Servings of Fruits and Vegetables Daily	91.7	1,174,504
Current Cigarette Smoking	25.7	369,602
Smoking Cessation	55.8	205,852
Smokeless Tobacco Use	9.3	133,932
Heavy Drinking	3.5	49,142
Binge Drinking	10.6	149,456

Risk Factor/Chronic Disease/Health- Related Factor	Percentage Prevalence Estimate (%)	Estimated Number of Adults
Seldom or Never Wear a Seatbelt	4.3	59,223
Ever Had Cholesterol Checked	85.7	1,220,874
Cholesterol Checked in Past 5 Years	82.3	1,155,948
Diabetes Test	64.5	765,741
HIV Test	36.7	473,267
Flu Vaccine	47.3	658,201
Pneumonia Vaccination (ages 65 and older)	70.1	226,245
Tetanus Vaccine	63.9	770,461
Tdap Vaccine	21.6	260,528
Shingles Vaccine	22.8	160,152
HPV Vaccine (3 shots)	16.9	101,165
Hypertension	42.7	626,552
Hypertension Medication	79.7	498,873
High Cholesterol	39.0	471,418
Heart Attack	7.0	102,945
Coronary Heart Disease	7.4	108,108
Stroke	4.7	69,544
Cardiovascular Disease	14.0	203,702
Diabetes	14.5	212,274
Cancer	14.1	206,766
Current Asthma	10.8	158,528
Chronic Obstructive Pulmonary Disease	13.3	195,468
Arthritis	38.0	556,790
Kidney Disease	3.6	53,421
Depression	23.1	338,248
Anxiety	21.0	282,817
Current Treatment for Mental Health	16.8	227,619
Confusion or Memory Loss	10.0	80,805

Definition 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 6 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 preventive screenings, 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 Department of Health and Human Resources, Bureau for Public Health (WVBPH) became one of the 15 initial participants in 1984. Since then, the system has expanded to include all 50 states, the District of Columbia, Guam, and Puerto Rico.

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-four 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 2015 risk factor prevalence estimates and compares them to the years 1984 through 2014. 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 2015

In 2015, West Virginia opted to ask several Optional Modules including: Cognitive Decline, Anxiety and Depression, Tetanus and Diphtheria, Adult Human Papillomavirus Vaccination, and Shingles. The Cognitive Decline Module includes six questions on confusion and memory loss. The Anxiety and Depression Module consists of 10 questions based on the Patient Health Questionnaire 8 (PHQ-8), which is a tool used to identify current depression symptoms.

Table I.1 Topics Administered in the Survey: WVBRFSS, 2005-2015

Topic	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Adverse Childhood Events										Х	
AIDS/HIV	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х
Alcohol Consumption	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х
Arthritis	Х		Х		Х	Х	Х	Х	Х	Х	Х
Asthma	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х
Cancer					Х	Х	Х	Х	Х	Х	Х
Cancer Screenings		Х		Х		Х		Х		Х	
Cardiovascular Disease	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х
Cholesterol	Х		Х		Х		Х		Х		Х
Diabetes	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х
Disability	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х
Emotional Support/ Life Satisfaction	Х	Х	Х	Х	Х	Х					
Falls		Х		Х		Х		Х		Х	
Fruits & Vegetables	Х		Х		Х		Х		Х		Х
Health Insurance	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х
Health Status	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х
HPV Vaccine				Х		Х		Х			Х
Hypertension	Х		Х		Х		Х		Х		Х
Immunization	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х
Intimate Partner Violence		Х	Х								
Leisure-time Physical Activity	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х
Obesity	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х
Oral Health		Х		Х		Х		Х		Х	
Osteoporosis				Х				Х			
Routine Checkup	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х
Seatbelt Use		Х		Х		Х	Х	Х	Х	Х	Х
Sexual Violence				Х							
Sleep					Х	Х			Х	Х	
Tobacco Use				Х		Х	Х	Х	Х	Х	Х
Weight Control					Х		Х				

Methodology

The survey is conducted by the method known as Computer Assisted Telephone Interviewing (CATI) and represents a collaborative effort between the West Virginia Health Statistics Center (WVHSC) and the Centers for Disease Control and Prevention (CDC). The WVHSC provides telephones, office space, interviewers, and supervision of the data collection. Approximately 50% of the cost is supported through financial assistance from the CDC. A standardized set of core questions and survey protocols, computer-assisted telephone interviewing software, data processing services, and analytic consultation are also 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 2015 state-level estimates from the National Health Interview Survey, 96.1% of West Virginia households have telephones, with 61.4% of households having landline telephones. In addition, a growing number of adults (38.6%) live in wireless-only households. In order to better represent these latter residents, the 2015 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, or if the selected respondent was unable to communicate. Additionally, a land line number was disqualified if it 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 2015, 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, 2015

Demographic Characteristic	Number of Interviews	Percent of Unweighted Sample	Percent of Weighted Sample
Total	5,957	100.0	100.0
<u>Sex</u> Male Female	2,678 3,279	45.0 55.0	48.9 51.1
Race/Ethnicity White, Non-Hispanic Black, Non-Hispanic Other, Non-Hispanic Multiracial, Non-Hispanic Hispanic	5,533 177 74 68 49	93.8 3.0 1.3 1.2 0.8	93.1 3.5 1.5 0.9 1.1
Age 18-24 25-34 35-44 45-54 55-64 65+	380 596 748 989 1,372 1,819	6.4 10.1 12.7 16.8 23.2 30.8	11.8 14.7 15.4 16.6 18.2 23.3
Education < High School (HS) HS or GED Some College College Degree	711 2,189 1,467 1,569	12.0 36.9 24.7 26.4	15.9 40.1 25.6 17.1
Household Income <\$15,000 \$15,000-\$24,999 \$25,000-\$34,999 \$35,000-\$49,999 \$50,000-\$74,999 \$75,000+	654 886 559 754 728 1,090	14.0 19.0 12.0 16.2 15.3 23.4	14.3 19.4 12.5 16.7 14.9 22.2
Marital Status Married Divorced Widowed Separated Never Married Unmarried Couple	3,056 958 780 127 838 178	51.5 16.1 13.1 2.1 14.1 3.0	52.4 12.9 8.9 2.0 19.3 4.5
Employment Status Employed for wages Self-Employed Unemployed (>1 year) Unemployed (<1 year) Homemaker Student Retired Unable to Work	2,317 301 127 133 406 156 1,721	39.1 5.1 2.1 2.2 6.9 2.6 29.0 13.0	42.5 4.8 2.6 3.2 7.7 4.0 22.0 13.2

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 overrepresentation 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). 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 6."

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

The estimate is based on responses from fewer than 50 respondents in the subsample or denominator of the prevalence estimate calculation.

The 95% confidence interval of the estimate has a width or range greater than 20 (e.g., 95% CI = 10.0-30.5).

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.

WEIGHTING OF 2015 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 are 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 2011-2015 statistics. Any changes between 2011 and previous years' statistics 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 statistics.

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.

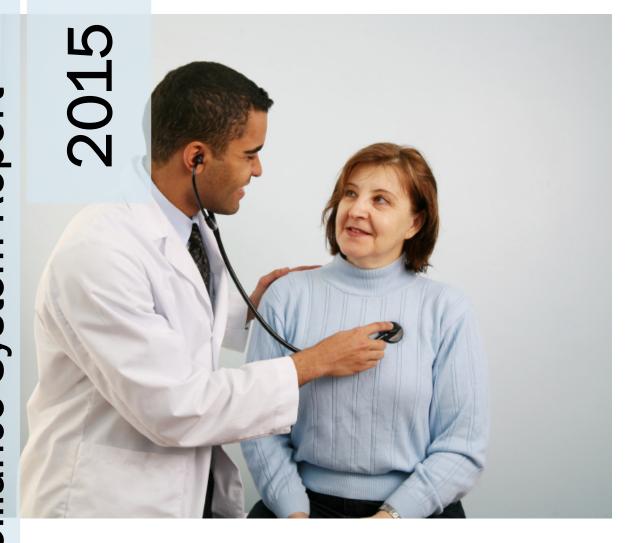
PRESENTATION OF RESULTS

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 demographic table in this report shows the weighted frequency or estimated number of West Virginia adults who exhibit a behavior or condition, 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.



SECTION 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: 25.9% (95% CI: 24.6-27.2)

U.S.: 17.7% (95% CI: 17.5-17.9)

West Virginia's prevalence of fair/poor health was significantly higher than the U.S. prevalence. West Virginia ranked the 2nd highest among 53 BRFSS

participants.

Gender Men: 25.2% (95% CI: 23.3-27.1)

Women: 26.6% (95% CI: 24.8-28.3)

There was no gender difference in the prevalence of fair or poor general health

status.

Race/Ethnicity White, Non-Hispanic: 26.2% (95% CI: 24.9-27.6)

Black, Non-Hispanic: 19.4% (95% CI: 13.1-25.8)
Other, Non-Hispanic: *27.6% (95% CI: 13.6-41.7)
Multiracial, Non-Hispanic: *23.8% (95% CI: 13.3-34.3)

Hispanic: *22.3% (95% CI: 8.2-36.4)

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 6

Age The prevalence of fair or poor health significantly increased with increasing age.

The prevalence ranged from a low of 9.5% among the youngest adults to a high of

35.5% among those aged 55-64.

Education Adults with less than a high school education had the highest prevalence of fair or

poor health, with a prevalence of 49.5%. Those with more education had a much lower prevalence, with the prevalence for college graduates of 9.3%. Significant

differences in prevalence were found between each educational bracket.

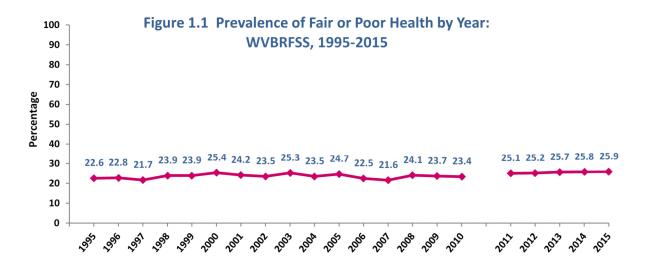
Household Income The prevalence of fair or poor health was 54.1% in the lowest income group (less

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 most

income groups.

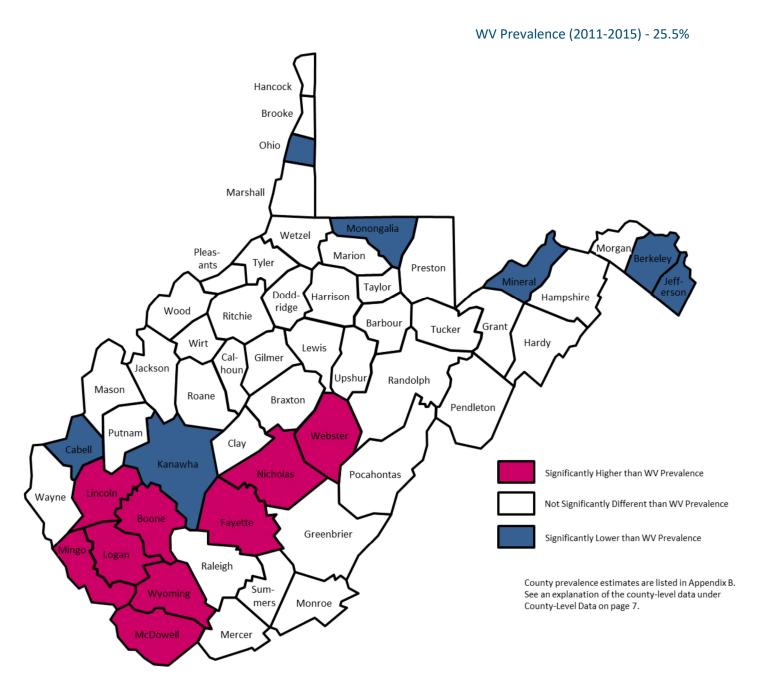
Table 1.1 Prevalence of Fair or Poor Health by Demographic Characteristics: WVBRFSS, 2015

	Men				Women		Total			
Characteristic	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	
TOTAL	181,009	25.2	23.3-27.1	199,232	26.6	24.8-28.3	380,241	25.9	24.6-27.2	
Age										
18-24	7,114	8.1	3.7-12.4	9,134	11.0	6.1-15.8	16,248	9.5	6.2-12.7	
25-34	14,168	12.9	8.6-17.3	14,016	13.3	9.2-17.4	28,184	13.1	10.1-16.1	
35-44	21,177	18.7	14.2-23.3	25,038	22.5	17.7-27.3	46,215	20.6	17.3-23.9	
45-54	34,624	28.7	23.7-33.6	40,850	33.7	29.1-38.3	75,474	31.2	27.8-34.6	
55-64	49,758	38.0	33.6-42.4	44,253	33.0	29.2-36.9	94,011	35.5	32.6-38.4	
65+	53,371	35.2	31.3-39.1	62,861	33.7	30.4-37.1	116,232	34.4	31.9-36.9	
Education										
Less than H.S.	55,455	49.0	42.7-55.3	58,938	50.0	44.2-55.8	114,393	49.5	45.2-53.8	
H.S. or G.E.D.	79,846	26.3	23.4-29.3	88,103	31.2	28.3-34.1	167,948	28.7	26.6-30.7	
Some Post-H.S.	33,728	18.3	15.1-21.4	39,301	18.7	15.8-21.6	73,029	18.5	16.4-20.6	
College Graduate	11,160	9.8	7.5-12.1	12,190	8.9	6.9-10.9	23,350	9.3	7.8-10.8	
Income										
Less than \$15,000	38,797	54.8	47.7-61.8	48,275	53.6	47.8-59.4	87,071	54.1	49.6-58.6	
\$15,000 - 24,999	40,969	40.2	34.5-45.9	44,250	37.6	32.7-42.5	85,219	38.8	35.1-42.5	
\$25,000 - 34,999	22,215	29.5	23.3-35.8	16,633	25.0	19.2-30.9	38,848	27.4	23.1-31.7	
\$35,000 - 49,999	15,874	16.7	12.8-20.7	15,822	16.8	12.7-21.0	31,696	16.8	13.9-19.7	
\$50,000 - 74,999	14,419	15.9	11.7-20.2	7,360	9.4	6.1-12.7	21,779	12.9	10.2-15.7	
\$75,000+	10,322	7.5	5.1-9.9	8,924	7.8	5.1-10.4	19,245	7.6	5.9-9.4	



^{*}Due to changes in sample composition and weighting methodology, 2011-2015 results are not directly comparable to previous years.

Figure 1.2 Prevalence of Fair or Poor Health by County: WVBRFSS, 2011-2015



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: 18.6% (95% CI: 17.4-19.8) **U.S.: 12.1%** (95% CI: 11.9-12.2)

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: 16.6% (95% CI: 15.0-18.2) **Women**: 20.6% (95% CI: 18.9-22.2)

The prevalence of poor physical health was significantly higher among females

than among males.

Race/Ethnicity

White, Non-Hispanic: 18.7% (95% CI: 17.5-19.9)
Black, Non-Hispanic: 20.7% (95% CI: 13.8-27.5)
Other, Non-Hispanic: *13.0% (95% CI: 3.9-22.1)
Multiracial, Non-Hispanic: *19.2% (95% CI: 9.7-28.6)

Hispanic: *17.8% (95% CI: 4.5-31.1)

There was no race/ethnicity difference in the prevalence of poor physical health

status.

st Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 6.

Age

The prevalence of poor physical health generally increased with advancing age with a statistically significant difference between those aged 44 and under and those aged 45 and older. The prevalence ranged from a low of 6.1% among those aged 18-24 to a high of 25.6% 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 35.0%. Those with more education had a lower prevalence, with a prevalence of 7.3% for college graduates. Significant differences were observed between all educational brackets.

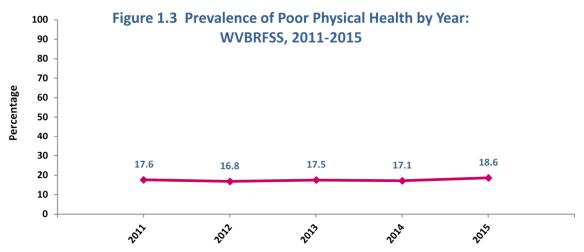
Household Income

The prevalence of poor physical health was highest among adults in the lowest income group of less than \$15,000 annually (40.5%), which was significantly higher than all other income groups. The prevalence of poor physical health was lowest among those in the highest income bracket of \$75,000 or more (7.0%), which was significantly lower than all those with incomes less than \$50,000.

Table 1.2 Prevalence of Poor Physical Health by Demographic Characteristics: WVBRFSS, 2015

	Men				Women		Total			
Characteristic	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	
TOTAL	117,605	16.6	15.0-18.2	152,127	20.6	18.9-22.2	269,732	18.6	17.4-19.8	
Age										
18-24	5,547	*6.3	2.6-9.9	4,841	*5.8	2.4-9.3	10,388	6.1	3.5-8.6	
25-34	8,772	8.1	4.2-11.9	13,315	12.9	8.3-17.4	22,087	10.4	7.4-13.4	
35-44	13,122	11.8	7.9-15.7	21,084	19.0	14.3-23.6	34,205	15.4	12.3-18.4	
45-54	20,993	17.6	13.6-21.6	34,215	28.6	24.2-33.0	55,208	23.1	20.1-26.1	
55-64	34,334	26.4	22.3-30.4	32,877	24.8	21.2-28.5	67,211	25.6	22.9-28.3	
65+	33,972	22.9	19.4-26.4	43,494	23.7	20.6-26.8	77,466	23.4	21.0-25.7	
Education										
Less than H.S.	34,911	31.6	25.8-37.4	44,153	38.3	32.6-44.1	79,065	35.0	31.0-39.1	
H.S. or G.E.D.	51,240	17.0	14.5-19.5	64,057	23.0	20.4-25.7	115,297	19.9	18.1-21.8	
Some Post-H.S.	22,770	12.5	9.8-15.1	33,597	16.1	13.3-18.8	56,366	14.4	12.5-16.3	
College Graduate	7,968	7.0	5.1-9.0	10,147	7.4	5.7-9.2	18,115	7.3	6.0-8.5	
Income										
Less than \$15,000	25,177	35.9	29.0-42.7	39,575	44.1	38.4-49.8	64,751	40.5	36.1-44.9	
\$15,000 - 24,999	24,443	24.7	19.6-29.8	31,091	26.8	22.3-31.3	55,534	25.8	22.5-29.2	
\$25,000 - 34,999	12,914	17.3	12.4-22.2	10,780	16.8	11.5-22.1	23,694	17.1	13.5-20.6	
\$35,000 - 49,999	11,817	12.6	8.9-16.2	11,647	12.4	8.8-16.1	23,463	12.5	9.9-15.1	
\$50,000 - 74,999	9,688	10.8	6.8-14.7	7,594	9.7	5.6-13.9	17,282	10.3	7.4-13.2	
\$75,000+	8,538	6.2	4.0-8.4	9,060	7.9	5.2-10.6	17,598	7.0	5.3-8.7	

st Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 6.



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: 15.6% (95% CI: 14.5-16.7)

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: 12.6% (95% CI: 11.1-14.1)

Women: 18.4% (95% CI: 16.9-20.0)

The prevalence of poor mental health was significantly higher among females

than males.

Race/Ethnicity White, Non-Hispanic: 15.2% (95% CI: 14.1-16.4)

Black, Non-Hispanic: 16.5% (95% CI: 10.1-23.0)
Other, Non-Hispanic: *28.2% (95% CI: 14.0-42.4)
Multiracial, Non-Hispanic: *11.8% (95% CI: 3.5-20.1)

Hispanic: *19.8% (95% CI: 4.8-34.9)

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 6.

Age The prevalence of poor mental health varied with age. The prevalence of poor

mental health was highest among those aged 45-54 (21.1%) and lowest among those aged 65 and older (9.0%). The prevalence of poor mental health was significantly lower among those aged 65 and older than among all other age

groups other than among those aged 25-34.

Education Adults with less than a high school education had the highest prevalence of poor

mental health, with a prevalence of 24.6%, which was significantly higher than all other education groups. Those with more education had a lower prevalence, with the prevalence among college graduates of 8.3% which was significantly lower

than all other education groups.

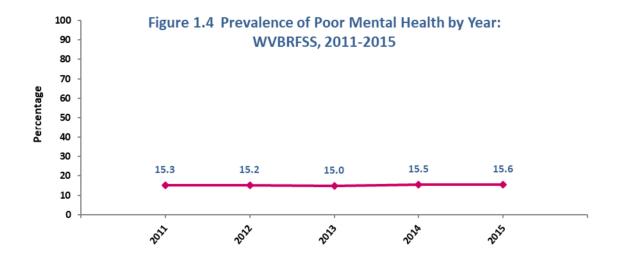
Household Income Poor mental health was experienced by more than one of every three adults

(35.6%) 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

(7.5%), significantly lower than all income brackets under \$35,000.

Table 1.3 Prevalence of Poor Mental Health by Demographic Characteristics: WVBRFSS, 2015

		Men			Women			Total	
Characteristic	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
TOTAL	88,994	12.6	11.1-14.1	136,155	18.4	16.9-20.0	225,148	15.6	14.5-16.7
Age									
18-24	9,123	10.6	6.0-15.1	15,464	18.6	12.8-24.4	24,587	14.5	10.8-18.2
25-34	11,489	10.7	6.5-14.9	15,683	15.3	11.1-19.5	27,173	12.9	10.0-15.9
35-44	17,323	15.4	11.3-19.6	26,620	23.9	19.0-28.8	43,942	19.6	16.4-22.9
45-54	19,821	16.7	12.5-20.8	30,360	25.6	21.4-29.9	50,180	21.1	18.1-24.1
55-64	19,443	15.0	11.7-18.4	28,128	21.4	17.9-24.9	47,571	18.2	15.8-20.7
65+	11,795	8.0	5.7-10.2	18,081	9.9	7.7-12.0	29,876	9.0	7.5-10.6
Education									
Less than H.S.	22,428	20.9	15.5-26.4	32,058	28.0	22.8-33.2	54,486	24.6	20.8-28.4
H.S. or G.E.D.	37,484	12.5	10.3-14.7	56,498	20.4	17.7-23.0	93,982	16.3	14.5-18.0
Some Post-H.S.	22,126	12.1	9.3-14.9	33,706	16.2	13.3-19.1	55,831	14.3	12.2-16.3
College Graduate	6,886	6.1	4.2-8.0	13,893	10.2	7.9-12.4	20,779	8.3	6.8-9.8
Income									
Less than \$15,000	23,065	33.6	26.5-40.6	32,770	37.1	31.4-42.8	55,835	35.6	31.1-40.0
\$15,000 - 24,999	17,242	17.3	12.8-21.8	25,417	21.9	17.6-26.1	42,659	19.8	16.7-22.9
\$25,000 - 34,999	8,514	11.3	6.8-15.9	9,914	15.3	10.4-20.2	18,428	13.2	9.9-16.5
\$35,000 - 49,999	5,559	5.9	3.3-8.4	10,975	11.8	8.2-15.4	16,534	8.8	6.6-11.0
\$50,000 - 74,999	8,220	9.1	5.3-13.0	9,173	11.8	8.0-15.7	17,393	10.4	7.6-13.1
\$75,000+	8,407	6.2	3.9-8.5	10,385	9.1	6.0-12.1	18,792	7.5	5.6-9.4



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: 23.9% (95% CI: 22.2-25.6) **U.S.: 15.4%** (95% CI: 15.2-15.7)

West Virginia ranked the highest among 53 BRFSS participants and was

significantly higher than the U.S. prevalence.

Every day

WV: 14.3% (95% CI: 12.9-15.7) **U.S.: 7.7%** (95% CI: 7.5-7.9)

West Virginia ranked the highest among 53 BRFSS participants and was

significantly higher than the U.S. prevalence.

Gender At least 14 days

Men: 24.3% (95% CI: 21.6-27.0) **Women**: 23.6% (95% CI: 21.4-25.8)

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: 16.0% (95% CI: 13.7-18.3) Women: 12.9% (95% CI: 11.2-14.6)

There was no gender difference in the prevalence of poor health limitations

every day in the past 30 days.

Race/Ethnicity No race/ethnicity statistics are reported due to unreliable estimates.

Age The prevalence of poor health limitations generally increased with age for both

the 14 day indicator and the every day indicator.

Education 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. Significant differences were observed between each level of education for the 14 day indicator and nearly

all education levels for the every day indicator.

Household Income In general, the prevalence of poor health limitations declined with increasing

annual household income for both the 14 day and every day indicators.

Table 1.4 Prevalence of Poor Health Limitations at Least 14 Days in the Past 30 Days by Demographic Characteristics: WVBRFSS, 2015

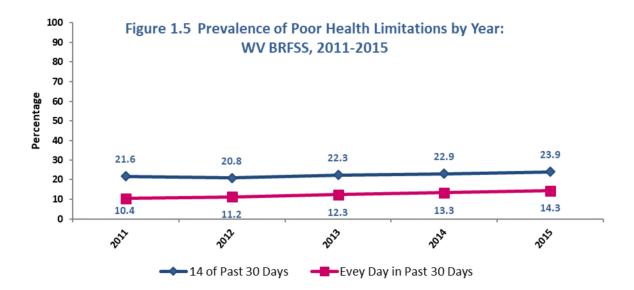
	Men				Women		Total			
Characteristic	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	
TOTAL	82,691	24.3	21.6-27.0	103,543	23.6	21.4-25.8	186,234	23.9	22.2-25.6	
Age										
18-24	2,771	*6.9	1.7-12.1	2,468	*5.1	1.0-9.2	5,239	5.9	2.6-9.2	
25-34	4,959	*10.4	4.2-16.6	9,641	15.3	9.2-21.3	14,600	13.2	8.8-17.6	
35-44	10,721	19.4	12.7-26.1	16,934	24.5	18.2-30.9	27,656	22.3	17.6-26.9	
45-54	15,433	25.7	19.2-32.1	26,330	34.0	28.3-39.7	41,763	30.4	26.1-34.7	
55-64	25,252	37.4	31.1-43.7	20,391	25.7	21.1-30.3	45,643	31.1	27.2-35.0	
65+	22,928	33.6	27.8-39.4	26,812	27.8	23.2-32.4	49,740	30.2	26.6-33.8	
Education										
Less than H.S.	25,074	39.3	31.4-47.2	32,217	41.1	34.0-48.2	57,291	40.3	35.0-45.6	
H.S. or G.E.D.	34,516	24.5	20.4-28.6	43,744	25.6	22.1-29.2	78,260	25.1	22.4-27.8	
Some Post-H.S.	17,138	18.9	14.3-23.5	19,757	16.5	12.9-20.0	36,896	17.5	14.7-20.3	
College Graduate	5,704	13.0	8.8-17.2	7,429	10.9	7.7-14.0	13,133	11.7	9.2-14.2	
Income										
Less than \$15,000	21,610	46.4	37.7-55.2	28,461	41.1	34.8-47.5	50,071	43.3	38.1-48.5	
\$15,000 - 24,999	15,777	26.8	20.0-33.5	19,745	26.9	21.3-32.4	35,521	26.8	22.5-31.1	
\$25,000 - 34,999	10,790	26.9	18.5-35.3	6,798	18.4	11.6-25.3	17,588	22.8	17.3-28.3	
\$35,000 - 49,999	6,768	16.8	10.7-22.9	5,463	10.9	6.4-15.3	12,231	13.5	9.8-17.2	
\$50,000 - 74,999	5,987	15.0	9.0-20.9	6,293	13.9	7.1-20.7	12,279	14.4	9.8-18.9	
\$75,000+	4,634	9.7	5.2-14.2	5,415	10.9	5.7-16.1	10,050	10.3	6.9-13.8	

^{*} Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 6.

Table 1.5 Prevalence of Poor Health Limitations at Every Day in the Past 30 Days by Demographic Characteristics: WVBRFSS, 2015

Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
TOTAL	54,452	16.0	13.7-18.3	56,770	12.9	11.2-14.6	111,222	14.3	12.9-15.7
Age									
18-24	2,043	*5.1	0.5-9.7	948	*2.0	0.0-4.7	2,991	*3.4	0.8-5.9
25-34	2,558	*5.4	0.2-10.5	3,320	*5.3	1.9-8.6	5,877	5.3	2.4-8.2
35-44	7,256	13.1	7.5-18.8	7,290	10.6	5.9-15.2	14,546	11.7	8.1-15.3
45-54	9,751	16.2	10.7-21.7	12,015	15.5	11.3-19.8	21,766	15.8	12.4-19.2
55-64	15,885	23.5	17.7-29.4	13,110	16.5	12.5-20.5	28,994	19.7	16.3-23.2
65+	16,333	23.9	18.8-29.1	19,197	19.9	15.9-23.9	35,530	21.6	18.4-24.8
Education									
Less than H.S.	16,720	26.2	19.0-33.4	18,820	24.0	18.2-29.9	35,541	25.0	20.4-29.6
H.S. or G.E.D.	22,766	16.2	12.7-19.6	25,918	15.2	12.3-18.1	48,683	15.6	13.4-17.9
Some Post-H.S.	11,289	12.4	8.5-16.4	7,696	6.4	4.4-8.4	18,985	9.0	6.9-11.1
College Graduate	3,419	7.8	4.6-11.0	3,939	5.8	3.5-8.0	7,359	6.6	4.7-8.4
Income									
Less than \$15,000	12,628	27.1	19.0-35.3	15,259	22.1	16.9-27.3	27,887	24.1	19.6-28.6
\$15,000 - 24,999	9,320	15.8	10.4-21.3	12,695	17.3	12.4-22.1	22,015	16.6	13.0-20.2
\$25,000 - 34,999	8,604	21.4	13.7-29.2	2,353	*6.4	2.2-10.6	10,957	14.2	9.6-18.8
\$35,000 - 49,999	5,108	12.7	7.1-18.3	3,029	6.0	2.6-9.4	8,138	9.0	5.8-12.1
\$50,000 - 74,999	2,865	7.2	3.1-11.2	2,721	6.0	2.5-9.5	5,586	6.5	3.9-9.2
\$75,000+	2,685	*5.6	2.1-9.2	2,148	*4.3	1.3-7.3	4,833	5.0	2.7-7.3

 $^{^{}st}$ Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 6.



CHAPTER 2: IMPAIRMENT

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: 28.3% (95% CI: 27.0-29.6)

U.S.: 20.3% (95% CI: 20.1-20.5)

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: 28.3% (95% CI: 26.3-30.3)

Women: 28.3% (95% CI: 26.6-30.1)

There was no gender difference in the prevalence of disability.

Race/Ethnicity White, Non-Hispanic: 28.5% (95% CI: 27.1-29.9)

Black, Non-Hispanic: 23.8% (95% CI: 16.7-30.9)
Other, Non-Hispanic: *26.6% (95% CI: 12.1-41.0)
Multiracial, Non-Hispanic: *37.3% (95% CI: 23.7-50.8)

Hispanic: *17.9% (95% CI: 5.0-30.8)

There was no race/ethnicity difference in the prevalence of disability.

* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 6.

Age The prevalence of disability generally increased significantly with each age group

under 55.

Education The prevalence of disability decreased significantly with each increasing

educational attainment level.

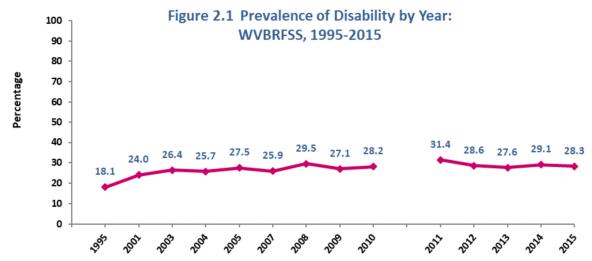
Household Income The prevalence of disability decreased with increasing household income. The

prevalence of disability was highest among those with an annual household income of less than \$15,000 (53.5%) 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

(11.6%) and was significantly lower than all other income brackets.

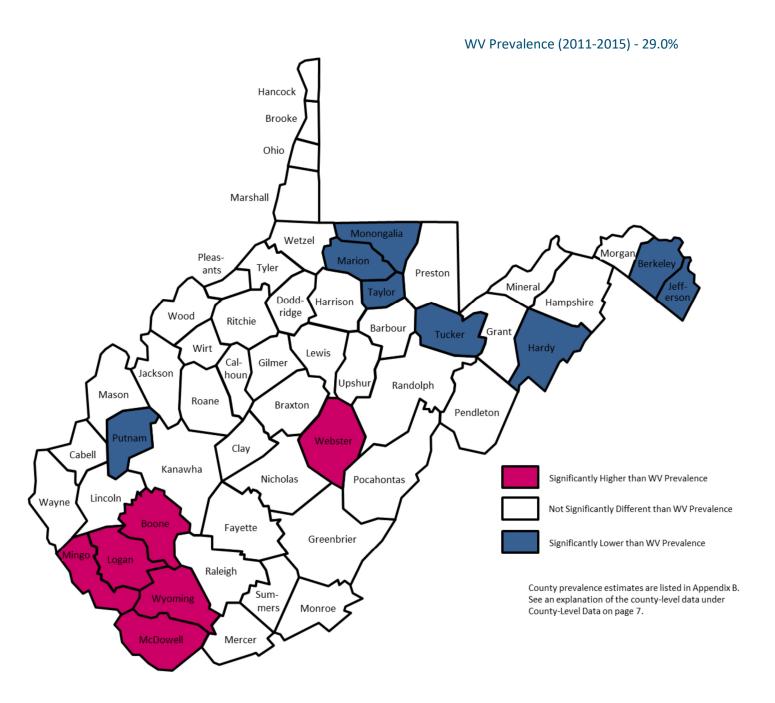
Table 2.1 Prevalence of Physical, Mental, or Emotional Disability by Demographic Characteristics: WVBRFSS, 2015

		Men			Women			Total	
Characteristic	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
TOTAL	200,356	28.3	26.3-30.3	209,953	28.3	26.6-30.1	410,309	28.3	27.0-29.6
Age									
18-24	9,824	11.2	5.7-16.7	5,946	7.3	3.5-11.0	15,770	9.3	5.9-12.7
25-34	16,670	15.7	10.8-20.6	17,558	16.7	12.0-21.4	34,227	16.2	12.8-19.6
35-44	23,784	21.4	16.6-26.2	27,972	25.3	20.3-30.3	51,757	23.3	19.9-26.8
45-54	38,762	32.6	27.6-37.7	42,554	35.7	31.1-40.3	81,317	34.2	30.8-37.6
55-64	54,345	41.9	37.4-46.3	50,760	38.2	34.2-42.2	105,105	40.0	37.0-43.0
65+	56,344	37.2	33.3-41.1	62,819	33.9	30.6-37.2	119,163	35.4	32.9-37.9
Education									
Less than H.S.	49,197	44.5	38.2-50.8	51,251	43.7	38.0-49.4	100,448	44.1	39.9-48.3
H.S. or G.E.D.	86,285	28.8	25.7-31.9	82,926	29.6	26.8-32.5	169,211	29.2	27.1-31.3
Some Post-H.S.	43,372	23.7	20.2-27.3	50,012	24.2	21.0-27.4	93,384	24.0	21.6-26.4
College Graduate	20,587	18.3	15.2-21.4	25,557	18.8	16.0-21.6	46,144	18.6	16.5-20.6
Income									
Less than \$15,000	38,727	54.4	47.3-61.5	47,481	52.8	47.0-58.6	86,208	53.5	49.0-58.0
\$15,000 - 24,999	40,699	40.5	34.8-46.3	39,315	33.8	29.1-38.5	80,014	36.9	33.2-40.6
\$25,000 - 34,999	25,415	33.9	27.4-40.4	18,643	28.4	22.4-34.3	44,058	31.3	26.9-35.8
\$35,000 - 49,999	20,685	22.0	17.5-26.5	23,030	24.6	19.8-29.4	43,715	23.3	20.0-26.6
\$50,000 - 74,999	20,597	22.9	18.0-27.8	14,550	18.7	13.7-23.6	35,147	20.9	17.4-24.4
\$75,000+	15,513	11.4	8.7-14.0	13,517	11.8	8.7-14.8	29,031	11.6	9.6-13.6



^{*}Due to changes in sample composition and weighting methodology, 2011-2015 results are not directly comparable to previous years.

Figure 2.2 Prevalence of Disability by County: WVBRFSS, 2011-2015



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: 13.1% (95% CI: 12.2-14.1)

U.S.: 8.5% (95% CI: 8.4-8.7)

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: 13.5% (95% CI: 12.0-14.9)

Women: 12.8% (95% CI: 11.6-14.1)

There was no gender difference for the prevalence of the use of special

equipment.

Race/Ethnicity White, Non-Hispanic: 13.2% (95% CI: 12.2-14.2)

Black, Non-Hispanic: 13.7% (95% CI: 8.6-18.8) Other, Non-Hispanic: *10.5% (95% CI: 0.0-22.5) Multiracial, Non-Hispanic: *15.9% (95% CI: 6.2-25.6)

Hispanic: *6.5% (95% CI: 0.0-15.7)

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 6.

Age The prevalence of use of special equipment increased with age. The prevalence

of the use of special equipment was significantly higher among those aged 65

and older (23.3%) than among all other age groups.

Education The prevalence of the use of special equipment decreased with each increasing

educational attainment level and was significantly higher among those with less than a high school education (26.9%) than among all other educational

attainment levels.

Household Income The prevalence of the use of special equipment decreased with increasing

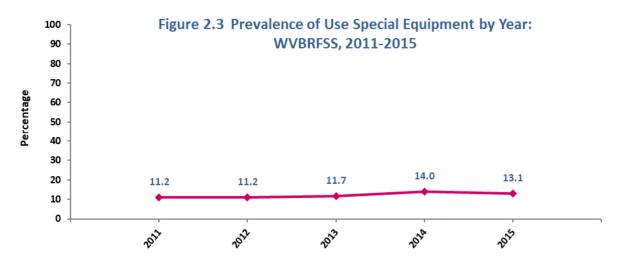
income. The prevalence of the use of special equipment was significantly higher among those with an annual household income of less than \$15,000 (28.8%)

than among all other income brackets.

Table 2.2 Prevalence of Use Special Equipment by Demographic Characteristics: WVBRFSS, 2015

		Men			Women			Total	
Characteristic	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
TOTAL	95,578	13.5	12.0-14.9	95,240	12.8	11.6-14.1	190,818	13.1	12.2-14.1
Age									
18-24	2,405	*2.7	0.5-5.0	2,319	*2.8	0.4-5.2	4,725	*2.8	1.1-4.4
25-34	5,754	5.4	2.3-8.6	3,306	*3.1	0.3-6.0	9,060	4.3	2.2-6.4
35-44	9,248	8.3	5.0-11.6	7,747	7.0	4.2-9.9	16,996	7.7	5.5-9.9
45-54	17,872	14.9	10.8-19.0	14,302	12.0	8.9-15.0	32,173	13.5	10.9-16.0
55-64	25,351	19.5	15.7-23.3	21,587	16.2	13.2-19.3	46,938	17.8	15.4-20.3
65+	34,499	22.8	19.4-26.1	44,160	23.8	20.8-26.8	78,659	23.3	21.1-25.6
Education									
Less than H.S.	29,347	26.4	20.8-32.0	32,279	27.4	22.4-32.4	61,626	26.9	23.2-30.7
H.S. or G.E.D.	38,747	12.9	10.8-15.0	33,235	11.9	9.9-13.8	71,982	12.4	10.9-13.8
Some Post-H.S.	17,084	9.3	7.0-11.6	20,534	9.9	7.9-12.0	37,618	9.6	8.1-11.2
College Graduate	9,754	8.7	6.4-10.9	9,191	6.7	5.1-8.4	18,946	7.6	6.3-9.0
Income									
Less than \$15,000	23,406	32.9	25.9-39.9	23,053	25.6	20.9-30.3	46,459	28.8	24.7-32.9
\$15,000 - 24,999	21,780	21.5	16.7-26.3	16,983	14.6	11.4-17.8	38,763	17.8	15.0-20.6
\$25,000 - 34,999	10,197	13.6	9.1-18.1	7,464	11.4	7.2-15.6	17,661	12.6	9.5-15.6
\$35,000 - 49,999	9,327	9.9	6.7-13.1	5,888	6.3	4.0-8.6	15,215	8.1	6.1-10.1
\$50,000 - 74,999	5,537	6.2	3.7-8.6	5,180	6.6	2.8-10.5	10,718	6.4	4.2-8.6
\$75,000+	7,593	5.6	3.6-7.6	3,151	2.7	1.3-4.2	10,744	4.3	3.0-5.5

 $^{^{}st}$ Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 6.



Use of Special Equipment Among Disabled

Definition Prevalence of the use of special equipment among those reporting they are

disabled.

Prevalence WV: 36.6% (95% CI: 34.0-39.2)

U.S.: 31.9% (95% CI: 31.4-32.5)

The West Virginia prevalence of the use of special equipment among those who are disabled was significantly higher than the U.S. prevalence. West Virginia

ranked the 3rd highest among the 53 BRFSS participants.

Gender Men: 37.8% (95% CI: 33.8-41.7)

Women: 35.4% (95% CI: 32.0-38.9)

There was no gender difference for the prevalence of the use of special

equipment among those who are disabled.

Race/Ethnicity No race/ethnicity statistics are reported due to unreliable estimates.

Age The prevalence of the use of special equipment among disabled increased with

age. The prevalence of the use of special equipment among those who are disabled was significantly higher among those aged 65 and older than the

prevalence among all other age groups under 55.

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 (52.0%) and was significantly higher than the prevalence among all other educational

attainment levels.

Household Income The prevalence of the use of special equipment among those who are disabled

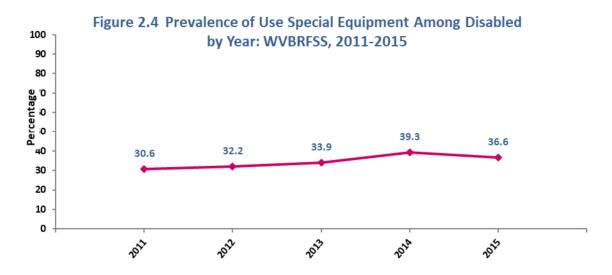
was highest among those with an annual household income less than \$15,000 (47.5%) and was significantly higher than the prevalence among those earning

\$25,000 or more per year.

Table 2.3 Prevalence of Use of Special Equipment Among Disabled by Demographic Characteristics: WVBRFSS, 2015

		Men			Women		Total			
Characteristic	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	
TOTAL	75,570	37.8	33.8-41.7	74,384	35.4	32.0-38.9	149,954	36.6	34.0-39.2	
Age										
18-24	438	*4.5	0.0-13.1	1,719	*28.9	3.9-53.9	2,156	*13.7	1.7-25.7	
25-34	3,995	*24.0	8.8-39.1	2,161	*12.3	0.0-26.4	6,156	18.0	7.7-28.3	
35-44	8,125	34.2	21.8-46.5	6,070	21.7	12.3-31.1	14,195	27.4	19.7-35.2	
45-54	14,773	38.1	28.6-47.6	11,950	28.1	21.1-35.1	26,723	32.9	26.9-38.8	
55-64	22,191	41.0	33.7-48.3	19,137	37.7	31.2-44.2	41,328	39.4	34.5-44.3	
65+	25,602	45.6	39.0-52.1	31,668	50.4	44.5-56.3	57,270	48.1	43.7-52.5	
Education										
Less than H.S.	24,251	49.3	39.9-58.6	28,007	54.6	46.2-63.1	52,258	52.0	45.8-58.3	
H.S. or G.E.D.	32,363	37.7	31.7-43.6	24,185	29.2	24.3-34.1	56,548	33.5	29.6-37.4	
Some Post-H.S.	12,769	29.4	22.2-36.7	15,735	31.5	25.0-37.9	28,504	30.5	25.7-35.4	
College Graduate	5,999	29.1	20.8-37.4	6,458	25.3	18.7-31.9	12,456	27.0	21.8-32.2	
Income										
Less than \$15,000	19,043	49.4	39.5-59.3	21,833	46.0	38.6-53.4	40,875	47.5	41.5-53.6	
\$15,000 - 24,999	18,342	45.1	35.9-54.3	12,418	31.6	24.4-38.8	30,760	38.4	32.5-44.4	
\$25,000 - 34,999	8,784	34.6	23.7-45.4	4,648	24.9	14.9-35.0	13,432	30.5	22.9-38.1	
\$35,000 - 49,999	6,929	33.5	23.2-43.8	4,953	21.5	13.2-29.8	11,882	27.2	20.5-33.8	
\$50,000 - 74,999	4,586	22.3	13.1-31.4	4,414	30.3	14.5-46.2	9,000	25.6	16.9-34.3	
\$75,000+	3,372	21.7	12.4-31.1	1,979	14.6	6.1-23.2	5,351	18.4	12.0-24.8	

^{*} Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 6.



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: 14.6% (95% CI: 13.6-15.7)

U.S.: 10.3% (95% CI: 10.2-10.5)

The West Virginia prevalence of cognitive difficulty was significantly higher than the U.S. prevalence. West Virginia ranked the 4th highest among the 53 BRFSS

participants.

Gender Men: 13.7% (95% CI: 12.2-15.3)

Women: 15.5% (95% CI: 14.0-17.0)

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: 10.1% (95% CI: 5.1-15.2)
Other, Non-Hispanic: *14.1% (95% CI: 4.1-24.0)
Multiracial, Non-Hispanic: *18.4% (95% CI: 7.5-29.2)

Hispanic: *12.2% (95% CI: 2.7-21.6)

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 6.

Age The prevalence of cognitive difficulty increased with age up to 45-54, and then

decreased with age for those over 55. The prevalence of cognitive difficulty was highest among those 45-54 (19.6%), significantly higher than among those

under 35 or those 65 and older (10.9%).

Education The prevalence of cognitive difficulty decreased with increasing education. It

was significantly higher among those with less than a high school education (28.5%) than among all other educational attainment levels, and it was significantly lower among those with a college degree (7.1%) than among all

other educational attainment levels.

Household Income The prevalence of cognitive difficulty generally decreased with increasing

income. The prevalence of cognitive difficulty was significantly higher among those with an income of less than \$15,000 (36.5%) than all income brackets

\$35,000 or more.

Table 2.4 Prevalence of Cognitive Difficulty by Demographic Characteristics: WVBRFSS, 2015

		Men			Women			Total	
Characteristic	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
TOTAL	96,744	13.7	12.2-15.3	114,200	15.5	14.0-17.0	210,944	14.6	13.6-15.7
Age									
18-24	9,337	10.7	6.2-15.2	11,459	14.1	8.8-19.4	20,797	12.3	8.9-15.8
25-34	14,377	13.7	9.1-18.4	13,136	12.7	8.6-16.7	27,513	13.2	10.1-16.3
35-44	17,201	15.5	11.3-19.7	20,199	18.4	13.8-22.9	37,400	16.9	13.8-20.0
45-54	17,471	14.7	11.0-18.3	29,080	24.5	20.3-28.7	46,551	19.6	16.8-22.4
55-64	17,700	13.7	10.3-17.0	22,318	16.9	13.8-20.0	40,017	15.3	13.0-17.6
65+	20,139	13.4	10.5-16.3	16,274	8.8	6.9-10.8	36,413	10.9	9.2-12.6
Education									
Less than H.S.	30,466	27.9	22.3-33.5	34,162	29.2	24.0-34.4	64,628	28.5	24.7-32.4
H.S. or G.E.D.	38,776	13.0	10.7-15.2	44,540	16.0	13.7-18.4	83,316	14.4	12.8-16.1
Some Post-H.S.	19,202	10.5	7.9-13.2	26,089	12.8	10.1-15.5	45,291	11.7	9.8-13.6
College Graduate	8,231	7.3	5.1-9.5	9,408	6.9	5.0-8.8	17,639	7.1	5.7-8.5
Income									
Less than \$15,000	26,713	37.7	30.7-44.8	31,676	35.5	30.0-41.1	58,389	36.5	32.1-40.9
\$15,000 - 24,999	19,715	19.6	14.9-24.2	20,877	18.1	14.1-22.1	40,591	18.8	15.7-21.8
\$25,000 - 34,999	10,745	14.3	9.6-19.1	7,789	12.0	7.5-16.5	18,534	13.3	10.0-16.6
\$35,000 - 49,999	5,591	5.9	3.4-8.5	8,003	8.6	5.4-11.8	13,594	7.3	5.2-9.3
\$50,000 - 74,999	8,403	9.5	5.8-13.1	5,353	6.9	3.7-10.1	13,757	8.3	5.8-10.7
\$75,000+	4,421	3.3	1.5-5.0	9,873	8.6	5.4-11.8	14,294	5.7	4.0-7.5

Difficulty Walking

Definition Responding "Yes" to the question, "Do you have serious difficulty walking or

climbing stairs?"

Prevalence WV: 22.7 (95% CI: 21.4-23.9)

U.S.: 13.8% (95% CI: 13.6-13.9)

The West Virginia prevalence of difficulty walking was significantly higher than the U.S. prevalence. West Virginia ranked the highest among the 53 BRFSS

participants.

Gender Men: 20.5% (95% CI: 18.8-22.3)

Women: 24.7% (95% CI: 23.0-26.4)

The prevalence of difficulty walking was significantly higher for women than it

was for men.

Race/Ethnicity White, Non-Hispanic: 22.9% (95% CI: 21.6-24.1)

Black, Non-Hispanic: 18.3% (95% CI: 12.3-24.3) Other, Non-Hispanic: *24.2% (95% CI: 9.7-38.6) Multiracial, Non-Hispanic: *24.2% (95% CI: 12.6-35.7)

Hispanic: *14.8% (95% CI: 3.0-26.7)

There was no race/ethnic difference in the prevalence of difficulty walking.

* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 6.

Age The prevalence of difficulty walking increased significantly between each age

group up to 45-54. It was highest among those 65 and older (35.5%) and lowest

among those 18-24 (2.3%).

Education The prevalence of difficulty walking decreased significantly with increasing

education. It was highest among those with a less than a high school education

(45.8%) and lowest among those with a college degree (10.2%).

Household Income The prevalence of difficulty walking decreased with increasing income. It was

highest among those with a household income less than \$15,000 (46.1%), significantly higher than all other income levels, and was lowest among those with a household income of \$75,000 or more (5.8%) significantly lower than all

other income levels.



Table 2.5 Prevalence of Difficulty Walking by Demographic Characteristics: WVBRFSS, 2015

		Men			Women		Total			
Characteristic	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	
TOTAL	145,066	20.5	18.8-22.3	182,436	24.7	23.0-26.4	327,502	22.7	21.4-23.9	
Age										
18-24	775	*0.9	0.0-2.1	3,174	*3.9	1.0-6.8	3,949	*2.3	0.8-3.9	
25-34	7,938	7.5	3.8-11.1	7,680	7.4	3.8-11.0	15,618	7.4	4.9-10.0	
35-44	14,301	12.9	8.8-16.9	17,902	16.3	12.0-20.6	32,203	14.6	11.6-17.5	
45-54	28,881	24.3	19.5-29.1	37,138	31.2	26.7-35.6	66,019	27.7	24.5-31.0	
55-64	42,805	33.0	28.7-37.3	45,877	34.6	30.6-38.6	88,682	33.8	30.9-36.7	
65+	49,739	33.1	29.3-37.0	69,078	37.4	34.0-40.8	118,817	35.5	32.9-38.0	
Education										
Less than H.S.	47,581	42.9	36.7-49.2	56,915	48.5	42.6-54.3	104,496	45.8	41.5-50.0	
H.S. or G.E.D.	61,480	20.5	17.9-23.2	72,171	26.0	23.3-28.7	133,651	23.2	21.3-25.1	
Some Post-H.S.	25,449	13.9	11.2-16.7	38,306	18.6	15.8-21.3	63,755	16.4	14.4-18.3	
College Graduate	10,263	9.1	6.8-11.4	14,962	11.0	8.9-13.2	25,225	10.2	8.6-11.7	
Income										
Less than \$15,000	31,782	44.9	37.8-52.1	41,983	47.0	41.3-52.7	73,765	46.1	41.6-50.6	
\$15,000 - 24,999	33,632	33.3	27.9-38.8	38,915	33.6	28.8-38.3	72,547	33.5	29.9-37.0	
\$25,000 - 34,999	19,080	25.5	19.5-31.5	15,330	23.5	18.0-29.0	34,410	24.6	20.5-28.7	
\$35,000 - 49,999	15,090	16.0	12.0-20.0	13,906	15.0	11.2-18.9	28,996	15.5	12.8-18.3	
\$50,000 - 74,999	9,932	11.1	7.7-14.5	10,537	13.6	9.1-18.1	20,469	12.2	9.5-15.0	
\$75,000+	6,708	4.9	3.2-6.7	7,805	6.8	4.4-9.2	14,513	5.8	4.3-7.2	

 $^{^{*}}$ Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 6.

Difficulty Dressing or Bathing

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

Prevalence WV: 5.6% (95% CI: 4.9-6.2)

U.S.: 3.8% (95% CI: 3.7-3.9)

The West Virginia prevalence of difficulty dressing or bathing is significantly higher than the U.S. prevalence. West Virginia ranked the 4th highest among the

53 BRFSS participants.

Gender Men: 5.5% (95% CI: 4.6-6.5)

Women: 5.6% (95% CI: 4.7-6.5)

There was no gender difference for the prevalence of difficulty dressing or

bathing.

Race/Ethnicity White, Non-Hispanic: 5.5% (95% CI: 4.8-6.2)

Black, Non-Hispanic: *7.5% (95% CI: 3.0-11.9) Other, Non-Hispanic: *4.8% (95% CI: 0.0-10.2) Multiracial, Non-Hispanic: *4.9% (95% CI: 0.0-10.6)

Hispanic: *3.0% (95% CI: 0.0-8.8)

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 6.

Age The prevalence of difficulty dressing or bathing was lowest among those 18-24

(0.5%) and highest among those 55-64 (9.5%), a significant difference.

Education The prevalence of difficulty dressing or bathing decreased with increasing

education. It was significantly higher among those with less than a high school education (12.4%) than among all other educational attainment levels and significantly lower among those with a college degree (1.9%) than among all other educational attainment levels except those with some post high school

education.

Household Income The prevalence of difficulty dressing or bathing decreased with increasing

income. It was significantly higher among those with a household income of

less than \$15,000 (16.3%) than all other income levels.

Table 2.6 Prevalence of Difficulty Dressing or Bathing by Demographic Characteristics: WVBRFSS, 2015

		Men			Women		Total			
Characteristic	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	
TOTAL	39,135	5.5	4.5-6.5	41,491	5.6	4.7-6.5	80,626	5.6	4.9-6.2	
Age										
18-24	316	*0.4	0.0-1.1	587	*0.7	0.0-2.1	902	*0.5	0.0-1.3	
25-34	2,417	*2.3	0.0-4.5	1,267	*1.2	0.2-2.2	3,684	*1.8	0.5-3.0	
35-44	3,542	*3.2	1.2-5.2	4,965	4.5	2.2-6.9	8,507	3.8	2.3-5.4	
45-54	9,510	8.0	5.2-10.8	9,758	8.2	5.5-10.9	19,267	8.1	6.1-10.0	
55-64	13,027	10.0	7.1-13.0	12,012	9.0	6.4-11.7	25,039	9.5	7.6-11.5	
65+	9,638	6.4	4.4-8.5	12,096	6.5	4.8-8.2	21,734	6.5	5.2-7.8	
Education										
Less than H.S.	13,147	11.9	8.1-15.6	15,041	12.8	9.2-16.5	28,189	12.4	9.7-15.0	
H.S. or G.E.D.	17,343	5.8	4.2-7.3	17,364	6.2	4.8-7.7	34,706	6.0	4.9-7.1	
Some Post-H.S.	6,407	3.5	2.0-5.0	6,449	3.1	1.9-4.3	12,856	3.3	2.4-4.2	
College Graduate	2,051	1.8	0.8-2.9	2,637	1.9	1.1-2.8	4,687	1.9	1.2-2.5	
Income										
Less than \$15,000	11,391	16.1	11.2-21.0	14,648	16.4	12.2-20.6	26,039	16.3	13.1-19.5	
\$15,000 - 24,999	8,383	8.3	4.8-11.8	6,750	5.8	3.7-7.9	15,133	7.0	5.0-8.9	
\$25,000 - 34,999	6,033	8.0	4.6-11.5	2,421	*3.7	1.2-6.2	8,455	6.0	3.8-8.2	
\$35,000 - 49,999	3,573	3.8	1.8-5.8	1,610	*1.7	0.4-3.1	5,183	2.8	1.6-4.0	
\$50,000 - 74,999	1,740	*1.9	0.5-3.3	1,845	*2.4	0.9-3.8	3,585	2.1	1.1-3.1	
\$75,000+	1,259	*0.9	0.0-1.8	1,338	*1.2	0.0-2.3	2,596	*1.0	0.3-1.8	

^{*} Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 6.

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: 11.6% (95% CI: 10.6-12.5)

U.S.: 7.0% (95% CI: 6.8-7.1)

The West Virginia prevalence of difficulty doing errands alone was significantly higher than the U.S. prevalence. West Virginia ranked the highest among the 53

BRFSS participants.

Gender Men: 8.8% (95% CI: 7.5-10.0)

Women: 14.2% (95% CI: 12.8-15.6)

The prevalence of difficulty doing errands alone was significantly higher among

women than among men.

Race/Ethnicity White, Non-Hispanic: 11.7% (95% CI: 10.7-12.6)

Black, Non-Hispanic: 7.9% (95% CI: 3.7-12.2) Other, Non-Hispanic: *15.4% (95% CI: 2.3-28.5) Multiracial, Non-Hispanic: *11.6% (95% CI: 3.3-19.9)

Hispanic: *7.8% (95% CI: 0.1-15.6)

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 6.

Age The prevalence of difficulty doing errands alone generally increased with age.

The prevalence of difficulty doing errands alone was lowest among those 18-24 (2.9%) and highest among those 65 and older (16.9%), a significant difference.

Education The prevalence of difficulty doing errands alone decreased significantly with

each educational attainment level. It was highest among those with less than a

high school education (24.7%) and lowest among college graduates (4.2%).

Household Income The prevalence of difficulty doing errands alone decreased with increasing

income. It was highest among those with a household income of less than \$15,000 (28.3%), significantly higher than all other income levels and it was lowest among those with a household income of \$75,000 or more (2.2%),

significantly lower than all other income levels.

Table 2.7 Prevalence of Difficulty Doing Errands Alone by Demographic Characteristics: WVBRFSS, 2015

		Men		,	Women			Total	
Characteristic	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
TOTAL	62,024	8.8	7.5-10.0	104,913	14.2	12.8-15.6	166,937	11.6	10.6-12.5
Age									
18-24	932	*1.1	0.0-2.6	3,911	*4.8	1.3-8.3	4,843	*2.9	1.0-4.7
25-34	4,562	*4.3	1.4-7.3	6,534	6.3	3.6-9.0	11,095	5.3	3.3-7.3
35-44	8,474	7.6	4.4-10.8	14,739	13.5	9.5-17.5	23,213	10.5	7.9-13.1
45-54	14,529	12.2	8.5-15.9	22,495	18.9	15.0-22.8	37,024	15.6	12.9-18.2
55-64	14,837	11.4	8.5-14.4	16,833	12.7	9.8-15.5	31,670	12.1	10.0-14.1
65+	17,992	12.0	9.3-14.7	38,641	20.9	18.0-23.8	56,634	16.9	14.9-19.0
Education									
Less than H.S.	20,147	18.3	13.4-23.2	35,794	30.6	25.3-35.9	55,942	24.7	21.0-28.3
H.S. or G.E.D.	28,283	9.4	7.5-11.4	40,894	14.7	12.5-17.0	69,178	12.0	10.5-13.5
Some Post-H.S.	9,167	5.0	3.4-6.7	21,828	10.6	8.4-12.8	30,995	8.0	6.6-9.4
College Graduate	4,238	3.8	2.2-5.3	6,314	4.6	3.3-6.0	10,552	4.2	3.2-5.3
Income									
Less than \$15,000	18,141	25.6	19.2-32.1	27,145	30.4	25.2-35.6	45,286	28.3	24.2-32.3
\$15,000 - 24,999	12,158	12.0	8.3-15.8	20,602	17.8	13.8-21.7	32,760	15.1	12.3-17.9
\$25,000 - 34,999	8,179	10.9	6.7-15.1	6,484	10.0	6.1-13.9	14,663	10.5	7.6-13.4
\$35,000 - 49,999	5,375	5.7	3.2-8.2	6,748	7.3	4.4-10.2	12,123	6.5	4.6-8.4
\$50,000 - 74,999	2,689	3.0	1.3-4.7	5,966	7.7	4.6-10.8	8,656	5.2	3.5-6.9
\$75,000+	1,847	*1.4	0.4-2.3	3,580	3.1	1.4-4.8	5,427	2.2	1.2-3.1

^{*} Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 6.

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: 8.0% (95% CI: 7.2-8.8)

U.S.: 4.6% (95% CI: 4.5-4.7)

The West Virginia prevalence of vision impairment was significantly higher than the U.S. prevalence. West Virginia ranked the 3rd highest among 53 BRFSS

participants.

Gender Men: 6.9% (95% CI: 5.8-8.0)

Women: 9.0% (95% CI: 7.9-10.1)

There was no gender difference in the prevalence of vision impairment.

Race/Ethnicity White, Non-Hispanic: 8.0% (95% CI: 7.1-8.8)

Black, Non-Hispanic: 10.9% (95% CI: 5.7-16.1)
Other, Non-Hispanic: *7.3% (95% CI: 1.0-13.6)
Multiracial, Non-Hispanic: *9.6% (95% CI: 2.1-17.1)

Hispanic: *3.0% (95% CI: 0.0-7.4)

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 6.

Age The prevalence of vision impairment was significantly higher among those 45

and older than for those under 45.

Education The prevalence of visual impairment decreased with increasing education. The

prevalence of vision impairment was significantly higher among those with less than a high school education (15.6%) than among all other educational attainment levels and significantly lower among those with a college degree

(3.2%) than among all other educational attainment levels.

Household Income The prevalence of vision impairment was significantly higher among those with

an annual household income of less than \$15,000 (17.9%) than among all other

income brackets \$25,000 or more.



Table 2.8 Prevalence of Vision Impairment by Demographic Characteristics: WVBRFSS, 2015

		Men			Women		Total			
Characteristic	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	
TOTAL	48,916	6.9	5.8-8.0	66,939	9.0	7.9-10.1	115,854	8.0	7.2-8.8	
Age										
18-24	1,543	*1.8	0.0-3.5	2,861	*3.5	0.7-6.3	4,404	*2.6	1.0-4.2	
25-34	5,693	5.4	2.3-8.4	4,549	4.3	1.9-6.8	10,242	4.9	2.9-6.8	
35-44	4,711	4.2	2.0-6.4	7,162	6.5	3.7-9.3	11,873	5.4	3.6-7.1	
45-54	9,022	7.6	4.7-10.5	14,285	12.0	8.9-15.0	23,307	9.8	7.7-11.9	
55-64	12,107	9.3	6.5-12.1	15,587	11.7	9.0-14.5	27,694	10.5	8.6-12.5	
65+	15,672	10.4	7.7-13.1	22,367	12.1	9.8-14.3	38,039	11.3	9.6-13.1	
Education										
Less than H.S.	14,597	13.2	9.0-17.4	20,990	17.8	13.7-22.0	35,587	15.6	12.7-18.6	
H.S. or G.E.D.	21,712	7.2	5.5-8.9	25,885	9.2	7.5-11.0	47,597	8.2	7.0-9.4	
Some Post-H.S.	8,770	4.8	3.0-6.5	15,345	7.4	5.5-9.3	24,115	6.2	4.9-7.5	
College Graduate	3,191	2.8	1.4-4.2	4,719	3.5	2.3-4.7	7,909	3.2	2.3-4.1	
Income										
Less than \$15,000	11,667	16.4	11.1-21.8	17,151	19.0	14.9-23.2	28,818	17.9	14.6-21.2	
\$15,000 - 24,999	12,224	12.1	8.3-16.0	16,187	13.9	10.5-17.3	28,411	13.1	10.5-15.6	
\$25,000 - 34,999	5,193	6.9	3.5-10.4	4,117	6.3	3.3-9.2	9,310	6.6	4.3-8.9	
\$35,000 - 49,999	4,800	5.1	2.4-7.8	4,417	4.7	2.3-7.2	9,217	4.9	3.1-6.7	
\$50,000 - 74,999	2,305	*2.6	0.6-4.5	3,890	5.0	2.1-7.9	6,194	3.7	2.0-5.4	
\$75,000+	3,088	2.3	1.0-3.5	3,805	3.3	1.5-5.1	6,893	2.7	1.7-3.8	

 $^{^{}st}$ Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 6.



No Health Care Coverage (among adults aged 18-64)

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: 9.6% (95% CI: 8.5-10.7)

U.S.: 14.8% (95% CI: 14.5-15.1)

The prevalence of no health care coverage among those aged 18-64 was significantly lower in West Virginia than in the U.S. West Virginia ranked the

13th lowest among 53 BRFSS participants.

Gender Men: 11.1% (95% CI: 9.4-12.9)

Women: 8.1% (95% CI: 6.7-9.5)

There was no gender difference in the prevalence of no health care coverage

among those 18-64.

Race/Ethnicity White, Non-Hispanic: 9.0% (95% CI: 7.9-10.0)

Black, Non-Hispanic: 12.3% (95% CI: 6.0-18.5)
Other, Non-Hispanic: *21.6% (95% CI: 6.8-36.3)
Multiracial, Non-Hispanic: *13.4% (95% CI: 3.2-23.6)

Hispanic: *19.2% (95% CI: 4.9-33.5

There was no race/ethnicity difference in the prevalence of no health care

coverage among those 18-64.

* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 6.

Age The highest prevalence of no health care coverage was among those aged 18-24

(15.0%) and was significantly higher than among those aged 45-64.

Education Those with a high school education or GED had the highest prevalence of no

health coverage (11.0%), significantly higher than among college graduates, while those with a college degree had the lowest prevalence of no health coverage (5.6%), significantly lower than all other educational attainment levels

except for those with less than high school education.

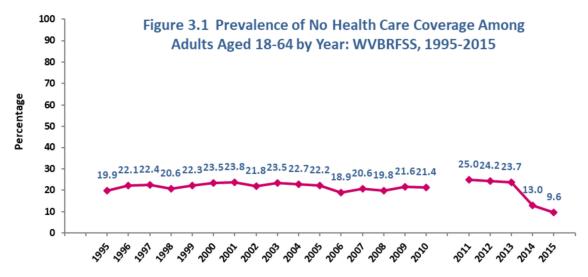
Household Income The prevalence of no health care coverage was highest among those with an

income of \$15,000-\$24,999 per year (14.6%) and lowest among those with an

income of \$75,000 or more per year (3.9%), a significant difference.

Table 3.1 Prevalence of No Health Care Coverage Among Adults Aged 18-64 by Demographic Characteristics: WVBRFSS, 2015

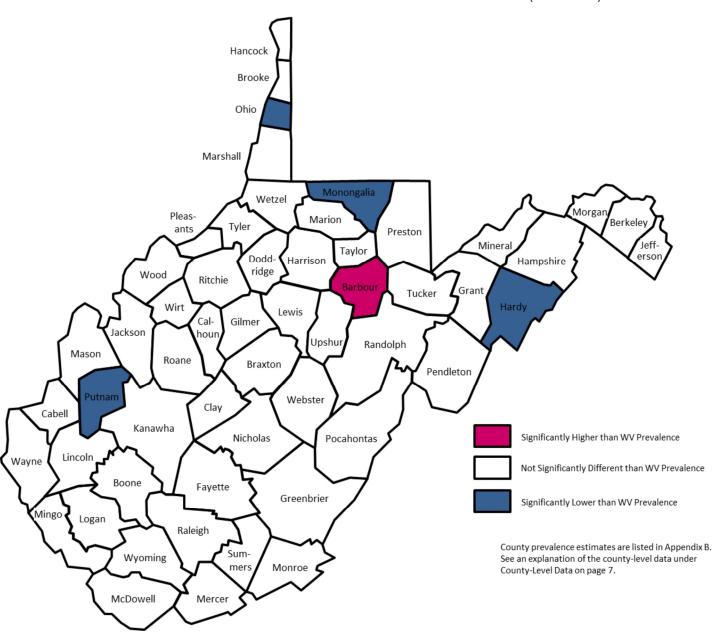
		Men			Women		Total			
Characteristic	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	
TOTAL	62,482	11.1	9.4-12.9	44,898	8.1	6.7-9.5	107,380	9.6	8.5-10.7	
Age										
18-24	14,101	16.2	10.1-22.3	11,298	13.7	8.2-19.2	25,399	15.0	10.8-19.1	
25-34	16,830	15.3	10.8-19.8	9,316	8.8	5.4-12.3	26,145	12.2	9.3-15.0	
35-44	13,695	12.1	8.0-16.2	7,855	7.1	4.4-9.7	21,551	9.6	7.2-12.1	
45-54	9,881	8.2	5.5-10.9	8,465	7.0	4.4-9.6	18,345	7.6	5.7-9.5	
55-64	7,976	6.1	4.1-8.1	7,964	5.9	3.9-8.0	15,940	6.0	4.6-7.5	
Education										
Less than H.S.	9,691	12.6	7.1-18.1	6,496	8.9	3.9-14.0	16,186	10.8	7.1-14.5	
H.S. or G.E.D.	30,590	12.5	9.7-15.3	17,804	9.1	6.8-11.4	48,394	11.0	9.1-12.8	
Some Post-H.S.	15,916	10.6	7.5-13.8	14,185	8.3	5.6-11.0	30,101	9.4	7.3-11.4	
College Graduate	5,074	5.8	3.3-8.3	6,281	5.5	3.5-7.5	11,356	5.6	4.1-7.2	
Income										
Less than \$15,000	6,788	11.5	6.1-16.9	3,801	5.5	2.6-8.3	10,589	8.2	5.3-11.2	
\$15,000 - 24,999	12,027	16.5	11.2-21.8	10,769	12.9	8.6-17.2	22,796	14.6	11.2-17.9	
\$25,000 - 34,999	7,657	13.3	7.6-19.0	7,014	14.8	8.5-21.0	14,671	14.0	9.7-18.2	
\$35,000 - 49,999	7,771	10.9	5.8-16.0	4,891	7.1	3.7-10.5	12,662	9.0	5.9-12.1	
\$50,000 - 74,999	8,482	11.6	6.5-16.7	3,035	4.6	1.0-8.3	11,518	8.3	5.1-11.5	
\$75,000+	3,616	3.1	1.3-4.9	4,990	4.7	2.0-7.4	8,607	3.9	2.3-5.4	



^{*}Due to changes in sample composition and weighting methodology, 2011-2015 results are not directly comparable to previous years.

Figure 3.2 Prevalence of No Health Care Coverage Among Adults Aged 18-64 by County: WVBRFSS, 2011-2015

WV Prevalence (2011-2015) - 19.2%



Primary Health Care Coverage

Definition

Responding "Yes" 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?" and responding as follows to the state-added question, "What type of health care coverage do you use to pay for most of your medical care?"

Private: "Your employer", "Someone else's employer", or "A plan that

you or someone else buys on your own"

Medicare Medicaid

Other: "The military, CHAMPUS, TriCare, or VA" or "Some other source"

None (no coverage)

Prevalence

Private: 46.5% (95% CI: 45.0-48.1) **Medicare: 23.9%** (95% CI: 22.7-25.1) **Medicaid: 16.6%** (95% CI: 15.3-17.8) **Other: 4.5%** (95% CI: 3.9-5.1)

None: **8.5%** (95% CI: 7.5-9.4)

This question was part of a state added set of questions and national data are not available, therefore a U.S. comparison was not conducted.

Gender

There was no gender difference in the prevalence of private insurance. The prevalence of Medicaid and Medicare was significantly higher among females than among males. The prevalence of Other and None was significantly higher among males than among females.

Race/Ethnicity

The prevalence of private insurance was significantly higher among White, Non-Hispanics than among Black Non-Hispanics. *The prevalence of Medicare was significantly higher among White, Non-Hispanics and Black, Non-Hispanics than among Hispanics.

* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 6.

Age

The prevalence of private insurance was significantly lower among those 65 and older than all other age groups. The prevalence of Medicare increased with age. The prevalence of Medicaid and None generally decreased with age.

Education

The prevalence of private insurance increased significantly with each educational attainment level while the prevalence of Medicare and Medicaid decreased with increasing educational attainment level. The prevalence of None was significantly higher among those with a high school education than among those with a college degree.

Household Income

The prevalence of private insurance increased significantly with each income bracket while the prevalence of Medicaid decreased significantly with increasing income under \$50,000. The prevalence of Medicare was significantly higher among those with an income of \$15,000-\$24,999 than all other income levels and significantly lower among those with an income of \$75,000 or more. The prevalence of None was significantly lower among those with an annual household income of \$75,000 or more than among those with an annual household income less than \$35,000.

Table 3.2 Prevalence of Primary Health Care Coverage by Demographic Characteristics: WVBRFSS, 2015

	P	rivate	M	edicare	M	edicaid	(Other		None
Characteristic	%	95% CI	%	95% CI	%	95% CI	%	95% CI	%	95% CI
TOTAL	46.5	45.0-48.1	23.9	22.7-25.1	16.6	15.3-17.8	4.5	3.9-5.1	8.5	7.5-9.4
Gender										
Male	47.8	45.4-50.1	21.7	20.0-23.5	13.2	11.6-14.9	7.2	6.0-8.3	10.1	8.6-11.6
Female	45.4	43.3-47.5	26.0	24.3-27.7	19.7	17.9-21.5	2.0	1.4-2.5	7.0	5.8-8.1
Age										
18-24	54.4	48.5-60.4	*3.3	1.1-5.5	23.1	18.1-28.2	*2.4	0.6-4.2	16.7	12.2-21.3
25-34	57.6	52.9-62.3	2.1	0.9-3.3	24.0	19.8-28.2	2.4	1.1-3.7	14.0	10.8-17.3
35-44	56.6	52.3-60.8	5.9	4.0-7.9	22.6	18.9-26.2	3.9	2.3-5.5	11.0	8.3-13.7
45-54	59.8	56.1-63.4	9.0	6.7-11.3	19.9	16.9-22.8	2.9	1.7-4.1	8.4	6.4-10.5
55-64	56.8	53.7-59.9	14.9	12.6-17.2	15.7	13.3-18.2	5.8	4.3-7.2	6.8	5.2-8.4
65+	12.5	10.7-14.3	75.7	73.3-78.1	3.8	2.6-5.0	7.0	5.6-8.5	0.9	0.4-1.4
Education										
Less than H.S.	16.9	13.5-20.4	34.9	30.7-39.1	34.9	30.5-39.3	4.0	2.2-5.7	9.3	6.4-12.2
H.S. or G.E.D.	42.2	39.7-44.7	27.4	25.4-29.4	16.7	14.8-18.6	4.3	3.3-5.2	9.5	7.9-11.0
Some Post-H.S.	54.7	51.6-57.7	17.9	15.9-19.9	13.6	11.4-15.8	5.4	4.1-6.7	8.4	6.6-10.2
College Graduate	69.4	66.9-72.0	15.9	14.1-17.7	5.4	4.0-6.7	4.0	3.0-5.1	5.2	3.9-6.6
Income										
Less than \$15,000	7.4	5.1-9.8	27.3	23.4-31.3	52.0	47.4-56.7	5.0	3.0-7.0	8.2	5.6-10.9
\$15,000 - 24,999	19.5	16.2-22.8	37.9	34.2-41.6	25.7	22.0-29.4	5.0	3.5-6.6	11.9	9.2-14.6
\$25,000 - 34,999	41.5	36.5-46.5	25.8	21.7-29.8	14.7	10.6-18.8	6.5	3.9-9.0	11.6	8.2-15.1
\$35,000 - 49,999	61.6	57.5-65.7	21.7	18.6-24.8	5.1	3.0-7.2	4.2	2.7-5.8	7.4	4.8-9.9
\$50,000 - 74,999	71.7	67.7-75.8	12.9	10.4-15.4	*3.4	1.3-5.6	4.5	2.9-6.2	7.4	4.6-10.2
\$75,000+	83.4	80.9-85.9	8.3	6.7-9.8	*0.9	0.3-1.6	3.6	2.3-4.9	3.8	2.3-5.4

 $^{^{}st}$ Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 6.



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: 21.0% (95% CI: 19.7-22.3)

U.S.: 21.4% (95% CI: 21.2-21.7)

West Virginia ranked the 27th highest among 53 BRFSS participants. There was no significant difference between the West Virginia prevalence of no personal

doctor or health care provider and the U.S. prevalence.

Gender Men: 27.5% (95% CI: 25.3-29.6)

Women: 14.9% (95% CI: 13.3-16.4)

The prevalence of no personal doctor or health care provider was significantly

higher among men than among women.

Race/Ethnicity White, Non-Hispanic: 20.2% (95% CI: 18.8-21.5)

Black, Non-Hispanic: 31.7% (95% CI: 23.6-39.8) Other, Non-Hispanic: *41.5% (95% CI: 27.0-56.1) Multiracial, Non-Hispanic: *28.9% (95% CI: 16.3-41.4)

Hispanic: *29.3% (95% CI: 13.9-44.6)

The prevalence of no personal doctor or health care provider was significantly higher among Black, Non-Hispanics and Other, Non-Hispanics than among

White, Non-Hispanics.

st Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 6.

Age The prevalence of no personal doctor or health care provider declined as age

increased. Those aged 18-24 had the highest prevalence of no personal doctor or health care provider (41.5%), significantly higher than all other age groups 35 and older. The oldest age group (65 and older) had a relatively low prevalence of no personal doctor or health care provider (6.9%), significantly lower than all

other age groups.

Education There was a significant difference in the prevalence of no personal doctor or

health care provider between those with less than a high school education (22.7%) and those with a college degree (15.7%). The prevalence of no personal doctor is significantly lower among college graduates than among all other

educational attainment levels.

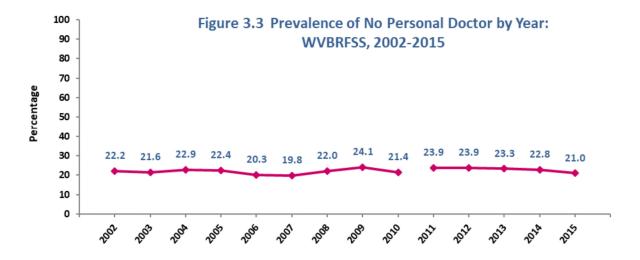
Household Income Those earning \$15,000-\$24,999 per year had the highest prevalence of not

having a personal doctor or health care provider (24.1%) which was significantly

higher than those earning \$75,000 or more per year (16.7%).

Table 3.3 Prevalence of No Personal Doctor or Health Care Provider by Demographics: WVBRFSS, 2015

		Men			Women		Total			
Characteristic	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	
TOTAL	197,175	27.5	25.3-29.6	111,277	14.9	13.3-16.4	308,452	21.0	19.7-22.3	
Age										
18-24	43,432	49.2	41.2-57.3	27,365	33.2	26.0-40.4	70,797	41.5	36.0-47.0	
25-34	56,314	51.6	45.0-58.2	24,129	23.1	18.0-28.1	80,443	37.6	33.2-42.0	
35-44	40,134	35.6	30.0-41.2	18,663	16.8	12.5-21.0	58,797	26.2	22.6-29.8	
45-54	25,133	20.8	16.6-25.0	15,037	12.5	9.2-15.7	40,170	16.6	14.0-19.3	
55-64	17,853	13.6	10.6-16.6	13,218	9.8	7.2-12.4	31,071	11.7	9.7-13.7	
65+	12,868	8.4	6.1-10.8	10,680	5.7	4.1-7.3	23,548	6.9	5.6-8.3	
Education										
Less than H.S.	31,695	27.8	21.9-33.7	20,837	17.8	13.1-22.5	52,532	22.7	18.9-26.5	
H.S. or G.E.D.	92,574	30.5	27.1-34.0	37,334	13.2	10.8-15.6	129,909	22.2	20.0-24.3	
Some Post-H.S.	48,068	26.1	22.0-30.2	37,351	17.8	14.6-21.0	85,420	21.7	19.1-24.3	
College Graduate	23,918	21.0	17.4-24.6	15,622	11.4	8.9-13.9	39,540	15.7	13.6-17.9	
Income										
Less than \$15,000	23,460	33.0	26.1-39.8	14,388	15.9	11.6-20.3	37,848	23.4	19.5-27.4	
\$15,000 - 24,999	27,929	27.4	21.9-33.0	24,907	21.2	16.6-25.8	52,837	24.1	20.5-27.6	
\$25,000 - 34,999	21,862	29.1	22.4-35.7	9,879	14.9	9.6-20.2	31,740	22.4	18.0-26.8	
\$35,000 - 49,999	23,400	24.8	19.0-30.6	8,703	9.3	6.0-12.5	32,103	17.0	13.6-20.5	
\$50,000 - 74,999	23,970	26.5	20.7-32.3	11,882	15.2	10.3-20.1	35,851	21.3	17.4-25.1	
\$75,000+	30,288	22.1	17.6-26.6	11,711	10.2	6.8-13.6	41,999	16.7	13.7-19.6	



^{*}Due to changes in sample composition and weighting methodology, 2011-2015 results are not directly comparable to previous years.



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: 13.8% (95% CI: 12.7-14.9)

U.S.: 13.3% (95% CI: 13.0-13.5)

The West Virginia prevalence of could not afford needed medical care was equivalent to the national prevalence. West Virginia ranked the 16th highest

among 53 BRFSS participants.

Gender Men: 12.9% (95% CI: 11.4-14.4)

Women: 14.7% (95% CI: 13.2-16.2)

There was no gender difference in the prevalence of could not afford needed

medical care.

Race/Ethnicity White, Non-Hispanic: 13.4% (95% CI: 12.3-14.5)

Black, Non-Hispanic: 11.7% (95% CI: 6.6-16.8) **Other, Non-Hispanic**: *19.5% (95% CI: 7.1-31.8)

Multiracial, Non-Hispanic: *23.93% (95% CI: 12.1-35.7)

Hispanic: *23.6% (95% CI: 9.8-37.3)

There was no race/ethnicity difference in the prevalence of could not afford

needed medical care.

* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 6.

Age The 25-34 age group experienced the highest prevalence of could not afford

needed medical care (20.0%) and the group aged 65 and older experienced the lowest prevalence (4.9%), which was significantly lower than all other age

groups.

Education The prevalence of could not afford needed medical care was significantly lower

among college graduates (7.9%) than among all other educational attainment

levels.

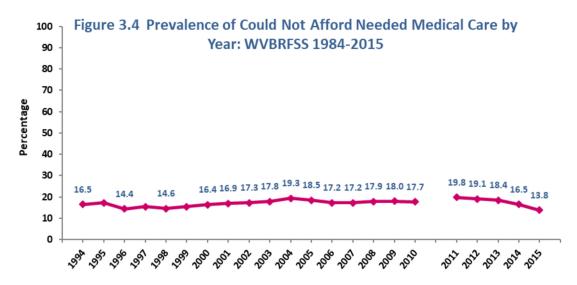
Household Income The prevalence of could not afford needed medical care became steadily higher

as household income declined. The prevalence of could not afford needed medical care was 6.9% for those earning \$75,000 per year or more and 23.4% for those earning less than \$15,000 per year. The prevalence of could not afford needed medical care was significantly higher among those earning less than

\$25,000 than among those earning \$35,000 or more.

Table 3.4 Prevalence of Could Not Afford Needed Medical Care by Demographic Characteristics: WVBRFSS, 2015

		Men			Women		Total			
Characteristic	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	
TOTAL	92,672	12.9	11.4-14.4	110,046	14.7	13.2-16.2	202,718	13.8	12.7-14.9	
Age										
18-24	13,226	14.9	9.3-20.6	11,772	14.1	8.5-19.8	24,998	14.5	10.5-18.5	
25-34	19,249	17.5	12.6-22.5	23,861	22.7	17.6-27.7	43,110	20.0	16.5-23.6	
35-44	18,924	16.8	12.5-21.1	22,906	20.6	16.0-25.3	41,831	18.7	15.6-21.9	
45-54	13,893	11.5	8.3-14.8	22,169	18.4	14.6-22.2	36,062	15.0	12.5-17.5	
55-64	18,638	14.2	10.9-17.5	19,248	14.3	11.4-17.2	37,886	14.3	12.1-16.5	
65+	8,168	5.4	3.6-7.2	8,641	4.6	3.2-6.0	16,809	4.9	3.8-6.1	
Education										
Less than H.S.	21,595	18.9	14.1-23.7	17,685	15.0	10.7-19.2	39,280	16.9	13.7-20.1	
H.S. or G.E.D.	40,345	13.3	10.9-15.7	43,951	15.6	13.1-18.0	84,297	14.4	12.7-16.1	
Some Post-H.S.	22,211	12.1	9.2-15.0	35,764	17.1	13.9-20.2	57,975	14.7	12.6-16.9	
College Graduate	7,603	6.7	4.4-8.9	12,118	8.8	6.6-11.0	19,721	7.9	6.3-9.4	
Income										
Less than \$15,000	18,650	26.1	19.7-32.6	19,247	21.3	16.5-26.1	37,898	23.4	19.5-27.4	
\$15,000 - 24,999	23,321	22.9	17.9-27.8	23,662	20.2	16.0-24.4	46,983	21.4	18.2-24.7	
\$25,000 - 34,999	12,819	17.0	11.5-22.6	10,713	16.2	10.7-21.7	23,533	16.6	12.7-20.6	
\$35,000 - 49,999	6,993	7.4	4.1-10.7	12,379	13.2	9.0-17.3	19,372	10.3	7.6-12.9	
\$50,000 - 74,999	6,936	7.7	4.1-11.2	8,011	10.2	6.1-14.3	14,947	8.9	6.2-11.5	
\$75,000+	6,885	5.0	2.8-7.3	10,600	9.2	5.9-12.5	17,485	6.9	5.0-8.9	



^{*}Due to changes in sample composition and weighting methodology, 2011-2015 results are not directly comparable to previous years.



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: 20.2% (95% CI: 18.9-21.4)

U.S.: 29.9% (95% CI: 29.7-30.2)

The West Virginia prevalence of no checkup in the past year was significantly lower than the national prevalence. West Virginia ranked the 2nd lowest among

53 BRFSS participants.

Gender Men: 24.0% (95% CI: 22.1-26.0)

Women: 16.4% (95% CI: 14.8-18.0)

The prevalence of no routine checkup in the past year was significantly higher

among males than among females.

Race/Ethnicity White, Non-Hispanic: 20.0% (95% CI: 18.7-21.3)

Black, Non-Hispanic: 22.0% (95% CI: 14.6-29.3) Other, Non-Hispanic: *25.4% (95% CI: 12.9-38.0) Multiracial, Non-Hispanic: *22.8% (95% CI: 11.9-33.7)

Hispanic: *22.7% (95% CI: 9.8-35.6)

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 6.

Age The prevalence of no checkup in the past year generally decreased as age

increased. Those 65 and older had a relatively low prevalence of no checkup in the past year (7.6%) while those aged 25-34 had the highest prevalence (33.6%). The prevalence of no checkup in the past year was significantly lower among

those 55 and older than among those under 55.

Education The prevalence of no checkup in the past year was significantly lower among

those with college degrees (16.4%) than among those with some post-high

school education (22.3%).

Household Income The highest prevalence of no checkup in the past year was among those with an

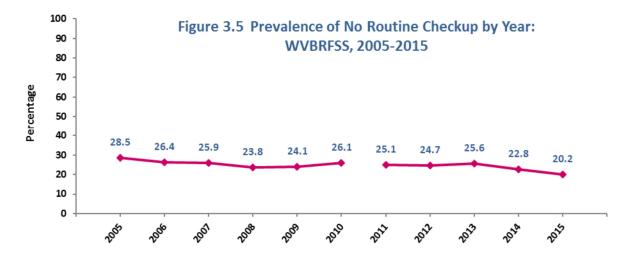
annual household income below \$15,000 (25.2%) and the lowest prevalence was among those with an annual household income of \$75,000 or more

(17.3%), a significant difference.



Table 3.5 Prevalence of No Routine Checkup by Demographic Characteristics: WVBRFSS, 2015

	Men			Women			Total		
Characteristic	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
TOTAL	170,943	24.0	22.1-26.0	122,033	16.4	14.8-18.0	292,976	20.2	18.9-21.4
Age									
18-24	24,433	28.4	21.4-35.4	23,725	29.0	22.1-35.9	48,158	28.7	23.8-33.6
25-34	47,758	44.3	37.7-50.9	23,337	22.5	17.4-27.6	71,096	33.6	29.3-37.9
35-44	37,323	33.4	27.7-39.1	20,949	19.0	14.4-23.6	58,272	26.2	22.5-30.0
45-54	29,225	24.4	19.9-29.0	21,119	17.5	13.9-21.1	50,344	21.0	18.0-23.9
55-64	19,932	15.3	12.3-18.4	17,700	13.3	10.4-16.2	37,632	14.3	12.2-16.4
65+	11,467	7.5	5.4-9.7	14,341	7.7	5.9-9.6	25,808	7.6	6.2-9.0
Education									
Less than H.S.	27,733	24.5	19.1-29.9	18,524	16.0	11.4-20.5	46,257	20.2	16.7-23.7
H.S. or G.E.D.	71,702	24.0	20.8-27.1	45,484	16.2	13.7-18.8	117,186	20.2	18.2-22.3
Some Post-H.S.	47,647	26.2	22.1-30.2	39,487	18.9	15.7-22.1	87,134	22.3	19.7-24.8
College Graduate	22,419	19.8	16.2-23.4	18,405	13.5	10.9-16.2	40,824	16.4	14.2-18.6
Income									
Less than \$15,000	20,716	29.4	22.8-35.9	19,233	21.9	16.8-26.9	39,948	25.2	21.2-29.3
\$15,000 - 24,999	24,189	23.9	18.5-29.3	21,737	18.8	14.4-23.2	45,926	21.2	17.8-24.6
\$25,000 - 34,999	21,743	29.1	22.6-35.5	11,221	16.9	11.2-22.6	32,964	23.3	19.0-27.7
\$35,000 - 49,999	23,011	24.4	18.7-30.0	10,151	10.9	7.2-14.5	33,162	17.6	14.2-21.1
\$50,000 - 74,999	19,447	21.8	16.4-27.3	14,295	18.4	13.3-23.6	33,742	20.2	16.5-24.0
\$75,000+	27,559	20.3	16.2-24.5	15,759	13.7	10.2-17.3	43,318	17.3	14.5-20.1



^{*}Due to changes in sample composition and weighting methodology, 2011-2015 results are not directly comparable to previous years.



SECTION 2: RISK BEHAVIORS



Overweight

DefinitionBody 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/m²).

Overweight is defined as a BMI of 25.0-29.9.

Prevalence WV: 35.5% (95% CI: 34.0-37.0)

U.S.: 35.7% (95% CI: 35.4-36.0)

The prevalence of overweight in West Virginia was similar to that for the U.S.

West Virginia ranked the 27th highest among 53 BRFSS participants.

Gender Men: 39.8% (95% CI: 37.6-42.1)

Women: 31.0% (95% CI: 29.1-33.0)

The prevalence of overweight was significantly higher among males than among

females.

Race/Ethnicity White, Non-Hispanic: 35.8% (95% CI: 34.2-37.3)

Black, Non-Hispanic: 28.5% (95% CI: 20.3-36.8) Other, Non-Hispanic: *28.3% (95% CI: 14.4-42.1) Multiracial, Non-Hispanic: *38.7% (95% CI: 24.4-53.0)

Hispanic: *33.2% (95% CI: 17.4-49.1)

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 6.

Age The prevalence of overweight was lowest among those aged 18-24 (29.6%) and

highest among those aged 65 and older (39.8%), a significant difference.

Education There was no difference in the prevalence of overweight between educational

attainment levels.

Household Income There was no difference in the prevalence of overweight between income

brackets.

Table 4.1 Overweight Prevalence by Demographic Characteristics: WVBRFSS, 2015

	Men			Women			Total		
Characteristic	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
TOTAL	273,831	39.8	37.6-42.1	205,645	31.0	29.1-33.0	479,476	35.5	34.0-37.0
Age									
18-24	31,064	36.7	28.7-44.7	16,044	21.6	14.9-28.3	47,108	29.6	24.3-35.0
25-34	43,509	43.1	36.3-50.0	26,723	29.5	23.7-35.4	70,232	36.7	32.1-41.3
35-44	44,265	40.6	34.8-46.4	28,216	28.3	22.8-33.7	72,481	34.7	30.6-38.7
45-54	44,247	38.3	33.1-43.6	32,154	30.1	25.6-34.7	76,401	34.4	30.9-37.9
55-64	44,645	35.2	31.0-39.4	41,308	34.5	30.4-38.6	85,953	34.9	31.9-37.8
65+	65,487	44.1	40.1-48.2	61,200	36.1	32.6-39.6	126,687	39.8	37.2-42.5
Education									
Less than H.S.	37,642	35.2	29.1-41.3	30,184	28.9	23.4-34.3	67,826	32.1	28.0-36.2
H.S. or G.E.D.	115,038	39.5	36.0-43.0	74,523	30.0	26.8-33.2	189,560	35.1	32.7-37.5
Some Post-H.S.	74,479	41.6	37.0-46.1	60,037	32.5	28.5-36.4	134,516	37.0	33.9-40.0
College Graduate	46,602	42.8	38.5-47.0	40,901	32.8	29.1-36.5	87,503	37.4	34.6-40.3
Income									
Less than \$15,000	25,070	37.1	30.1-44.1	22,266	26.8	21.5-32.1	47,336	31.4	27.1-35.7
\$15,000 - 24,999	37,250	37.5	31.8-43.2	30,023	28.6	23.8-33.4	67,273	32.9	29.2-36.6
\$25,000 - 34,999	27,375	37.4	30.6-44.3	15,581	26.6	20.8-32.3	42,956	32.6	28.0-37.2
\$35,000 - 49,999	40,825	43.7	37.5-49.9	32,265	36.9	31.0-42.7	73,090	40.4	36.1-44.7
\$50,000 - 74,999	40,767	46.3	40.1-52.4	23,036	31.6	25.8-37.4	63,803	39.6	35.3-44.0
\$75,000+	58,209	42.8	37.9-47.8	33,580	33.1	28.2-38.0	91,789	38.7	35.1-42.2



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/m²).

Obese is defined as a BMI of 30.0 or higher.

Prevalence WV: 35.6% (95% CI: 34.1-37.1)

U.S.: 28.9% (95% CI: 28.6-29.1)

The prevalence of obesity was significantly higher in West Virginia than in the U.S.

West Virginia ranked the 4th highest among 53 BRFSS participants.

Gender Men: 37.4% (95% CI: 35.2-39.5)

Women: 33.8% (95% CI: 31.7-35.8)

There was no gender difference in the prevalence of obesity.

Race/Ethnicity White, Non-Hispanic: 35.4% (95% CI: 33.9-36.9)

Black, Non-Hispanic: 44.0% (95% CI: 35.0-53.0) Other, Non-Hispanic: *29.3% (95% CI: 13.9-44.8) Multiracial, Non-Hispanic: *35.2% (95% CI: 21.0-49.4)

Hispanic: *35.9% (95% CI: 20.1-51.6)

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 6.

Age The prevalence of obesity was lowest in those aged 18-24 (20.7%), which was

significantly lower than all other age groups.

Education There was no difference in the prevalence of obesity between educational

attainment levels.

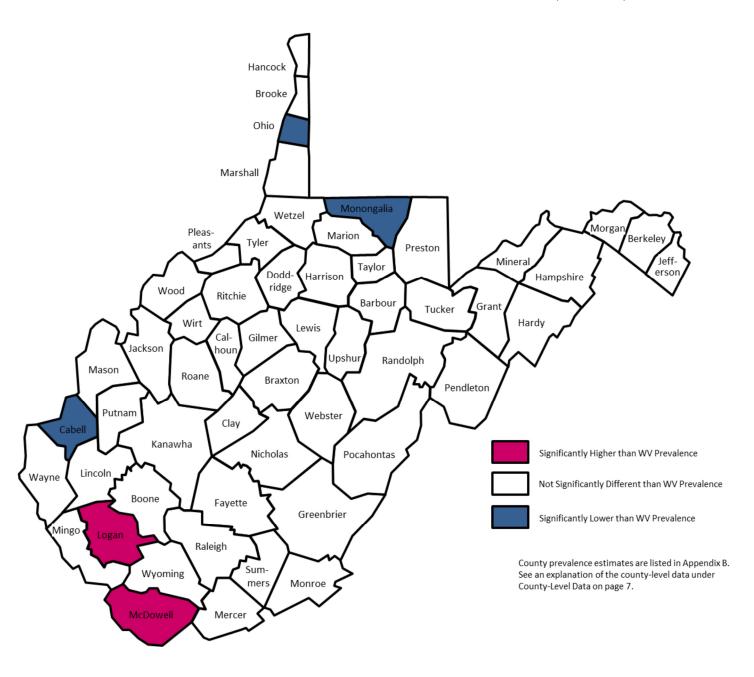
Household Income There was no difference in the prevalence of obesity between income brackets.

Table 4.2 Obesity Prevalence by Demographic Characteristics: WVBRFSS, 2015

Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
TOTAL	256,776	37.4	35.2-39.5	223,742	33.8	31.7-35.8	480,517	35.6	34.1-37.1
Age									
18-24	17,396	20.5	14.2-26.9	15,537	20.9	14.4-27.5	32,934	20.7	16.2-25.3
25-34	33,049	32.8	26.4-39.2	30,618	33.9	27.6-40.1	63,667	33.3	28.8-37.8
35-44	43,312	39.7	34.0-45.5	40,259	40.3	34.5-46.1	83,571	40.0	35.9-44.1
45-54	54,700	47.4	42.0-52.8	44,897	42.1	37.0-47.1	99,597	44.8	41.1-48.6
55-64	57,232	45.1	40.6-49.5	45,621	38.1	33.9-42.4	102,854	41.7	38.6-44.8
65+	50,806	34.2	30.4-38.1	45,560	26.9	23.7-30.0	96,366	30.3	27.8-32.8
Education									
Less than H.S.	41,157	38.5	32.3-44.7	36,397	34.8	28.9-40.7	77,554	36.7	32.4-40.9
H.S. or G.E.D.	115,955	39.8	36.3-43.3	90,921	36.6	33.3-39.9	206,875	38.3	35.9-40.7
Some Post-H.S.	60,307	33.7	29.5-37.9	61,942	33.5	29.6-37.4	122,249	33.6	30.7-36.5
College Graduate	38,951	35.7	31.6-39.8	34,482	27.7	24.2-31.2	73,433	31.4	28.7-34.1
Income									
Less than \$15,000	24,791	36.7	29.5-43.8	32,617	39.3	33.4-45.1	57,408	38.1	33.6-42.6
\$15,000 - 24,999	38,566	38.8	33.0-44.6	40,860	38.9	33.7-44.1	79,426	38.9	35.0-42.7
\$25,000 - 34,999	30,435	41.6	34.6-48.6	23,616	40.3	33.3-47.2	54,051	41.0	36.0-46.0
\$35,000 - 49,999	33,520	35.9	30.2-41.6	26,604	30.4	25.0-35.7	60,124	33.2	29.3-37.1
\$50,000 - 74,999	33,065	37.5	31.5-43.5	30,305	41.6	35.3-47.9	63,370	39.4	35.0-43.7
\$75,000+	52,908	38.9	34.1-43.7	27,606	27.2	22.2-32.2	80,514	33.9	30.4-37.4

Figure 4.1 Obesity Prevalence (Body Mass Index of 30.0 or Higher) by County: WVBRFSS, 2011-2015

WV Prevalence (2011-2015) - 34.5%



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/m²).

Overweight or obese is defined as a BMI of 25.0 or higher.

Prevalence WV: 71.1% (95% CI: 69.7-72.5)

U.S.: 64.6% (95% CI: 64.3-64.9)

The prevalence of overweight or obese in West Virginia was significantly higher than the U.S. prevalence. West Virginia ranked the highest among 53 BRFSS

participants.

Gender Men: 77.2% (95% CI: 75.2-79.2)

Women: 64.8% (95% CI: 62.7-66.8)

Men had a significantly higher prevalence of overweight or obese than women.

Race/Ethnicity White, Non-Hispanic: 71.2% (95% CI: 69.7-72.7)

Black, Non-Hispanic: 72.6% (95% CI: 63.9-81.2) **Other, Non-Hispanic**: *57.6% (95% CI: 42.2-73.0) **Multiracial, Non-Hispanic**: 73.9% (95% CI: 61.7-86.0)

Hispanic: *69.1% (95% CI: 52.6-85.6)

There was no race/ethnic difference in the prevalence of overweight or obese.

* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 6.

Age The 18-24 age group had the lowest prevalence of overweight or obese (50.3%)

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.

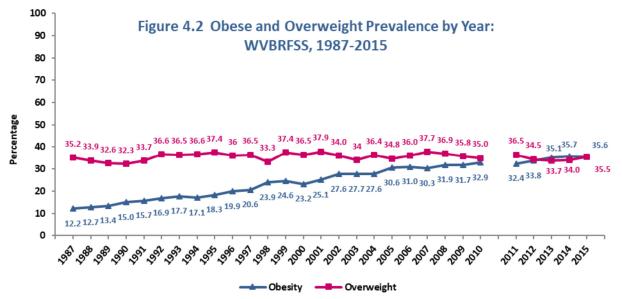
Household Income The prevalence of overweight or obese was highest among those with an annual

household income of \$50,000-\$74,999 (79.0%), significantly higher than among

those with an annual household income below \$25,000.

Table 4.2 Overweight or Obese Prevalence by Demographic Characteristics: WVBRFSS, 2015

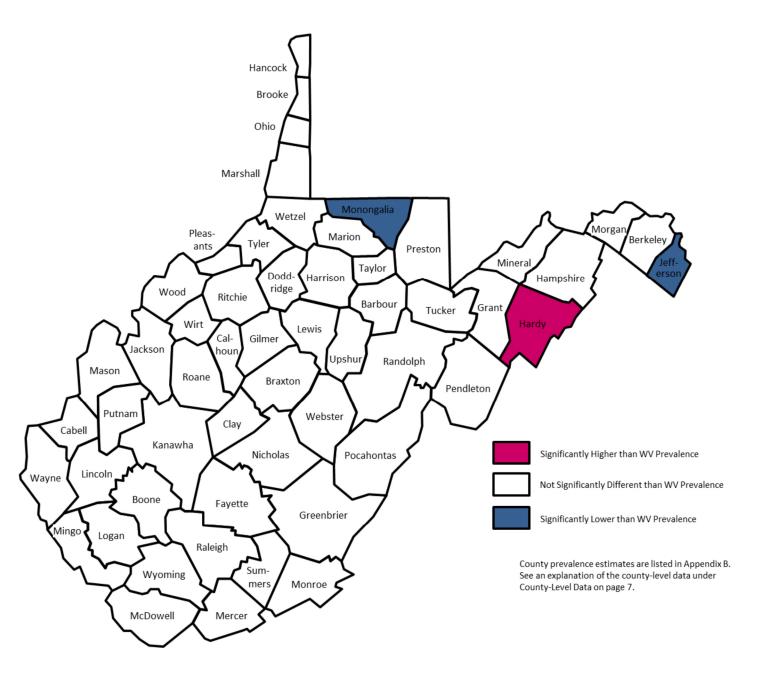
Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
TOTAL	530,606	77.2	75.2-79.2	429,386	64.8	62.7-66.8	959,993	71.1	69.7-72.5
Age									
18-24	48,460	57.2	49.0-65.4	31,581	42.5	34.5-50.4	80,041	50.3	44.6-56.1
25-34	76,558	75.9	70.2-81.7	57,341	63.4	57.3-69.5	133,899	70.0	65.8-74.2
35-44	87,577	80.3	75.5-85.1	68,475	68.6	62.8-74.3	156,051	74.7	70.9-78.5
45-54	98,947	85.7	82.2-89.3	77,051	72.2	67.7-76.7	175,998	79.2	76.4-82.1
55-64	101,878	80.2	76.7-83.8	86,929	72.6	68.8-76.5	188,807	76.6	74.0-79.2
65+	116,293	78.3	75.0-81.7	106,760	63.0	59.5-66.5	223,053	70.2	67.7-72.6
Education									
Less than H.S.	78,799	73.7	67.9-79.5	66,581	63.7	57.8-69.6	145,380	68.7	64.6-72.9
H.S. or G.E.D.	230,992	79.3	76.3-82.2	165,443	66.6	63.2-69.9	396,436	73.4	71.2-75.7
Some Post-H.S.	134,786	75.3	71.2-79.3	121,979	66.0	62.0-70.0	256,765	70.5	67.7-73.4
College Graduate	85,553	78.5	75.0-82.0	75,383	60.5	56.6-64.4	160,936	68.9	66.2-71.6
Income									
Less than \$15,000	49,861	73.7	67.5-80.0	54,883	66.1	60.3-71.9	104,744	69.5	65.2-73.8
\$15,000 - 24,999	75,816	76.3	71.3-81.3	70,883	67.5	62.3-72.7	146,699	71.8	68.1-75.4
\$25,000 - 34,999	57,810	79.0	72.9-85.2	39,197	66.8	59.9-73.8	97,007	73.6	69.0-78.3
\$35,000 - 49,999	74,345	79.6	74.7-84.5	58,870	67.2	61.7-72.8	133,215	73.6	69.9-77.3
\$50,000 - 74,999	73,832	83.8	79.5-88.0	53,341	73.2	67.6-78.8	127,173	79.0	75.5-82.5
\$75,000+	111,117	81.8	77.7-85.8	61,186	60.3	55.1-65.5	172,304	72.6	69.3-75.9



^{*}Due to changes in sample composition and weighting methodology, 2011-2015 results are not directly comparable to previous years.

Figure 4.3 Overweight or Obese Prevalence (Body Mass Index of 25.0 or Higher) by County: WVBRFSS, 2011-2015

WV Prevalence (2011-2015) - 69.3%



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: 30.8% (95% CI: 29.4-32.2)

U.S.: 26.1% (95% CI: 25.9-26.4)

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: 28.5% (95% CI: 26.5-30.6)

Women: 33.0% (95% CI: 31.1-35.0)

The prevalence of physical inactivity was significantly higher among females than

among males.

Race/Ethnicity White, Non-Hispanic: 30.9% (95% CI: 29.5-32.4)

Black, Non-Hispanic: 33.9% (95% CI: 25.9-42.0) Other, Non-Hispanic: *24.3% (95% CI: 10.3-38.3) Multiracial, Non-Hispanic: *23.7% (95% CI: 12.5-35.0)

Hispanic: *30.2% (95% CI: 15.2-45.1)

There was no race/ethnic difference in the prevalence of physical inactivity.

* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 6.

Age The prevalence of physical inactivity generally increased with age with the lowest

being among those 18-24 (16.4%), significantly lower than all other age groups,

and highest among those 65 and older (36.7%).

Education The prevalence of physical inactivity decreased significantly with increasing

education. The prevalence of physical inactivity among those lacking a high school education was 45.3%, whereas only 18.5% of college graduates were

physically inactive.

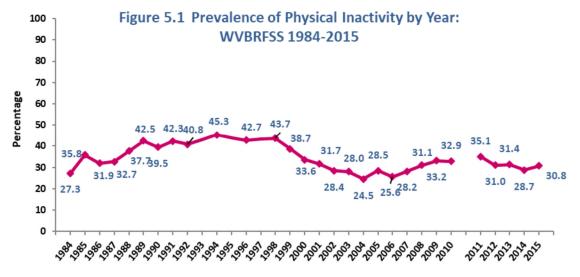
Household Income The prevalence of physical inactivity declined with increasing income levels. The

prevalence of physical inactivity was significantly higher among adults with incomes of less than \$15,000 (40.4%) than among persons with incomes of

\$35,000 or more.

Table 5.1 Prevalence of Physical Inactivity by Demographic Characteristics: WVBRFSS, 2015

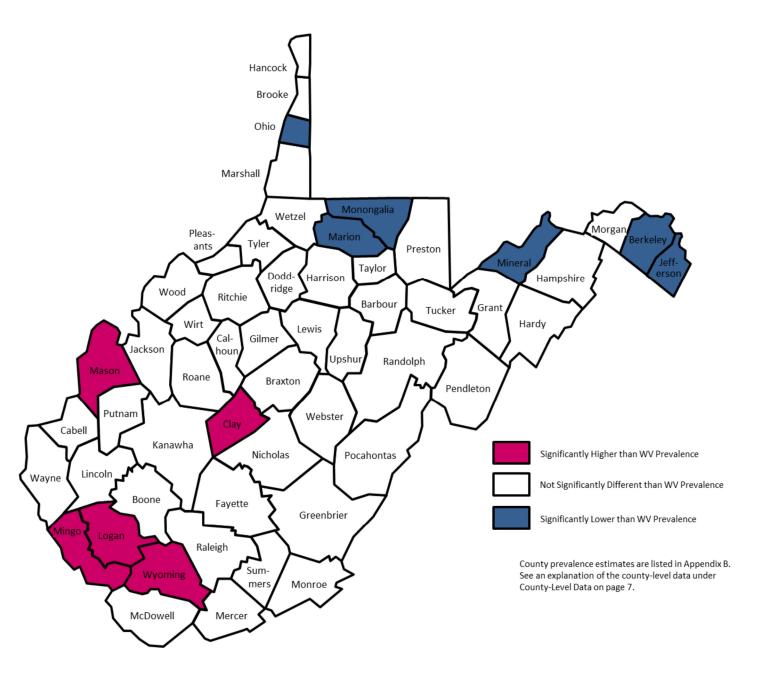
		Men			Women		Total			
Characteristic	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	
TOTAL	195,701	28.5	26.5-30.6	237,860	33.0	31.1-35.0	433,562	30.8	29.4-32.2	
Age										
18-24	14,594	17.3	10.9-23.8	12,064	15.4	10.0-20.7	26,659	16.4	12.2-20.6	
25-34	23,832	23.5	17.7-29.2	26,605	26.6	20.9-32.3	50,437	25.0	21.0-29.1	
35-44	29,012	27.0	21.7-32.3	31,240	29.1	23.8-34.5	60,252	28.1	24.3-31.8	
45-54	40,640	34.9	29.6-40.1	43,171	37.2	32.4-41.9	83,811	36.0	32.5-39.6	
55-64	41,261	32.7	28.4-36.9	47,555	36.7	32.7-40.7	88,816	34.7	31.8-37.6	
65+	45,508	31.0	27.1-34.9	75,271	41.3	37.8-44.7	120,779	36.7	34.1-39.3	
Education										
Less than H.S.	44,550	41.8	35.5-48.2	55,433	48.6	42.7-54.5	99,983	45.3	41.0-49.7	
H.S. or G.E.D.	90,645	31.3	28.0-34.6	104,955	39.0	35.8-42.2	195,600	35.0	32.7-37.3	
Some Post-H.S.	41,537	23.2	19.4-26.9	50,895	25.3	21.9-28.6	92,431	24.3	21.8-26.8	
College Graduate	18,628	17.0	13.8-20.1	26,494	19.7	16.8-22.7	45,122	18.5	16.3-20.6	
Income										
Less than \$15,000	25,898	37.0	30.0-44.0	37,839	43.2	37.5-49.0	63,736	40.4	36.0-44.9	
\$15,000 - 24,999	33,894	35.2	29.4-41.0	40,992	36.2	31.3-41.1	74,886	35.7	32.0-39.5	
\$25,000 - 34,999	23,820	33.2	26.3-40.1	19,545	30.6	24.3-36.9	43,365	32.0	27.3-36.7	
\$35,000 - 49,999	23,932	25.8	20.6-31.0	28,734	31.9	26.5-37.4	52,666	28.8	25.1-32.6	
\$50,000 - 74,999	20,370	23.1	17.9-28.3	25,686	33.6	27.6-39.7	46,056	28.0	24.0-32.0	
\$75,000+	28,108	21.3	17.3-25.3	22,446	20.2	16.2-24.2	50,554	20.8	18.0-23.7	



^{*}Due to changes in sample composition and weighting methodology, 2011-2015 results are not directly comparable to previous years.

Figure 5.2 Prevalence of Physical Inactivity by County: WVBRFSS, 2011-2015

WV Prevalence (2011-2015) - 31.4%



Physical Activity Levels

Definition

Highly active is defined as doing enough physical activity to meet the 300 minute

per week aerobic recommendation.

Active is defined as doing 150-300 minutes of aerobic physical activity per week. Insufficiently active is defined as doing insufficient physical activity (11-149 minutes per week).

Inactive is defined as doing no physical activity.

Prevalence

Highly Active:

WV: 32.8% (95% CI: 31.3-34.2) **U.S.: 31.1%** (95% CI: 30.9-31.4)

The prevalence of highly active in West Virginia was similar to that for the U.S. West Virginia ranked the 22nd highest among 53 BRFSS participants.

Active:

WV: 14.8% (95% CI: 13.7-15.9) **U.S.: 19.3%** (95% CI: 19.0-19.5)

The prevalence of active in West Virginia was significantly lower in West Virginia than in the U.S. West Virginia ranked lowest among 53 BRFSS participants.

Insufficiently Active:

WV: 18.8% (95% CI: 17.5-20.0) **U.S.: 20.8%** (95% CI: 20.5-21.1)

The prevalence of insufficiently active in West Virginia was significantly lower in West Virginia than in the U.S. West Virginia ranked the 13th lowest among 53 BRFSS participants.

Inactive:

WV: 33.7% (95% CI: 32.2-35.2) **U.S.: 28.8%** (95%CI: 28.5-29.1)

The prevalence of inactive was significantly higher in West Virginia than in the U.S. West Virginia ranked the 9th highest among 53 BRFSS participants.

Gender

Highly Active:

Men: 35.1% (95% CI: 32.9-37.4) **Women**: 30.5% (95% CI: 28.6-32.5)

Men had a significantly higher prevalence of being highly active than women.

Active:

Men: 14.5% (95% CI: 12.9-16.2) **Women**: 15.0% (95% CI: 13.5-16.5)

There was no gender difference in the prevalence of the active level.

Insufficiently Active:

Men: 18.7% (95% CI: 16.8-20.5) **Women**: 18.8% (95% CI: 17.2-20.5)

There was no gender difference in the prevalence of the insufficiently active level.

Inactive:

Men: 31.7% (95% CI: 29.5-33.9) **Women**: 35.6% (95% CI: 33.6-37.6)

There was no gender difference in the prevalence of the inactive level.

Race/Ethnicity

No race/ethnicity statistics are reported due to unreliable estimates.

Age

There was no age difference in the prevalence of highly active or active. The prevalence of insufficiently active was significantly lower among those 65 and older (13.0%) than among those under 35 years old. The prevalence of inactive generally increased with age and was significantly lower among those 18-24 (21.0%) than among those 35 and over.

Education

The prevalence of highly active was significantly higher among college graduates than among those with a high school education or less than a high school education. The prevalence of active was significantly lower among those with less than a high school education than all other educational attainment levels and significantly higher among college graduates than among all other educational attainment levels. The prevalence of insufficient activity was significantly higher among those with some post-high school education and college graduates than among those with less than high school or high school education. The prevalence of inactive decreased significantly with each level of increasing education.

Household Income

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 (40.4%) than among persons with incomes of \$35,000 or more.



Table 5.2 Prevalence of Physical Activity Levels by Demographic Characteristics: WVBRFSS, 2015

	Hig	hly Acti	ve		Active		Insufficiently Active			Inactive		
Characteristic	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
TOTAL	195,701	28.5	26.5-30.6	237,860	33.0	31.1-35.0	237,860	33.0	31.1-35.0	433,562	30.8	29.4-32.2
Sex												
Male	228,484	35.1	32.9-37.4	94,514	14.5	12.9-16.2	121,373	18.7	16.8-205	206,146	31.7	29.5-33.9
Female	210,777	30.5	28.6-32.5	103,377	15.0	13.5-16.5	130,082	18.8	17.2-20.5	245,998	35.6	33.6-37.6
Age												
18-24	55,329	35.6	30.0-41.2	25,931	16.7	12.3-21.0	41,658	26.8	21.6-32.0	32,619	21.0	16.1-25.8
25-34	66,128	34.3	29.8-38.8	33,555	17.4	13.9-20.9	40,071	20.8	17.0-24.5	53,242	27.6	23.3-31.9
35-44	70,050	34.1	30.0-38.2	32,177	15.7	12.7-18.7	39,653	19.3	16.1-22.5	63,369	30.9	26.9-34.8
45-54	60,526	27.0	23.7-30.3	32,378	14.4	12.0-16.9	46,142	20.6	17.6-23.5	85,185	38.0	34.3-41.6
55-64	75,526	30.4	27.6-33.2	38,676	15.6	13.4-17.8	43,416	17.5	15.1-19.9	90,621	36.5	33.5-39.5
65+	111,702	35.8	33.2-38.4	35,174	11.3	9.7-12.9	40,514	13.0	11.2-14.8	124,301	39.9	37.2-42.6
Education												
Less than H.S.	58,607	28.2	24.0-32.4	17,005	8.2	5.8-10.5	29,139	14.0	10.8-17.2	103,231	49.6	45.1-54.1
H.S. or G.E.D.	168,453	31.7	29.4-34.1	71,902	13.5	11.8-15.3	87,681	16.5	14.6-18.4	202,778	38.2	35.8-40.6
Some Post-H.S.	122,165	33.5	30.6-36.4	61,555	16.9	14.5-19.2	83,583	22.9	20.3-25.6	97,323	26.7	24.0-29.4
College Graduate	89,685	38.0	35.2-40.8	47,068	19.9	17.6-22.3	51,052	21.6	19.2-24.1	48,387	20.5	18.2-22.8
Income												
Less than \$15,000	44,541	29.5	25.2-33.8	16,677	11.1	8.4-13.8	22,980	15.2	11.7-18.8	66,679	44.2	39.6-48.8
\$15,000 - 24,999	59,748	29.9	26.1-33.7	24,173	12.1	9.6-14.6	38,644	19.3	16.1-22.5	77,299	38.7	34.7-42.6
\$25,000 - 34,999	43,468	33.3	28.5-38.1	21,031	16.1	12.3-19.9	22,267	17.0	13.2-20.9	43,855	33.6	28.7-38.4
\$35,000 - 49,999	58,484	32.9	28.8-36.9	26,226	14.7	11.6-17.9	37,230	20.9	17.4-24.5	56,005	31.5	27.5-35.5
\$50,000 - 74,999	54,020	34.1	29.9-38.3	24,589	15.5	12.4-18.7	32,153	20.3	16.7-23.9	47,744	30.1	28.0-34.3
\$75,000+	81,664	34.6	31.2-38.1	47,643	20.2	17.2-23.2	54,648	23.2	19.9-26.4	51,972	22.0	19.1-25.0

Physical Activity Recommendations

Definition

Met aerobic activity recommendation 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 recommendation 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 recommendations 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 recommendations only:

WV: 34.2% (95% CI: 32.7-35.7) **U.S.: 30.2%** (95% CI: 30.0-30.5)

The prevalence of met aerobic recommendation only was significantly higher for West Virginia than for the U.S. West Virginia ranked the 10th highest among 53 BRFSS participants.

Met muscle strengthening recommendation only:

WV: 7.1% (95% CI: 6.3-8.0) **U.S.: 9.9** (95% CI: 9.7-10.1)

The prevalence of met muscle strengthening recommendation only was significantly lower for West Virginia than for the U.S. West Virginia ranked the 2nd lowest among 53 BRFSS participants.

Met both aerobic and muscle strengthening recommendations:

WV: 13.8% (95% CI: 12.7-14.9) **U.S.: 20.3%** (95% CI: 20.1-20.6)

The prevalence of met both aerobic and muscle strengthening recommendations was significantly lower for West Virginia than for the U.S. West Virginia ranked the 2nd lowest.

Did not meet either aerobic or muscle strengthening recommendations:

WV: 44.9% (95% CI: 43.3-46.5) **U.S.: 39.6%** (95% CI: 39.3-39.9)

The prevalence of did not meet either aerobic or muscle strengthening recommendations was significantly higher for West Virginia than for the U.S. West Virginia ranked the 8th highest among 53 BRFSS participants.

Gender Met aerobic recommendation only:

Men: 35.3% (95% CI: 33.1-37.5) **Women**: 33.2% (95% CI: 31.2-35.1)

There was no gender difference in meeting aerobic recommendations only.

Met muscle strengthening recommendation only:

Men: 8.4% (95% CI: 7.0-9.8) **Women**: 5.9% (95% CI: 4.9-6.9)

Men had a significantly higher prevalence of meeting muscle strengthening

recommendation only than women.

Met both aerobic and muscle strengthening recommendations:

Men: 14.7% (95% CI: 13.0-16.4) Women: 12.9% (95% CI: 11.5-14.4)

There was no gender difference in the prevalence of meeting both aerobic and

muscle strengthening recommendations.

Did not meet either aerobic or muscle strengthening recommendations:

Men: 41.6% (95% CI: 39.3-43.9) **Women**: 48.0% (95% CI: 45.9-50.1)

Women had a significantly higher prevalence of not meeting either aerobic or

muscle strengthening activity recommendations than men.

Race/Ethnicity

No race/ethnicity statistics are reported due to unreliable estimates.

Age

The prevalence of meeting aerobic recommendation only was highest among those aged 65 and older (38.4%), significantly higher than among those aged 18-24 (26.7%). The prevalence of meeting muscle strengthening recommendation only generally decreased with age and was significantly higher among those aged 18-24 (14.1%) than among those 45 and older and significantly lower among those aged 65 and older (4.0%) than among those under 45. The prevalence of meeting both aerobic and muscle strengthening recommendations was highest among those 18-24, significantly higher than among those 35 and older. The prevalence of meeting neither aerobic or muscle strengthening recommendation was highest among those aged 45-54 (51.6%) which was significantly higher than those under age 45.

Education

There was no education difference in the prevalence of those meeting aerobic recommendation only. The prevalence of meeting muscle strengthening recommendation only was highest among those with some post-high school education (10.0%), significantly higher than among those with less than a high school education (5.5%) or those with high school education (5.4%). The prevalence of meeting both aerobic and muscle strengthening recommendations was significantly lower among those with les than a high school education or with a high school education than among those with some college or college graduates.



Household Income

There was no income difference in the prevalence of those who met aerobic recommendation only or those who met muscle strengthening recommendation only. The prevalence of meeting both aerobic and muscle strengthening recommendations was significantly higher among those with an income of \$75,000 or more (22.9%) than among all other income levels. The prevalence of meeting neither aerobic nor muscle strengthening recommendation decreased with increasing income and was significantly higher among those with an income of less than \$15,000 than among those with an income of \$25,000 or more.

Table 5.3 Prevalence of Meeting Physical Activity Recommendations by Demographic Characteristics: WVBRFSS, 2015

Characteristic	Met Aerobi	ic Guide	lines Only	Met Muscle Strengthening Guidelines Only			Met Both Aerobic and Muscle Strengthening			Didn't Meet Aerobic or Muscle Strengthening Guide-		
Characteristic	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
TOTAL	459,165	34.2	32.7-35.7	95,425	7.1	6.3-8.0	184,881	13.8	12.7-14.9	602,520	44.9	43.3-46.5
Sex												
Male	230,478	35.3	33.1-37.5	54,818	8.4	7.0-9.8	95,776	14.7	13.0-16.4	271,264	41.6	39.3-43.9
Female	228,687	33.2	31.2-35.1	40,607	5.9	4.9-6.9	89,105	12.9	11.5-14.4	331,256	48.0	45.9-50.1
Age												
18-24	41,479	26.7	21.5-31.9	21,873	14.1	9.9-18.3	39,895	25.7	20.6-30.8	52,123	33.5	28.0-39.1
25-34	64,221	33.5	29.0-37.9	16,137	8.4	5.8-11.0	34,848	18.2	14.5-21.8	76,534	39.9	35.3-44.6
35-44	74,572	36.4	32.3-40.4	17,598	8.6	6.2-10.9	29,539	14.4	11.3-17.5	83,342	40.6	36.5-44.8
45-54	68,997	30.5	27.1-33.9	13,829	6.1	4.3-7.9	26,625	11.8	9.5-14.0	116,733	51.6	47.9-55.3
55-64	89,327	36.2	33.2-39.2	13,390	5.4	4.1-6.8	24,705	10.0	8.2-11.8	119,372	48.4	45.3-51.5
65+	120,568	38.4	35.8-41.0	12,520	4.0	2.9-5.1	29,269	9.3	7.9-10.8	151,685	48.3	45.6-51.0
Education												
Less than H.S.	60,807	29.6	25.4-33.7	11,123	5.4	3.3-7.5	15,234	7.4	4.8-10.1	118,598	57.6	53.1-62.1
H.S. or G.E.D.	186,509	35.0	32.6-37.4	28,290	5.3	4.0-6.6	56,936	10.7	9.0-12.4	260,702	49.0	46.4-51.5
Some Post-H.S.	125,199	34.2	31.3-37.0	36,704	10.0	8.1-12.0	60,742	16.6	14.1-19.0	143,876	39.3	36.3-42.3
College Graduate	86,236	36.5	33.7-39.3	19,308	8.2	6.5-9.8	51,670	21.9	19.4-24.3	78,989	33.4	30.7-36.2
Income												
Less than \$15,000	45,652	30.3	26.1-34.5	8,387	5.6	3.4-7.7	15,649	10.4	7.4-13.3	80,818	53.7	49.0-58.4
\$15,000 - 24,999	64,409	32.5	28.7-36.2	13,137	6.6	4.6-8.6	20,615	10.4	7.7-13.1	100,125	50.5	46.5-54.5
\$25,000 - 34,999	48,075	36.7	31.8-41.6	9,041	6.9	4.0-9.8	17,143	13.1	9.6-16.6	56,703	43.3	38.3-48.3
\$35,000 - 49,999	57,517	32.3	28.3-36.3	15,669	8.8	5.9-11.7	28,094	15.8	12.4-19.2	76,760	43.1	38.9-47.4
\$50,000 - 74,999	60,802	38.3	33.9-42.6	10,474	6.6	4.3-8.9	18,789	11.8	9.1-14.6	68,869	43.3	38.9-47.8
\$75,000+	76,037	32.1	28.8-35.4	22,476	9.5	7.2-11.8	54,219	22.9	19.7-26.1	83,926	35.5	32.0-39.0

Fruit and Vegetable Consumption

Definition Consuming fewer than five servings of fruits and vegetables on a daily basis in the

past month.

Prevalence WV: 91.7% (95% CI: 90.9-92.6)

U.S.: 83.4% (95% CI: 83.2-83.6)

The prevalence of 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 2nd highest among 53 BRFSS participants.

Gender Men: 94.0% (95% CI: 92.9-95.1)

Women: 89.6% (95% CI: 88.3-90.9)

The prevalence of consuming fewer than five servings of fruits and vegetables

daily was significantly higher among men than among women.

Race/Ethnicity White, Non-Hispanic 91.7% (95% CI: 90.8-92.6)

Black, Non-Hispanic: 91.2% (95% CI: 85.6-96.9)
Other, Non-Hispanic: 97.0% (95% CI: 93.4-100.0)
Multiracial, Non-Hispanic: *84.2% (95% CI: 71.2-97.3)

Hispanic: *91.6% (95% CI: 84.0-99.3)

The prevalence of consuming fewer than five servings of fruits and vegetables daily was significantly higher among Other, Non-Hispanics than among White,

Non-Hispanics.

* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 6

Age There was no age difference in the prevalence of consuming fewer than five

servings of fruits and vegetables daily.

Education The prevalence of consuming fewer than five servings of fruits and vegetables

daily was significantly higher among those with less than a high school education (95.2%) and those with a high school education or GED (93.7%) than among those

with some post-high school education (90.6%) or college graduates (86.1%).

Household Income In general, the prevalence of consuming fewer than five servings of fruits and

vegetables daily declined with increasing income levels. The prevalence of consuming fewer than five servings of fruits and vegetables daily was significantly lower among adults with incomes of \$75,000 or more (87.4%) than among adults

with incomes less than \$50,000.

CHAPTER 6: NUTRITION

Table 6.1 Prevalence of Consuming Less than Five Servings of Fruits and Vegetables Daily by Demographic Characteristics: WVBRFSS, 2015

		Men			Women		Total			
Characteristic	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	
TOTAL	583,600	94.0	92.9-95.1	590,903	89.6	88.3-90.9	117,4504	91.7	90.9-92.6	
Age										
18-24	72,889	93.9	89.8-98.0	66,366	90.6	86.2-94.9	139,255	92.3	89.3-95.3	
25-34	85,090	92.9	89.4-96.3	80,670	87.2	83.2-91.1	165,760	90.0	87.4-92.7	
35-44	94,917	94.5	91.7-97.3	86,804	86.6	82.5-90.7	181,721	90.5	88.0-93.0	
45-54	100,769	94.2	91.9-96.5	101,051	92.1	89.7-94.6	201,820	93.2	91.5-94.9	
55-64	108,007	94.6	92.7-96.5	109,542	89.8	87.3-92.3	217,549	92.1	90.5-93.7	
65+	119,375	93.8	91.8-95.8	142,413	90.6	88.4-92.8	261787	92.0	90.5-93.6	
Education										
Less than H.S.	88,411	96.3	93.7-98.9	90,683	94.2	91.2-97.2	179,093	95.2	93.2-97.2	
H.S. or G.E.D.	249,309	95.4	93.9-97.0	225,968	91.9	90.0-93.9	475,277	93.7	92.5-95.0	
Some Post-H.S.	154,315	93.4	91.0-95.7	166,901	88.2	85.5-90.9	321,217	90.6	88.8-92.4	
College Graduate	90,845	89.2	86.4-91.9	106,598	83.7	80.9-86.5	197,444	86.1	84.1-88.1	
Income										
Less than \$15,000	60,860	96.9	94.0-99.7	73,696	91.2	87.7-94.7	134,556	93.7	91.4-96.0	
\$15,000 - 24,999	84,745	96.3	94.3-98.2	92,608	91.5	88.3-94.6	177,354	93.7	91.8-95.6	
\$25,000 - 34,999	62,367	95.2	91.9-98.4	55,174	89.8	85.7-94.0	117,542	92.6	90.0-95.2	
\$35,000 - 49,999	78877	93.8	90.5-97.0	79,620	93.0	90.2-95.7	158,497	93.4	91.2-95.5	
\$50,000 - 74,999	78,150	94.5	91.6-97.3	64,433	88.7	84.7-92.6	142,583	91.7	89.3-94.2	
\$75,000+	114,571	91.0	88.2-93.9	87,458	83.0	79.3-86.8	202,029	87.4	85.1-89.7	

Figure 6.1 Prevalence of Consuming Less than Five Servings of Fruits and Vegetables Daily by Year: WVBRFSS, 1994-2015

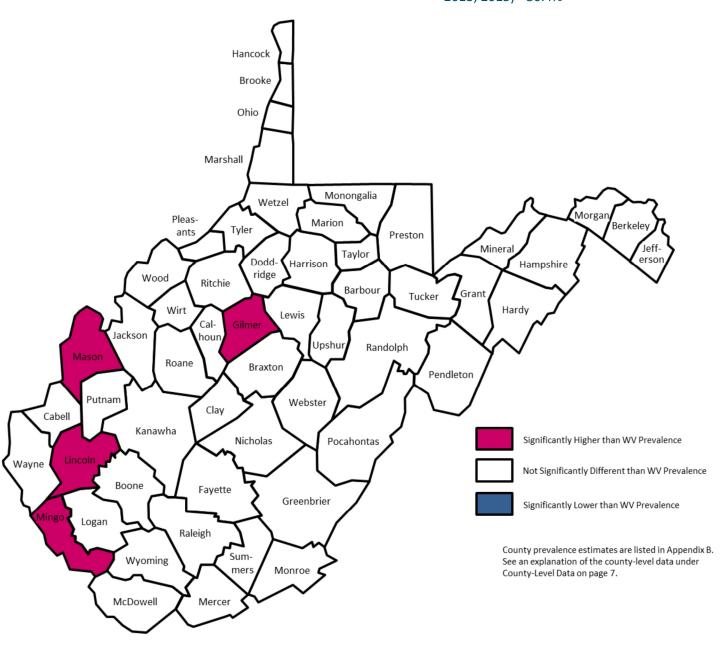


^{*}Due to changes in sample composition and weighting methodology, 2011-2015 results are not directly comparable to previous years.

CHAPTER 6: NUTRITION

Figure 6.2 Prevalence of Consuming Less than Five Servings of Fruits and Vegetables Daily by County: WVBRFSS, 2007, 2009, 2011, 2015, 2015

WV Prevalence (2007, 2009, 2011, 2013, 2015) - 86.4%



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: 25.7% (95% CI: 24.3-27.1)

U.S.: 16.7% (95% CI: 16.5-17.0)

The West Virginia prevalence of current cigarette smoking was significantly higher than the national prevalence. West Virginia ranked the 3rd highest among the 53

BRFSS participants.

Gender Men: 25.7% (95% CI: 23.7-27.8)

Women: 25.7% (95% CI: 23.8-27.5)

There was no gender difference in the prevalence of current cigarette smoking.

Race/Ethnicity White, Non-Hispanic: 25.3% (95% CI: 23.8-26.7)

Black, Non-Hispanic: 30.6% (95% CI: 22.4-38.9) Other, Non-Hispanic: *39.1% (95% CI: 23.6-54.6) Multiracial, Non-Hispanic: *35.6% (95% CI: 22.3-48.9)

Hispanic: *26.3% (95% CI: 11.5-41.0)

There was no race/ethnicity difference in the prevalence of current cigarette

smoking.

* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 6.

Age The prevalence of current cigarette smoking was highest among those aged 25-34

(36.3%), significantly higher than among those aged 18-24 (25.5%) and among those aged 55 and older. The prevalence of current smoking was significantly

lower among those 65 and older (10.7%) than among all other age groups.

Education The prevalence of current cigarette smoking decreased with increasing education.

It was lowest among college graduates (12.0%) 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 (37.7%), and the prevalence was

significantly higher than all other education groups.

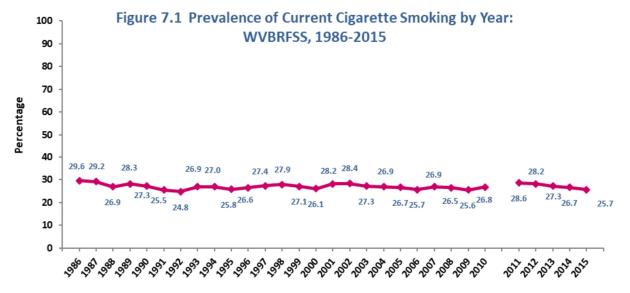
Household Income The prevalence of current cigarette smoking decreased as annual household

income increased. The highest prevalence of current cigarette smoking was among those earning less than \$15,000 per year (42.5%), significantly higher than among those with income levels of \$25,000 or more per year. The lowest prevalence of smoking was among adults earning \$75,000 or more per year

(13.9%), significantly lower than those with incomes less than \$50,000.

Table 7.1 Prevalence of Current Cigarette Smoking by Demographic Characteristics: WVBRFSS, 2015

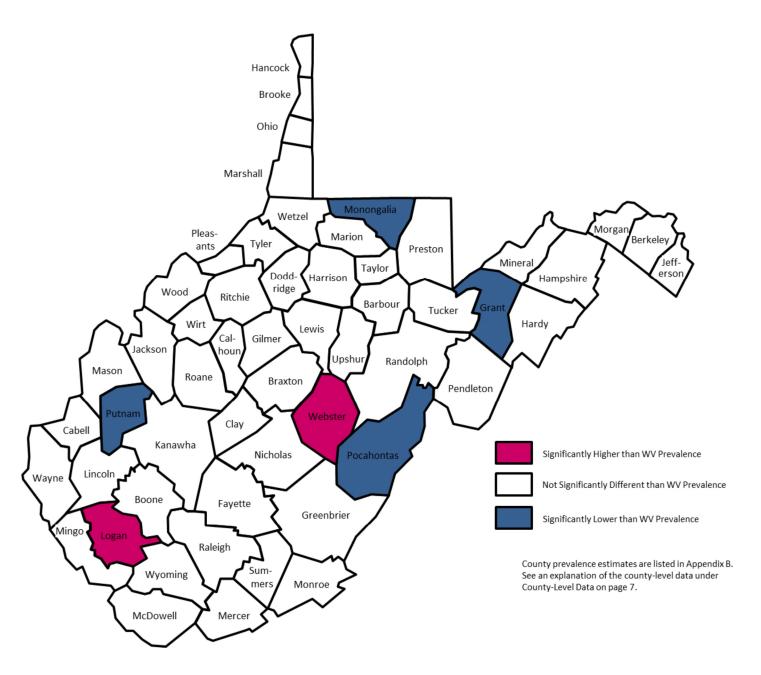
		Men			Women		Total			
Characteristic	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	
TOTAL	180,814	25.7	23.7-27.8	188,788	25.7	23.8-27.5	369,602	25.7	24.3-27.1	
Age										
18-24	21,494	24.4	17.4-31.5	21,809	26.6	19.7-33.5	43,303	25.5	20.5-30.4	
25-34	35,782	34.2	27.8-40.6	39,812	38.4	32.3-44.4	75,595	36.3	31.9-40.7	
35-44	35,123	32.0	26.4-37.6	37,615	34.4	28.9-39.9	72,739	33.2	29.3-37.1	
45-54	36,104	30.4	25.4-35.4	37,364	31.6	27.1-36.2	73,467	31.0	27.6-34.4	
55-64	36,403	28.3	24.2-32.4	31,314	23.6	20.1-27.1	67,718	25.9	23.2-28.6	
65+	15,479	10.4	7.9-12.8	20,240	11.0	8.7-13.3	35719	10.7	9.0-12.4	
Education										
Less than H.S.	37,067	34.0	27.8-40.2	47,886	41.1	35.2-47.0	84,952	37.7	33.4-41.9	
H.S. or G.E.D.	82,313	27.7	24.4-31.0	71,170	25.7	22.7-28.6	153,483	26.7	24.5-28.9	
Some Post-H.S.	45,743	25.2	21.2-29.1	54,382	26.4	22.9-30.0	100,125	25.8	23.2-28.5	
College Graduate	14,411	12.8	10.0-15.7	15,350	11.3	8.9-13.7	29,762	12.0	10.1-13.9	
Income										
Less than \$15,000	30,867	43.8	36.6-51.0	36,964	41.5	35.7-47.2	67,831	42.5	38.0-47.0	
\$15,000 - 24,999	35,032	34.7	29.0-40.4	40,813	35.1	30.0-40.1	75,846	34.9	31.1-38.7	
\$25,000 - 34,999	22,129	30.2	23.4-37.0	18,414	28.4	21.9-34.9	40,543	29.3	24.6-34.0	
\$35,000 - 49,999	20,246	21.7	16.5-26.9	22,235	24.0	18.8-29.2	42,481	22.8	19.2-26.5	
\$50,000 - 74,999	19,754	22.0	16.7-27.3	13,741	17.7	12.3-23.1	33,495	20.0	16.2-23.8	
\$75,000+	20,567	15.2	11.4-19.0	14,086	12.3	8.8-15.8	34,654	13.9	11.3-16.5	



^{*}Due to changes in sample composition and weighting methodology, 2011-2015 results are not directly comparable to previous years.

Figure 7.2 Prevalence of Current Cigarette Smoking by County: WVBRFSS, 2011-2015

WV Prevalence (2011-2015) - 27.3%





Smoking Cessation

Definition 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: 55.8% (95% CI: 52.6-58.9)

U.S.: 60.5% (95% CI: 59.7-61.2)

The U.S. prevalence of smoking cessation was significantly higher than the West Virginia prevalence. West Virginia ranked the 5th lowest among 53 BRFSS

participants.

Gender Men: 53.0% (95% CI: 48.3-57.7)

Women: 58.4% (95% CI: 54.1-62.6)

There was no gender difference in the prevalence of smoking cessation.

Race/Ethnicity No race/ethnicity statistics are reported due to unreliable estimates.

Age There was no age difference in the prevalence of smoking cessation.

Education There was no educational attainment difference in the prevalence of smoking

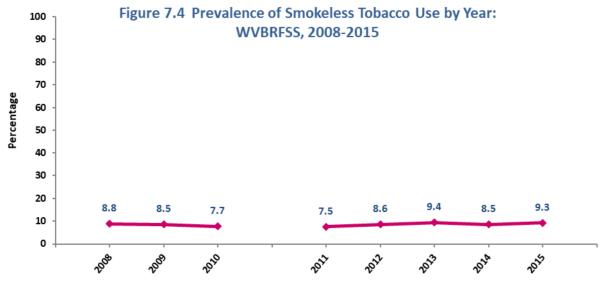
cessation.

Household Income There was no annual household income difference in the prevalence of smoking

cessation.

Table 7.2 Prevalence of Smoking Cessation by Demographic Characteristics: WVBRFSS, 2015

		Men			Women		Total			
Characteristic	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	
TOTAL	95,629	53.0	48.3-57.7	110,224	58.4	54.1-62.6	205,852	55.8	52.6-58.9	
Age										
18-24	14,936	69.5	54.7-84.3	13,872	63.6	48.6-78.6	28,808	66.5	55.9-77.1	
25-34	19,091	54.0	42.4-65.6	25,811	64.8	54.9-74.8	44,902	59.7	52.1-67.4	
35-44	17,327	49.3	38.5-60.2	21,472	57.1	47.2-67.0	38,799	53.3	46.0-60.7	
45-54	18,258	50.6	40.6-60.6	21,348	57.1	48.3-65.9	39,605	53.9	47.2-60.6	
55-64	18,750	51.5	42.8-60.3	16,260	51.9	43.4-60.4	35,010	51.7	45.6-57.8	
65+	6,839	44.2	31.6-56.8	10,958	54.1	42.9-65.3	17,796	49.8	41.4-58.2	
Education										
Less than H.S.	18,790	50.7	39.3-62.1	25,691	53.7	44.0-63.3	44,482	52.4	45.0-59.8	
H.S. or G.E.D.	45,354	55.1	48.2-62.0	39,682	55.8	49.1-62.4	85,036	55.4	50.6-60.2	
Some Post-H.S.	23,264	50.9	41.8-59.9	35,318	64.9	57.5-72.4	58,582	58.5	52.6-64.4	
College Graduate	7,963	56.9	45.0-68.8	9,532	62.1	51.3-72.8	17,495	59.6	51.6-67.6	
Income										
Less than \$15,000	18,515	60.0	48.7-71.3	19,551	52.9	43.6-62.2	38,066	56.1	48.9-63.4	
\$15,000 - 24,999	18,259	52.1	41.8-62.4	24,250	59.4	50.4-68.4	42,509	56	49.2-62.9	
\$25,000 - 34,999	11,833	53.5	39.7-67.2	11,528	62.6	49.5-75.7	23,360	57.6	48.0-67.2	
\$35,000 - 49,999	8,806	43.5	29.9-57.1	12,409	55.8	43.4-68.2	21,215	49.9	40.6-59.2	
\$50,000 - 74,999	11,668	60.4	46.8-73.9	8,484	61.7	45.2-78.3	20,152	60.9	50.5-71.4	
\$75,000+	9,087	44.2	30.6-57.7	8,133	57.7	42.7-72.8	17,220	49.7	39.5-59.9	



^{*}Due to changes in sample composition and weighting methodology, 2011-2015 results are not directly comparable to previous years.

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: 9.3% (95% CI: 8.3-10.3)

U.S.: 3.7% (95% CI: 3.5-3.8)

The West Virginia prevalence of smokeless tobacco use was significantly higher than the U.S. prevalence. West Virginia ranked the highest among 53 BRFSS

participants.

Gender Men: 18.2% (95% CI: 16.3-20.0)

Women: 0.8% (95% CI: 0.5-1.2)

There was a significant gender difference in the prevalence of smokeless tobacco

use with men having a significantly higher prevalence than women.

Race/Ethnicity No race/ethnicity statistics are reported due to unreliable estimates.

Age The prevalence of smokeless tobacco use was highest among those aged 35-44

(13.6%) and lowest among those aged 65 and older (5.0%), a significant

difference.

Education College graduates had the lowest prevalence of smokeless tobacco use (5.0%),

and this prevalence was significantly lower than the prevalence among those with less than a high school education (12.3%) and those with a high school degree

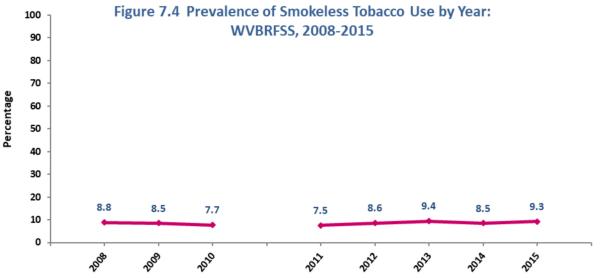
(11.4%).

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

Table 7.3 Prevalence of Smokeless Tobacco Use by Demographic Characteristics: WVBRFSS, 2015

		Men			Women		Total			
Characteristic	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	
TOTAL	127,652	18.2	16.3-20.0	6,280	0.8	0.5-1.2	133,932	9.3	8.3-10.3	
Age										
18-24	20,324	23.1	16.3-29.9	1,436	*1.8	0.0-3.7	21,760	12.8	9.0-16.7	
25-34	19,428	18.5	13.1-23.9	827	*0.8	0.0-1.9	20,255	9.7	6.8-12.6	
35-44	29,814	27.0	21.7-32.4	147	*0.1	0.0-0.4	29,961	13.6	10.7-16.6	
45-54	26,463	22.4	17.8-27.0	1,347	*1.1	0.2-2.0	27,810	11.7	9.3-14.2	
55-64	15,693	12.2	8.9-15.4	1,267	*1.0	0.2-1.7	16,960	6.5	4.8-8.2	
65+	15,612	10.4	7.9-12.9	1,256	*0.7	0.1-1.3	16,868	5.0	3.8-6.2	
Education										
Less than H.S.	26,284	24.0	18.5-29.5	1,711	*1.5	0.1-2.8	27,996	12.3	9.4-15.3	
H.S. or G.E.D.	63,733	21.4	18.4-24.5	1,697	*0.6	0.1-1.1	65,430	11.4	9.7-13.1	
Some Post-H.S.	25,008	13.7	10.4-17.1	2,068	*1.0	0.2-1.8	27,076	7.0	5.3-8.7	
College Graduate	11,571	10.3	7.6-13.1	804	*0.6	0.1-1.1	12,375	5.0	3.7-6.3	
Income										
Less than \$15,000	16,429	23.2	16.8-29.6	430	*0.5	0.0-1.2	16,859	10.5	7.4-13.6	
\$15,000 - 24,999	15,602	15.5	11.2-19.7	1,205	*1.0	0.0-2.0	16,807	7.7	5.6-9.8	
\$25,000 - 34,999	14,421	19.7	13.4-25.9	449	*0.7	0.0-1.7	14,869	10.8	7.2-14.3	
\$35,000 - 49,999	15,438	16.5	11.6-21.4	364	*0.4	0.0-0.9	15,802	8.5	5.9-11.1	
\$50,000 - 74,999	14,544	16.3	11.5-21.1	966	*1.2	0.1-2.4	15,510	9.3	6.5-12.1	
\$75,000+	25,381	18.7	14.6-22.9	230	*0.2	0.0-0.5	25,611	10.2	7.9-12.6	

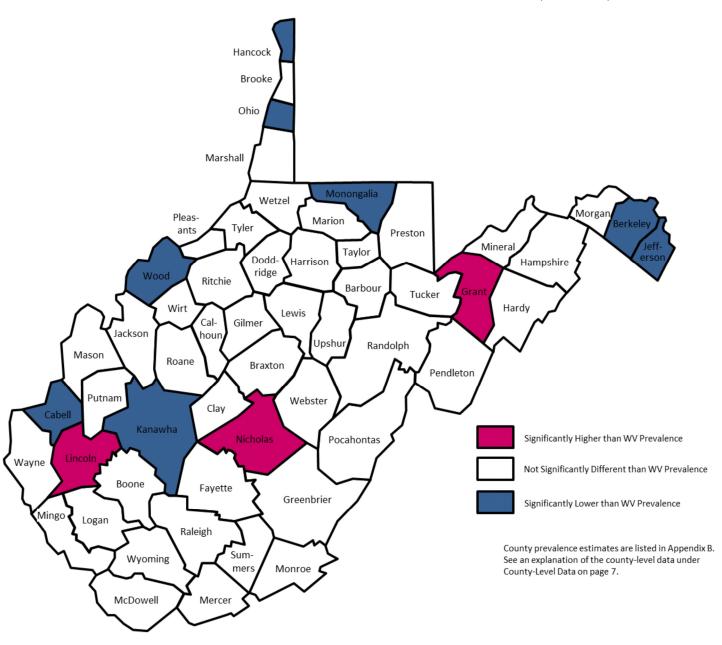
^{*} Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 6.



*Due to changes in sample composition and weighting methodology, 2011-2015 results are not directly comparable to previous years.

Figure 7.5 Prevalence of Smokeless Tobacco Use by County: WVBRFSS, 2011-2015

WV Prevalence (2011-2015) - 8.7%





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: 3.5% (95% CI: 2.9-4.1)

U.S.: 5.8% (95% CI: 5.6-5.9)

The U.S. prevalence of heavy drinking was significantly higher than the West Virginia prevalence. West Virginia ranked the lowest among the 53 BRFSS

participants.

Gender Men: 4.6% (95% CI: 3.6-5.7)

Women: 2.4% (95% CI: 1.8-3.1)

The prevalence of heavy drinking was significantly higher among men than

women.

Race/Ethnicity No race/ethnicity statistics are reported due to unreliable estimates.

Age The highest prevalence of heavy drinking was among those aged 25-34 (5.4%) and

the lowest prevalence was among those aged 65 and older (1.6%). The prevalence of heavy drinking was significantly higher among those 18-34 and 45-54 than

among those 65 and older.

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 with an

income of \$75,000 or more (5.9%) than among those with an income of \$15,000-

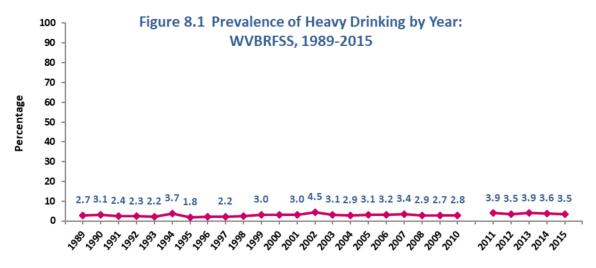
\$24,999 (2.3%).

CHAPTER 8: ALCOHOL USE

Table 8.1 Prevalence of Heavy Drinking by Demographic Characteristics: WVBRFSS, 2015

		Men			Women		Total			
Characteristic	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	
TOTAL	31,409	4.6	3.6-5.7	17,732	2.4	1.8-3.1	49,142	3.5	2.9-4.1	
Age										
18-24	4,983	*6.0	1.5-10.5	3,580	*4.6	1.5-7.6	8,564	5.3	2.5-8.1	
25-34	7,235	7.2	3.7-10.8	3,744	3.7	1.5-5.8	10,979	5.4	3.4-7.5	
35-44	5,913	5.5	2.6-8.5	2,513	*2.3	0.0-4.7	8,426	3.9	2.0-5.8	
45-54	5,667	5.0	2.8-7.3	3,470	3.0	1.5-4.5	9,137	4.0	2.6-5.4	
55-64	3,553	2.9	1.4-4.3	3,220	2.5	1.1-3.8	6,773	2.6	1.6-3.7	
65+	4,058	2.8	1.6-3.9	1,204	*0.7	0.2-1.1	5,263	1.6	1.0-2.1	
Education										
Less than H.S.	2,683	*2.6	0.7-4.5	1,315	*1.1	0.0-2.6	3,998	*1.8	0.6-3.0	
H.S. or G.E.D.	12,654	4.4	2.8-6.0	5,904	2.2	0.9-3.4	18,559	3.3	2.3-4.3	
Some Post-H.S.	10,537	6.0	3.4-8.6	5,526	2.7	1.5-4.0	16,064	4.2	2.8-5.6	
College Graduate	5,076	4.7	2.9-6.5	4,987	3.7	2.3-5.2	10,062	4.1	3.0-5.3	
Income										
Less than \$15,000	2,528	*3.8	1.5-6.1	2,727	*3.1	0.9-5.3	5,255	3.4	1.8-5.0	
\$15,000 - 24,999	2,767	*2.8	0.4-5.3	2,104	*1.8	0.5-3.2	4,871	2.3	0.9-3.6	
\$25,000 - 34,999	2,886	*4.0	1.4-6.7	556	*0.9	0.0-1.9	3,442	2.5	1.1-4.0	
\$35,000 - 49,999	3,832	*4.1	1.4-6.8	3,765	*4.1	0.9-7.3	7,597	4.1	2.0-6.2	
\$50,000 - 74,999	3,095	3.5	1.5-5.6	1,806	*2.4	0.6-4.1	4,900	3.0	1.6-4.3	
\$75,000+	10,230	7.8	4.4-11.2	4,167	3.7	1.9-5.4	14,398	5.9	3.9-7.9	

^{*} Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 6.



^{*}Due to changes in sample composition and weighting methodology, 2011-2015 results are not directly comparable to previous years.



Binge Drinking

Definition Defined as the 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: 10.6% (95% CI: 9.6-11.6)

U.S.: 16.3% (95% CI: 16.0-16.5)

The U.S. prevalence of binge drinking was significantly higher than the West Virginia prevalence. West Virginia ranked the 2nd lowest among 53 BRFSS

participants.

Gender Men: 16.5% (95% CI: 14.7-18.4)

Women: 5.0% (95% CI: 4.1-6.0)

Men had a significantly higher prevalence of binge drinking than women.

Race/Ethnicity No race/ethnicity statistics are reported due to unreliable estimates.

Age The prevalence of binge drinking decreased with increased age. The prevalence

of binge drinking was significantly higher among those aged 18-24 (19.6%) than among those aged 55 and older. The prevalence of binge drinking was significantly lower among those 65 and older (2.4%) than among all other

age groups.

Education The prevalence of binge drinking was significantly lower among those with less

than a high school education (6.5%) than among those with some post-high

school (12.3%) and college graduates (11.9%).

Household Income The prevalence of binge drinking was significantly higher among those with an

income of \$75,000 or more (16.1%) than among those with an income of less than

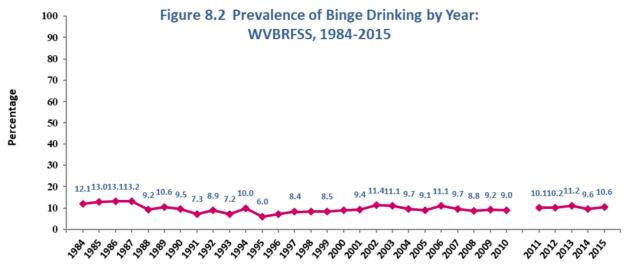
\$25,000.

CHAPTER 8: ALCOHOL CONSUMPTION

Table 8.2 Prevalence of Binge Drinking by Demographic Characteristics: WVBRFSS, 2015

		Men			Women		Total			
Characteristic	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	
TOTAL	112,925	16.5	14.7-18.4	36,530	5.0	4.1-6.0	149,456	10.6	9.6-11.6	
Age										
18-24	21,714	25.3	18.2-32.4	10,068	12.6	7.7-17.5	31,782	19.2	14.7-23.6	
25-34	25,634	25.3	19.4-31.2	9,633	9.4	5.9-12.9	35,267	17.3	13.8-20.8	
35-44	24,637	23.0	17.8-28.2	5,761	5.3	2.8-7.8	30,398	14.1	11.1-17.1	
45-54	20,625	17.9	13.3-22.6	7,542	6.5	4.2-8.8	28,167	12.2	9.5-14.8	
55-64	13,407	10.7	8.0-13.4	2,332	1.8	0.8-2.8	15,739	6.2	4.7-7.6	
65+	6,724	4.6	2.9-6.3	1,194	*0.6	0.2-1.1	7,918	2.4	1.6-3.2	
Education										
Less than H.S.	12,360	11.5	6.8-16.2	1,952	*1.7	0.2-3.2	14,311	6.5	4.0-8.9	
H.S. or G.E.D.	48,321	16.7	13.8-19.6	10,672	3.9	2.5-5.3	58,993	10.5	8.8-12.2	
Some Post-H.S.	30,901	17.7	13.8-21.5	15,772	7.7	5.5-9.9	46,673	12.3	10.1-14.5	
College Graduate	20,884	19.0	15.4-22.6	8,135	6.1	4.1-8.0	29,019	11.9	9.9-13.9	
Income										
Less than \$15,000	10,916	15.8	9.9-21.8	4,784	5.4	2.6-8.2	15,700	10.0	6.9-13.1	
\$15,000 - 24,999	14,433	14.5	10.0-19.0	5,621	4.9	2.4-7.4	20,054	9.4	6.8-11.9	
\$25,000 - 34,999	10,748	14.8	9.4-20.2	3,312	5.1	2.2-8.1	14,060	10.3	7.0-13.5	
\$35,000 - 49,999	11,592	12.4	8.3-16.6	6,087	6.6	3.3-9.9	17,680	9.5	6.9-12.2	
\$50,000 - 74,999	17,347	19.8	14.5-25.2	3,997	5.2	2.2-8.2	21,344	13.0	9.7-16.2	
\$75,000+	31,145	23.8	19.0-28.6	8,329	7.3	4.8-9.9	39,474	16.1	13.2-19.1	

^{*} Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 6.

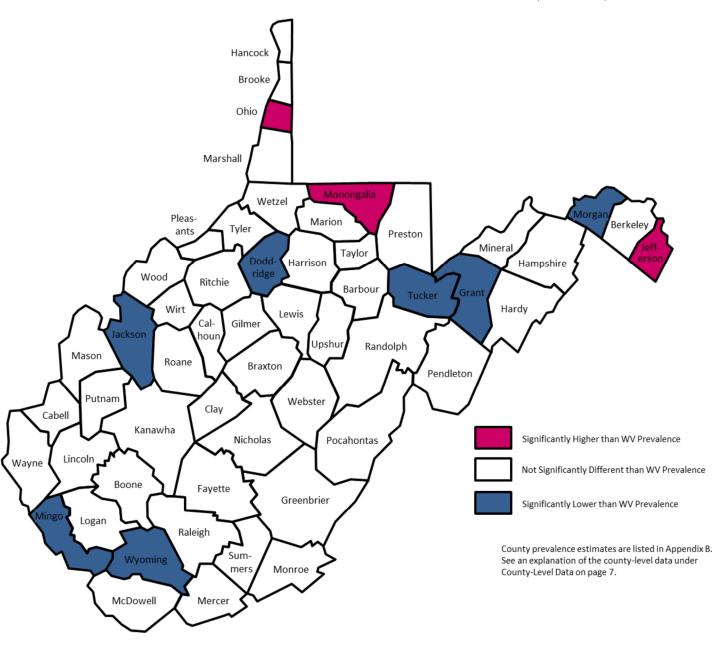


^{*}Due to changes in sample composition and weighting methodology, 2011-2015 results are not directly comparable to previous years.

CHAPTER 8: ALCOHOL USE

Figure 8.3 Prevalence of Binge Drinking by County: WVBRFSS, 2011-2015

WV Prevalence (2011-2015) - 10.3%



CHAPTER 9: INJURY

Seldom or Never Wear Seatbelt

Definition Responding "Seldom" or "Never" to the question, "How often do you use seat

belts when you drive or ride in a car?"

Prevalence WV: 4.3% (95% CI: 3.6-4.9)

U.S.: 2.8% (95% CI: 2.7-2.9)

The West Virginia prevalence of seldom or never wear a seat belt was significantly higher than the U.S. prevalence. West Virginia ranked the 13th highest among the

53 BRFSS participants.

Gender Men: 6.1% (95% CI: 4.9-7.3)

Women: 2.5% (95% CI: 1.8-3.1)

The prevalence of seldom or never wear a seat belt was significantly higher

among men than among women.

Race/Ethnicity No race/ethnicity statistics are reported due to unreliable estimates.

Age The prevalence of seldom or never wear a seat belt was highest among those

aged 25-34 (6.4%), significantly higher than among those 65 and older (3.1%).

Education The prevalence of seldom or never wear a seat belt decreased with increasing

educational attainment level and was significantly lower among college graduates (2.2%) than among those with a high school education or G.E.D. (4.9%) and

among those with less than a high school education (6.7%).

Household Income There was no income difference in the prevalence of seldom or never wear a

seatbelt.

CHAPTER 9: INJURY

Table 9.1 Prevalence of Seldom or Never Wear a Seatbelt: WVBRFSS, 2015

		Men			Women		Total			
Characteristic	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	
TOTAL	41,582	6.1	4.9-7.3	17,641	2.5	1.8-3.1	59,223	4.3	3.6-4.9	
Age										
18-24	5,004	*6.0	1.1-10.9	3,096	*4.0	0.7-7.3	8,100	*5.0	2.0-8.0	
25-34	9,976	9.8	5.7-13.8	2,839	*2.9	0.8-5.0	12,815	6.4	4.1-8.8	
35-44	7,117	6.7	3.5-9.9	3,071	*2.9	1.0-4.7	10,188	4.8	2.9-6.7	
45-54	5,892	5.2	2.9-7.4	2,319	*2.0	0.7-3.3	8,211	3.6	2.3-4.9	
55-64	6,877	5.5	3.4-7.6	2,708	2.1	0.9-3.3	9,585	3.8	2.6-5.0	
65+	6,549	4.5	2.9-6.2	3,607	2.0	1.0-2.9	10,156	3.1	2.2-4.0	
Education										
Less than H.S.	9,229	9.0	5.4-12.6	5,009	4.5	2.1-6.9	14,239	6.7	4.5-8.8	
H.S. or G.E.D.	19,831	6.9	5.0-8.8	7,441	2.8	1.7-3.8	27,271	4.9	3.8-6.0	
Some Post-H.S.	8,752	4.9	2.5-7.3	3,668	*1.8	0.6-3.1	12,420	3.3	2.0-4.6	
College Graduate	3,699	3.4	1.8-5.0	1,524	*1.1	0.3-2.0	5,223	2.2	1.3-3.0	
Income										
Less than \$15,000	6,209	9.2	4.4-13.9	2,028	*2.4	0.6-4.1	8,237	5.4	3.0-7.7	
\$15,000 - 24,999	4,837	5.1	2.7-7.5	5,095	4.6	2.4-6.7	9,932	4.8	3.2-6.4	
\$25,000 - 34,999	4,894	6.9	3.5-10.2	1,068	*1.7	0.0-3.6	5,962	4.4	2.4-6.4	
\$35,000 - 49,999	6,510	7.1	3.8-10.4	1,397	*1.6	0.2-2.9	7,907	4.4	2.5-6.2	
\$50,000 - 74,999	4,829	*5.5	2.2-8.8	2,506	*3.3	0.7-5.9	7,335	4.5	2.4-6.6	
\$75,000+	5,767	*4.4	1.6-7.3	2,270	*2.1	0.6-3.5	8,037	3.3	1.7-5.0	

 $^{^{*}}$ Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 6.



SECTION 3: PREVENTIVE PRACTICES



Ever Had Cholesterol Checked

Definition Responding "Yes" to the question, "Have you ever had your blood cholesterol

checked?"

Prevalence WV: 85.7% (95% CI: 84.5-86.9)

U.S.: 81.4% (95% CI: 81.2-81.7)

West Virginia's prevalence of ever had cholesterol checked was significantly higher than the U.S. prevalence. West Virginia ranked the 7th highest among 53

BRFSS participants.

Gender Men: 83.7% (95% CI: 81.8-85.5)

Women: 87.6% (95% CI: 86.1-89.1)

The prevalence of ever had cholesterol checked was significantly higher among

women than among men.

Race/Ethnicity White, Non-Hispanic: 86.3% (95% CI: 85.1-87.4)

Black, Non-Hispanic: 76.4% (95% CI: 68.1-84.6)
Other, Non-Hispanic: *70.6% (95% CI: 56.7-84.4)
Multiracial, Non-Hispanic: *83.0% (95% CI: 71.5-94.4)

Hispanic: *74.9% (95% CI: 60.6-89.2)

The prevalence of ever had cholesterol checked was significantly higher among White, Non-Hispanic adults than among Black, Non-Hispanic and Other, Non-

Hispanic adults.

 st Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 6.

Age The prevalence of ever had cholesterol checked significantly increased with

increasing age. The prevalence ranged from a low of 61.7% among the youngest

adults to a high of 97.2% among those aged 65 and older.

Education The prevalence of ever had cholesterol checked was significantly higher among

college graduates (90.8%) than among all other educational attainment groups.

Household Income The prevalence of ever had cholesterol checked was significantly lower among

those with an annual household income of less than \$15,000 (80.3%) than among

those earning \$35,000 or more per year.



CHAPTER 10: CHOLESTEROL TESTING

Table 10.1 Prevalence of Ever Had Cholesterol Checked by Demographic Characteristics: WVBRFSS, 2015

		Men			Women		Total			
Characteristic	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	
TOTAL	581,270	83.7	81.8-85.5	639,604	87.6	86.1-89.1	1,220,874	85.7	84.5-86.9	
Age										
18-24	49,822	62.5	54.2-70.9	44,522	60.8	53.0-68.6	94,344	61.7	56.0-67.4	
25-34	67,711	65.3	58.8-71.7	74,279	73.8	68.1-79.5	141,991	69.5	65.1-73.8	
35-44	89,105	81.8	77.3-86.4	94,262	86.2	82.0-90.4	183,367	84.0	80.9-87.1	
45-54	104,441	87.8	84.1-91.4	109,831	91.6	88.7-94.4	214,272	89.7	87.4-92.0	
55-64	120,883	93.1	90.7-95.4	129,149	96.5	95.0-98.1	250,031	94.8	93.4-96.2	
65+	145,838	97.2	96.0-98.5	180,378	97.2	96.0-98.5	326,216	97.2	96.3-98.1	
Education										
Less than H.S.	89,795	81.7	76.4-86.9	98,830	87.1	82.5-91.7	188,625	84.4	81.0-87.9	
H.S. or G.E.D.	237,717	81.4	78.2-84.5	242,338	88.2	85.8-90.5	480,055	84.7	82.7-86.6	
Some Post-H.S.	151,672	85.4	82.0-88.8	172,290	84.3	81.0-87.5	323,962	84.8	82.4-87.1	
College Graduate	100,920	89.7	86.8-92.6	124,616	91.7	89.3-94.1	225,536	90.8	89.0-92.7	
Income										
Less than \$15,000	54,112	79.1	73.0-85.2	71,103	81.1	76.1-86.1	125,215	80.3	76.4-84.1	
\$15,000 - 24,999	83,659	84.1	79.4-88.7	99,387	86.5	82.4-90.5	183,046	85.3	82.3-88.4	
\$25,000 - 34,999	60,275	81.1	75.1-87.0	56,456	86.4	80.6-92.1	116,731	83.5	79.4-87.7	
\$35,000 - 49,999	77,385	84.4	79.2-89.5	84,735	90.6	86.9-94.4	162,120	87.5	84.3-90.7	
\$50,000 - 74,999	79,092	88.7	84.5-92.9	70,064	92.4	88.1-96.7	149,156	90.4	87.4-93.4	
\$75,000+	121,556	90.8	87.6-93.9	100,219	88.1	84.4-91.9	221,775	89.5	87.1-92.0	



Had Cholesterol Checked in Past 5 Years

Definition Reported having blood cholesterol checked and 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: 82.3% (95% CI: 81.1-83.6)

U.S.: 77.9% (95% CI: 77.7-78.2)

The West Virginia prevalence of had cholesterol checked in the past 5 years was significantly higher than the U.S. prevalence. West Virginia ranked the 7th highest

among the 53 BRFSS participants.

Gender Men: 79.5% (95% CI: 77.5-81.5)

Women: 85.0% (95% CI: 83.4-86.6)

The prevalence of had cholesterol checked in the past 5 years was significantly

higher among women than among men.

Race/Ethnicity White, Non-Hispanic: 83.0% (95% CI: 81.7-84.5)

Black, Non-Hispanic: 73.7% (95% CI: 65.2-82.3) Other, Non-Hispanic: *61.2% (95% CI: 45.9-76.4) Multiracial, Non-Hispanic: *80.3% (95% CI: 68.5-92.1)

Hispanic: *72.2% (95% CI: 57.6-86.7)

The prevalence of had cholesterol checked in the past 5 years was significantly higher among White, Non-Hispanic adults than among Other, Non-Hispanic adults.

* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 6.

Age The prevalence of had cholesterol checked in the past 5 years was significantly

higher among those aged 65 and older (95.6%) than among all other age groups.

Education The prevalence of had cholesterol checked in the past 5 years was significantly

higher among those with a college degree (88.1%) than among all other

educational attainment groups.

Household Income The prevalence of had cholesterol checked in the past 5 years was significantly

lower among those with an annual household income of less than \$15,000 (76.9%)

than among those earning \$35,000 or more per year.



Table 10.2 Prevalence of Had Cholesterol Checked in the Past 5 Years by Demographic Characteristics: WVBRFSS, 2015

		Men			Women		Total			
Characteristic	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	
TOTAL	544,305	79.5	77.5-81.5	611,643	85.0	83.4-86.6	1,155,948	82.8	81.1-83.6	
Age										
18-24	41,212	54.7	45.9-63.5	40,631	57.4	49.4-65.4	81,843	56.0	50.0-62.0	
25-34	60,955	59.5	52.8-66.2	69,027	70.0	64.1-76.0	129,982	64.7	60.2-69.2	
35-44	83,956	77.1	72.2-82.1	87,613	81.9	77.4-86.5	171,569	79.5	76.1-82.9	
45-54	97,250	83.7	79.6-87.8	106,666	89.0	86.0-92.1	203,916	86.4	83.8-88.9	
55-64	116,316	89.7	86.9-92.4	126,008	94.7	92.8-96.5	242,324	92.2	90.5-93.9	
65+	141,781	95.5	93.8-97.2	175,034	95.8	94.3-97.3	316,815	95.6	94.5-96.8	
Education										
Less than H.S.	85,574	78.8	73.4-84.2	92,569	84.7	79.8-89.5	178,143	81.7	78.1-85.4	
H.S. or G.E.D.	220,763	77.3	74.0-80.6	233,784	85.7	83.2-88.2	454,547	81.4	79.3-83.5	
Some Post-H.S.	139,815	79.7	75.8-83.7	164,141	81.1	77.7-84.5	303,956	80.5	77.9-83.0	
College Graduate	96,987	86.4	83.2-89.6	119,619	89.5	87.0-92.1	216,606	88.1	86.1-90.1	
Income										
Less than \$15,000	49,072	74.6	68.0-81.1	68,412	78.7	73.5-83.8	117,484	76.9	72.8-81.0	
\$15,000 - 24,999	79,943	80.6	75.5-85.7	93,795	83.8	79.5-88.0	173,737	82.3	79.0-85.6	
\$25,000 - 34,999	56,510	76.0	69.6-82.3	54,640	83.6	77.6-89.5	111,150	79.5	75.2-83.9	
\$35,000 - 49,999	73,585	81.8	76.5-87.2	81,989	88.0	83.9-92.1	155,574	85.0	81.6-88.4	
\$50,000 - 74,999	73,738	82.7	77.7-87.7	67,720	89.8	85.3-94.4	141,458	86.0	82.6-89.4	
\$75,000+	115,049	86.4	82.6-90.1	96,955	86.5	82.6-90.5	212,004	86.5	83.7-89.2	



Diabetes Test

Definition Reported not having diabetes and responding "Yes" to the question, "Have you

had a test for high blood sugar or diabetes within the past three years?"

Prevalence WV: 64.5% (95% CI: 62.9-66.2)

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: 60.9% (95% CI: 58.4-63.5)

Women: 67.9% (95% CI: 65.7-70.1)

The prevalence of had a diabetes test in the past year three years was significantly

higher among women than among men.

Race/Ethnicity White, Non-Hispanic: 65.2% (95% CI: 63.4-66.9)

Black, Non-Hispanic: 53.0% (95% CI: 43.1-62.9) Other, Non-Hispanic: *46.3% (95% CI: 29.7-62.9) Multiracial, Non-Hispanic: *72.3% (95% CI: 57.2-87.4)

Hispanic: *59.8% (95% CI: 42.5-77.2)

The prevalence of had a diabetes test in the past 3 years was significantly higher among White, Non-Hispanic adults than among Black, Non-Hispanic adults and

Other, Non-Hispanic adults.

* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 6.

Age The prevalence of had a diabetes test in the past three years increased with age

and was highest among those aged 45 and older, significantly higher than among

those younger than 45.

Education The prevalence of had a diabetes test in the past three years was highest among

college graduates (72.4%), significantly higher than among all other educational

attainment levels.

Household Income The prevalence of had a diabetes test in the past three years was lowest among

those with an annual household income of \$15,000 or less (55.8%) and was significantly lower than the prevalence among those with an income of \$50,000 or

more.



Table 11.1 Prevalence of Had a Diabetes Test in the Past Three Years by Demographic Characteristics: WVBRFSS, 2015

Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
TOTAL	348,415	60.9	58.4-63.5	417,327	67.9	65.7-70.1	765,741	64.5	62.9-66.2
Age									
18-24	24,027	30.4	22.6-38.2	36,990	48.5	40.5-56.4	61,017	39.3	33.6-45.0
25-34	44,384	43.5	36.7-50.3	58,581	60.6	54.2-67.0	102,965	51.8	47.1-56.5
35-44	50,965	56.1	49.7-62.4	63,199	64.1	58.2-70.0	114,164	60.3	55.9-64.6
45-54	68,297	69.4	64.0-74.9	67,663	70.1	65.3-75.0	135,960	69.8	66.1-73.4
55-64	76,846	79.6	75.4-83.8	78,613	76.6	72.7-80.5	155,460	78.1	75.2-80.9
65+	81,518	80.3	76.5-84.1	106,553	78.2	74.8-81.6	188,070	79.1	76.6-81.6
Education									
Less than H.S.	46,879	59.4	52.0-66.9	54,671	63.3	56.4-70.1	101,550	61.4	56.4-66.5
H.S. or G.E.D.	144,877	59.0	54.9-63.0	156,167	69.5	66.0-73.0	301,044	64.0	61.3-66.7
Some Post-H.S.	89,568	59.5	54.4-64.6	115,295	63.9	59.6-68.2	204,863	61.9	58.6-65.2
College Graduate	65,777	70.2	65.7-74.8	89,888	74.1	70.5-77.6	155,666	72.4	69.6-75.2
Income									
Less than \$15,000	27,925	51.9	43.6-60.1	39,819	58.9	52.1-65.6	67,744	55.8	50.5-61.0
\$15,000 - 24,999	46,102	59.8	52.9-66.7	65,043	69.6	64.1-75.1	111,145	65.2	60.8-69.5
\$25,000 - 34,999	36,909	62.7	54.9-70.5	37,176	70.7	63.2-78.2	74,085	66.5	61.0-71.9
\$35,000 - 49,999	51,731	66.7	59.9-73.5	50,745	64.1	57.9-70.3	102,476	65.4	60.8-70.0
\$50,000 - 74,999	48,445	67.3	60.5-74.0	48,931	70.6	64.1-77.1	97,376	68.9	64.2-73.6
\$75,000+	76,108	66.6	61.1-72.1	73,956	71.8	66.9-76.8	150,064	69.1	65.4-72.8

CHAPTER 12: HIV TESTING

HIV Test

Definition 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: 36.7% (95% CI: 35.1-38.2)

U.S.: 38.0% (95% CI: 37.7-38.3)

The West Virginia prevalence of ever had a HIV test was similar to the U.S.

prevalence. West Virginia ranked 24th among 53 BRFSS participants.

Gender Men: 37.1% (95% CI: 34.7-39.4)

Women: 36.3% (95% CI: 34.2-38.4)

There was no gender difference in the prevalence of ever had a HIV test.

Race/Ethnicity White, Non-Hispanic: 35.8% (95% CI: 34.2-37.4)

Black, Non-Hispanic: 50.3% (95% CI: 41.2-59.4) Other, Non-Hispanic: *26.4% (95% CI: 12.9-40.0) Multiracial, Non-Hispanic: *54.5% (95% CI: 39.8-69.3)

Hispanic: *60.0% (95% CI: 43.1-77.0)

The prevalence of ever had a HIV test was significantly higher among Black, Non-Hispanic; Multiracial, Non-Hispanic; and Hispanic adults than among White, Non-Hispanic adults. Additionally, the prevalence was higher among Black, Non-

Hispanic and Hispanic adults than among Other, Non-Hispanic adults.

st Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 6.

Age The prevalence of ever had a HIV test was significantly higher among those aged

25-44 than among all other age groups.

Education The prevalence of ever had a HIV test was significantly higher among those with

some college (39.4%) or a college degree (40.7%) than among high school

graduates (32.9%).

Household Income There was no annual household income difference in the prevalence of ever had

a HIV test.

CHAPTER 12: HIV TESTING

Table 12.1 Prevalence of Ever Had a HIV Test by Demographic Characteristics: WVBRFSS, 2015

Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
TOTAL	232,822	37.1	34.7-39.4	240,444	36.3	34.2-38.4	473,267	36.7	35.1-38.2
Age									
18-24	27,298	34.2	26.0-42.5	31,751	44.3	36.1-52.5	59,049	39.0	33.1-44.8
25-34	42,453	44.7	37.7-51.6	59,448	64.7	58.6-70.7	101,902	54.5	49.7-59.3
35-44	52,554	52.1	46.0-58.3	58,385	57.6	51.6-63.6	110,939	54.9	50.6-59.2
45-54	43,576	39.7	34.3-45.1	43,728	40.3	35.4-45.3	87,304	40.0	36.4-43.7
55-64	38,500	34.0	29.6-38.4	28,776	23.7	20.1-27.3	67,276	28.7	25.8-31.5
65+	27,798	21.9	18.2-25.6	17,293	10.7	8.4-13.0	45,091	15.6	13.5-17.7
Education									
Less than H.S.	36,653	39.0	32.3-45.7	35,975	35.1	28.8-41.3	72,629	36.9	32.4-41.5
H.S. or G.E.D.	93,901	35.2	31.5-38.9	75,445	30.5	27.1-33.8	169,346	32.9	30.4-35.4
Some Post-H.S.	63,058	38.8	34.1-43.4	74,839	40.0	35.9-44.2	137,897	39.4	36.3-42.5
College Graduate	38,657	37.3	33.0-41.6	54,053	43.5	39.5-47.5	92,710	40.7	37.7-43.6
Income									
Less than \$15,000	25,696	40.4	33.1-47.7	31,298	39.2	33.2-45.2	56,994	39.7	35.1-44.4
\$15,000 - 24,999	33,542	38.5	32.3-44.7	41,388	39.0	33.6-44.4	74,930	38.7	34.7-42.8
\$25,000 - 34,999	26,757	40.5	32.9-48.1	22,443	36.7	29.7-43.7	49,200	38.7	33.5-43.8
\$35,000 - 49,999	31,190	36.2	29.8-42.6	25,376	30.0	24.3-35.7	56,566	33.1	28.8-37.4
\$50,000 - 74,999	30,356	37.7	31.3-44.0	24,789	35.3	28.8-41.8	55,145	36.6	32.0-41.1
\$75,000+	44,617	36.4	31.4-41.5	44,052	42.8	37.5-48.2	88,669	39.4	35.7-43.0

CHAPTER 13: IMMUNIZATIONS

Flu Vaccine

Definition Responding "Yes" to the question, "During the past 12 months, have you had

either a flu shot or a flu vaccine that was sprayed in your nose?"

Prevalence WV: 47.3% (95% CI: 45.8-48.9)

U.S.: 40.3% (95% CI: 40.0-40.6)

The West Virginia prevalence of had a flu vaccine in the past year was significantly higher than the U.S. prevalence. West Virginia ranked the 5th

highest among the 53 BRFSS participants.

Gender Men: 43.2% (95% CI: 41.0-45.4)

Women: 51.3% (95% CI: 49.2-53.4)

The prevalence of had a flu vaccine in the past year was significantly higher

among women than among men.

Race/Ethnicity White, Non-Hispanic: 47.6% (95% CI: 46.0-49.2)

Black, Non-Hispanic: 45.9% (95% CI: 37.0-54.7) Other, Non-Hispanic: *38.4% (95% CI: 23.8-52.9) Multiracial, Non-Hispanic: *35.4% (95% CI: 22.1-48.6)

Hispanic: *51.5% (95% CI: 34.8-68.2)

There was no race/ethnicity difference in the prevalence of had a flu vaccine in

he past year.

* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 6.

Age The prevalence of had a flu vaccine in the past year was significantly higher

among those aged 65 and older (69.1%) than among all other age groups.

Education The prevalence of had a flu vaccine in the past year was significantly higher

among college graduates (55.4%) than among those with some college (45.6%)

or a high school degree (44.6%).

Household Income There was no annual household income difference in the prevalence of had a flu

vaccine in the past year.

CHAPTER 13: IMMUNIZATIONS

Table 13.1 Prevalence of Had a Flu Vaccine in the Past Year by Demographic Characteristics: WVBRFSS, 2015

		Men			Women			Total	
Characteristic	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
TOTAL	293,666	43.2	41.0-45.4	364,535	51.3	49.2-53.4	658,201	47.3	45.8-48.9
Age									
18-24	21,317	25.5	18.4-32.5	24,984	32.4	24.9-40.0	46,300	28.8	23.6-34.0
25-34	23,006	22.6	17.1-28.0	42,413	43.9	37.7-50.0	65,419	32.9	28.7-37.2
35-44	36,071	34.0	28.4-39.5	42,899	40.3	34.6-46.1	78,970	37.1	33.1-41.1
45-54	48,470	42.2	36.8-47.7	51,474	45.1	40.2-49.9	99,944	43.7	40.0-47.3
55-64	63,014	50.6	46.1-55.1	74,375	57.7	53.5-61.8	137,389	54.2	51.1-57.3
65+	100,693	69.1	65.4-72.9	125,010	69.0	65.8-72.3	225,703	69.1	66.6-71.5
Education									
Less than H.S.	47,620	45.7	39.2-52.2	56,349	50.9	44.9-57.0	103,968	48.4	44.0-52.8
H.S. or G.E.D.	117,189	40.7	37.2-44.1	130,173	48.9	45.5-52.2	247,362	44.6	42.2-47.0
Some Post-H.S.	74,569	42.0	37.5-46.5	96,984	48.9	44.9-52.9	171,553	45.6	42.6-48.7
College Graduate	54,057	49.7	45.4-54.1	80,325	60.0	56.2-63.7	134,382	55.4	52.5-58.2
Income									
Less than \$15,000	29,069	42.0	34.8-49.2	41,423	48.4	42.5-54.3	70,492	45.5	41.0-50.1
\$15,000 - 24,999	45,219	47.5	41.5-53.6	54,429	49.4	44.1-54.6	99,648	48.5	44.6-52.5
\$25,000 - 34,999	30,380	42.7	35.7-49.7	32,170	50.3	43.3-57.2	62,550	46.3	41.3-51.2
\$35,000 - 49,999	38,128	41.5	35.5-47.5	41,984	47.2	41.3-53.0	80,112	44.3	40.1-48.5
\$50,000 - 74,999	34,576	39.7	33.8-45.6	43,608	57.6	51.4-63.9	78,184	48.0	43.6-52.4
\$75,000+	62,512	47.9	42.8-52.9	61,243	55.6	50.5-60.8	123,755	51.4	47.8-55.1



Flu Vaccine, Ages 65 and Older

Definition Responding "Yes" to the question, "During the past 12 months, have you had

either a flu shot or a flu vaccine that was sprayed in your nose?" Restricted to

adults aged 65 and older.

Prevalence WV: 69.1% (95% CI: 66.6-71.5)

U.S.: 60.5% (95% CI: 60.0-61.1)

The West Virginia prevalence of had a flu vaccine in the past year among those aged 65 and older was significantly higher than the U.S. prevalence. West

Virginia ranked the 4th highest among the 53 BRFSS participants.

Gender Men: 69.1% (95% CI: 65.4-72.9)

Women: 69.0% (95% CI: 65.8-72.3)

There was no gender difference in the prevalence of had a flu vaccine in the

past year among those aged 65 and older.

Race/Ethnicity No race/ethnicity statistics are reported due to unreliable estimates.

Education There was no educational attainment difference in the prevalence of had a flu

vaccine in the past year among those aged 65 and older.

Household Income The prevalence of had a flu vaccine in the past year among those aged 65 and

older was significantly lower among those with a household income of less than \$15,000 per year (61.4%) than among those earning \$50,000 or more per year.

CHAPTER 13: IMMUNIZATIONS

Table 13.2 Prevalence of Had a Flu Vaccine in the Past Year Among Those Aged 65 and Older by Demographic Characteristics: WVBRFSS, 2015

		Men			Women			Total	
Characteristic	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
TOTAL	100,693	69.1	65.4-72.9	125,010	69.0	65.8-72.3	225,703	69.1	66.6-71.5
Education									
Less than H.S.	21,591	63.7	54.1-73.2	27,642	68.1	60.1-76.1	49,233	66.1	59.9-72.2
H.S. or G.E.D.	37,103	68.1	62.0-74.2	57,597	69.3	64.5-74.1	94,701	68.8	65.0-72.6
Some Post-H.S.	23,284	72.8	65.1-80.4	24,308	66.0	59.2-72.7	47,592	69.1	64.0-74.2
College Graduate	18,715	75.5	69.1-81.9	15,380	75.2	68.3-82.0	34,094	75.3	70.7-80.0
Income									
Less than \$15,000	5,479	46.5	31.7-61.2	13,819	70.3	60.5-80.1	19,298	61.4	53.0-69.7
\$15,000 - 24,999	18,005	64.1	54.6-73.6	22,704	70.2	63.0-77.3	40,709	67.3	61.5-73.2
\$25,000 - 34,999	12,007	68.8	57.5-80.1	11,701	64.2	53.5-74.9	23,708	66.4	58.7-74.2
\$35,000 - 49,999	15,291	68.1	58.8-77.5	16,757	68.8	59.7-77.9	32,048	68.5	61.9-75.0
\$50,000 - 74,999	12,648	74.9	65.0-84.7	10,398	84.6	76.1-93.1	23,046	79.0	72.1-85.8
\$75,000+	15,851	84.2	76.7-91.7	6,253	71.7	59.4-83.9	22,104	80.2	73.7-86.7



Pneumonia Vaccine

Definition Responding "Yes" 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?"

Prevalence WV: 38.2% (95% CI: 36.7-39.6)

U.S.: 34.7% (95% CI: 34.4-35.0)

The West Virginia prevalence of ever had a pneumonia vaccine was significantly higher than the U.S. prevalence. West Virginia ranked the 5th highest among the

53 BRFSS participants.

Gender Men: 37.3% (95% CI: 35.1-39.5)

Women: 38.9% (95% CI: 37.0-40.9)

There was no gender difference in the prevalence of ever had a pneumonia

vaccine.

Race/Ethnicity White, Non-Hispanic: 38.4% (95% CI: 36.9-40.0)

Black, Non-Hispanic: 35.7% (95% CI: 27.1-44.3) Other, Non-Hispanic: *33.9% (95% CI: 20.0-47.8) Multiracial, Non-Hispanic: *39.2% (95% CI: 25.0-53.3)

Hispanic: *23.9% (95% CI: 9.3-38.5)

There was no race/ethnicity difference in the prevalence of ever had a

pneumonia vaccine.

* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 6.

Age The prevalence of ever had a pneumonia vaccine was significantly higher among

those aged 65 and older (70.1%) than among all other age groups.

Education The prevalence of ever had a pneumonia vaccine was highest among those with

less than a high school education (49.1%) and was significantly higher than the

prevalence among all other educational attainment levels.

Household Income The prevalence of ever had a pneumonia vaccine was significantly lower among

those earning \$50,000 or more per year than among those with an annual

household income of less than \$50,000.



Table 13.3 Prevalence of Ever Had a Pneumonia Vaccine by Demographic Characteristics: WVBRFSS, 2015

		Men			Women			Total	
Characteristic	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
TOTAL	237,813	37.3	35.1-39.5	266,405	38.9	37.0-40.9	504,217	38.2	36.7-39.6
Age									
18-24	16,988	24.7	16.7-32.6	15,970	25.1	17.3-32.9	32,958	24.9	19.3-30.5
25-34	17,276	19.8	13.7-26.0	14,456	15.9	11.3-20.4	31,732	17.8	14.0-21.6
35-44	19,131	19.1	14.4-23.8	22,191	21.4	16.4-26.4	41,323	20.3	16.8-23.7
45-54	33,540	29.9	24.8-35.0	33,785	30.0	25.4-34.6	67,325	29.9	26.5-33.4
55-64	48,683	39.6	35.1-44.1	53,007	41.5	37.4-45.6	101,690	40.5	37.5-43.6
65+	101,401	70.5	66.8-74.3	124,844	69.8	66.6-73.0	226,245	70.1	67.7-72.6
Education									
Less than H.S.	49,160	48.1	41.6-54.7	53,078	50.0	43.9-56.1	102,238	49.1	44.6-53.6
H.S. or G.E.D.	93,263	34.6	31.2-38.0	108,621	42.4	39.1-45.7	201,883	38.4	36.0-40.8
Some Post-H.S.	62,032	38.3	33.8-42.8	68,041	35.7	31.9-39.5	130,073	36.9	34.0-39.8
College Graduate	32,856	32.0	28.1-36.0	36,012	27.7	24.4-31.0	68,868	29.6	27.1-32.1
Income									
Less than \$15,000	28,641	42.2	35.1-49.4	41,291	50.7	44.7-56.7	69,932	46.8	42.2-51.5
\$15,000 - 24,999	40,637	44.3	38.3-50.3	50,260	46.4	41.1-51.6	90,897	45.4	41.5-49.4
\$25,000 - 34,999	30,433	43.9	36.7-51.1	23,940	38.9	32.2-45.7	54,373	41.6	36.6-46.5
\$35,000 - 49,999	34,287	39.5	33.3-45.7	33,096	38.0	32.4-43.6	67,382	38.7	34.6-42.9
\$50,000 - 74,999	21,715	27.1	21.9-32.2	19,545	26.4	21.3-31.6	41,260	26.8	23.1-30.4
\$75,000+	37,914	31.3	26.5-36.1	23,406	21.7	17.6-25.8	61,321	26.8	23.6-30.0



Pneumonia Vaccine, Ages 65 and Older

Definition Responding "Yes" 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?" Restricted to adults aged 65

and older.

Prevalence WV: 70.1% (95% CI: 67.7-72.6)

U.S.: 71.3% (95% CI: 70.8-71.8)

The West Virginia prevalence of ever had a pneumonia vaccine among those aged 65 and older was similar to the U.S. prevalence. West Virginia ranked the

15th lowest among the 53 BRFSS participants.

Gender Men: 70.5% (95% CI: 66.8-74.3)

Women: 69.8% (95% CI: 66.6-73.0)

There was no gender difference in the prevalence of ever had a pneumonia

vaccine among those aged 65 and older.

Race/Ethnicity No race/ethnicity statistics are reported due to unreliable estimates.

Education There was no educational attainment difference in the prevalence of ever had a

pneumonia vaccine among those aged 65 and older.

Household Income There was no annual household income difference in the prevalence of ever had

a pneumonia vaccine among those aged 65 and older.



Table 13.4 Prevalence of Ever Had a Pneumonia Vaccine Among Those Aged 65 and Older by Demographic Characteristics: WVBRFSS, 2015

		Men			Women			Total	
Characteristic	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
TOTAL	101,401	70.5	66.8-74.3	124,844	69.8	66.6-73.0	226,245	70.1	67.7-72.6
Education									
Less than H.S.	23,455	69.9	60.5-79.4	29,225	74.3	67.1-81.5	52,680	72.3	66.4-78.1
H.S. or G.E.D.	37,037	68.4	62.2-74.6	56,942	68.8	63.9-73.7	93,979	68.7	64.8-72.5
Some Post-H.S.	22,798	73.5	65.7-81.4	24,557	67.4	60.6-74.2	47,355	70.2	65.1-75.4
College Graduate	17,777	72.3	65.8-78.8	14,036	69.3	62.2-76.4	31,813	70.9	66.1-75.7
Income									
Less than \$15,000	6,337	53.7	39.0-68.5	15,660	80.6	72.7-88.5	21,997	70.4	62.4-78.5
\$15,000 - 24,999	19,860	72.8	63.7-82.0	23,136	72.3	65.3-79.3	42,996	72.6	66.9-78.2
\$25,000 - 34,999	13,154	77.4	68.1-86.7	11,493	63.1	52.3-73.9	24,647	70.0	62.6-77.4
\$35,000 - 49,999	17,265	77.2	69.0-85.4	15,895	65.2	56.1-74.4	33,159	71.0	64.7-77.2
\$50,000 - 74,999	11,244	66.2	55.9-76.6	7,744	63.0	50.1-76.0	18,988	67.9	56.8-73.0
\$75,000+	13,640	73.0	63.9-82.1	5,789	66.4	53.4-79.3	19,429	70.9	63.4-78.4

CHAPTER 13: IMMUNIZATIONS

Tetanus Vaccine

Definition Responding "Yes, received Tdap", "Yes, received tetanus shot, but not Tdap", or

"Yes, received tetanus shot but not sure what type" to the question, "Since

2005, have you had a tetanus shot?"

Prevalence WV: 63.9% (95% CI: 62.3-65.4)

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: 69.6% (95% CI: 67.4-71.8)

Women: 58.3% (95% CI: 56.2-60.5)

The prevalence of had a tetanus vaccine was significantly higher among men

than women.

Race/Ethnicity White, Non-Hispanic: 64.3% (95% CI: 62.7-65.9)

Black, Non-Hispanic: 55.2% (95% CI: 45.8-64.6) **Other, Non-Hispanic**: *57.6% (95% CI: 42.8-72.5) **Multiracial, Non-Hispanic**: *74.5% (95% CI: 62.8-86.3)

Hispanic: *60.3% (95% CI: 43.3-77.4)

There was no race/ethnic difference in the prevalence of had a tetanus vaccine.

* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 6.

Age The prevalence of had a tetanus vaccine generally decreased with age. The

prevalence of had a tetanus vaccine was significantly lower among those aged 65 and older (48.6%) than among all other age groups. The prevalence was highest among those aged 18-24 (79.1%) and was significantly higher than the

prevalence among those aged 35 and older.

Education The prevalence of had a tetanus vaccine was significantly higher among college

graduates (70.3%) than among those with less than a high school education

(56.4%) and among those with a high school education (62.2%).

Household Income The prevalence of had a tetanus vaccine was significantly higher among those

earning \$75,000 or more per year (71.1%) than among those with an annual

household income of less than \$35,000 a year.



Table 13.5 Prevalence of Had a Tetanus Vaccine by Demographic Characteristics: WVBRFSS, 2015

		Men			Women			Total	
Characteristic	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
TOTAL	414,440	69.6	67.4-71.8	356,021	58.3	56.2-60.5	770,461	63.9	62.3-65.4
Age									
18-24	58,916	82.6	76.3-88.9	48,188	75.1	67.9-82.4	107,105	79.1	74.2-83.9
25-34	66,540	71.1	64.6-77.6	60,572	70.9	64.7-77.2	127,111	71.0	66.5-75.5
35-44	67,062	72.2	66.6-77.7	59,546	64.5	58.6-70.4	126,608	68.4	64.3-72.4
45-54	75,564	72.7	67.7-77.7	57,259	57.8	52.7-63.0	132,823	65.4	61.8-69.1
55-64	75,025	70.0	65.6-74.3	64,014	56.9	52.4-61.3	139,038	63.3	60.1-66.4
65+	69,790	56.1	51.7-60.6	64,389	42.4	37.8-46.1	134,179	48.6	45.7-51.5
Education									
Less than H.S.	57,840	64.9	58.3-71.5	43,312	48.1	41.4-54.7	101,152	56.4	51.7-61.2
H.S. or G.E.D.	172,374	69.4	65.9-72.9	122,230	54.3	50.7-57.9	294,604	62.2	59.7-64.7
Some Post-H.S.	112,278	70.3	66.0-74.6	109,318	62.5	58.4-66.6	221,595	66.2	63.2-69.2
College Graduate	71,125	73.2	69.3-77.1	80,630	67.9	64.2-71.6	151,754	70.3	67.6-73.0
Income									
Less than \$15,000	39,870	65.3	58.3-72.4	44,379	58.7	52.6-64.9	84,250	61.7	57.0-66.3
\$15,000 - 24,999	57,314	67.9	62.0-73.8	58,125	59.6	54.2-65.0	115,440	63.5	59.4-67.5
\$25,000 - 34,999	42,701	65.9	58.7-73.1	30,945	55.4	48.1-62.6	73,646	61.0	55.9-66.2
\$35,000 - 49,999	58,691	70.5	64.8-76.2	45,799	58.1	52.0-64.3	104,490	64.5	60.2-68.7
\$50,000 - 74,999	53,275	69.7	63.4-75.9	39,979	60.8	54.5-67.2	93,255	65.6	61.1-70.0
\$75,000+	86,531	74.5	70.2-78.9	65,317	67.0	62.0-71.9	151,848	71.1	67.8-74.4



Tdap Vaccine

Definition Respondents who reported they had a tetanus vaccine and responding "Yes,

received Tdap" to the guestion, "Since 2005, have you had a tetanus shot?"

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: 19.7% (95% CI: 17.7-21.7)

Women: 23.4% (95% CI: 21.5-25.3)

There was no gender difference in the prevalence of had the Tdap vaccine.

Race/Ethnicity White, Non-Hispanic: 21.7% (95% CI: 20.2-23.1)

Black, Non-Hispanic: 17.9% (95% CI: 11.0-24.9)
Other, Non-Hispanic: *23.4% (95% CI: 10.2-36.6)
Multiracial, Non-Hispanic: *18.0% (95% CI: 6.7-29.3)

Hispanic: *33.3% (95% CI: 16.0-50.6)

There was no race/ethnicity difference in the prevalence of had the Tdap

vaccine.

* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 6.

Age The prevalence of had the Tdap vaccine was significantly higher among those

aged 18-24 (39.9%) than among all other age groups.

Education The prevalence of had the Tdap vaccine was significantly higher among college

graduates (32.3%) than among all other educational attainment groups.

Household Income The prevalence of had the Tdap vaccine was significantly higher among those

with an annual household income of \$75,000 or more (29.7%) than among

those earning less than \$35,000 a year.



Table 13.6 Prevalence of Had the Tdap Vaccine Among Those Who Had a Tetanus Vaccine by Demographic Characteristics: WVBRFSS, 2015

		Men			Women			Total	
Characteristic	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
TOTAL	117,544	19.7	17.7-21.7	142,984	23.4	21.5-25.3	260,528	21.6	20.2-23.0
Age									
18-24	25,509	35.8	27.1-44.4	28,551	44.5	35.9-53.2	54,060	39.9	33.7-46.1
25-34	19,460	20.8	15.2-26.3	30,714	36.0	29.6-42.3	50,174	28.0	23.8-32.3
35-44	19,274	20.7	15.8-25.7	25,163	27.3	22.1-32.5	44,437	24.0	20.4-27.6
45-54	17,296	16.6	12.5-20.8	16,768	16.9	13.2-20.6	34,064	16.8	14.0-19.6
55-64	15,492	14.4	11.2-17.7	20,943	18.6	15.3-21.9	36,434	16.6	14.3-18.9
65+	20,513	16.5	13.2-19.8	20,502	13.5	10.9-16.1	41,015	14.9	12.8-16.9
Education									
Less than H.S.	11,039	12.4	7.6-17.2	11,702	13.0	8.1-17.9	22,741	12.7	9.3-16.1
H.S. or G.E.D.	45,792	18.4	15.3-21.5	37,665	16.7	14.0-19.4	83,457	17.6	15.5-19.7
Some Post-H.S.	33,495	21.0	16.8-25.1	50,767	29.0	24.9-33.1	84,262	25.2	22.2-28.1
College Graduate	27,148	27.9	23.8-32.1	42,623	35.9	31.9-39.9	69,770	32.3	29.4-35.2
Income									
Less than \$15,000	6,759	11.1	6.1-16.0	11,700	15.5	11.0-20.0	18,459	13.5	10.2-16.8
\$15,000 - 24,999	12,851	15.2	10.6-19.8	18,438	18.9	14.5-23.4	31,290	17.2	14.0-20.4
\$25,000 - 34,999	8,251	12.7	7.5-17.9	12,990	23.2	16.4-30.1	21,241	17.6	13.3-21.9
\$35,000 - 49,999	20,252	24.3	18.7-30.0	17,699	22.5	17.4-27.5	37,951	23.4	19.6-27.2
\$50,000 - 74,999	15,362	20.1	15.0-25.2	19,256	29.3	23.4-35.2	34,617	24.3	20.4-28.2
\$75,000+	29,635	25.5	20.6-30.5	33,717	34.6	29.2-39.9	63,352	29.7	26.0-33.3



Shingles Vaccine

Definition Responding "Yes" to the question, "Have you ever had the shingles or zoster

vaccine?" Question asked among those aged 45 and older.

Prevalence WV: 22.8% (95% CI: 21.3-24.3)

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: 20.7% (95% CI: 18.6-22.9)

Women: 24.7% (95% CI: 22.6-26.7)

There was no gender difference in the prevalence of had the shingles vaccine.

Race/Ethnicity White, Non-Hispanic: 23.5% (95% CI: 21.9-25.0)

Black, Non-Hispanic: *7.0% (95% CI: 0.8-13.2) Other, Non-Hispanic: *21.3% (95% CI: 4.6-37.9) Multiracial, Non-Hispanic: *20.1% (95% CI: 4.2-36.1)

Hispanic: *0.0% (95% CI: 0.0-0.0)

The prevalence of had the shingles vaccine was significantly higher among White, Non-Hispanic adults than among Black, Non-Hispanic adults and Hispanic

adults.

* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 6.

Age The prevalence of had the shingles vaccine was significantly higher among those

aged 65 and older (36.2%) than among all other age groups.

Education The prevalence of had the shingles vaccine was significantly higher among

college graduates (32.2%) than among all other educational attainment levels.

Household Income The prevalence of had the shingles vaccine was significantly higher among those

with an annual household income of \$75,000 or more (26.9%) than among

those earning less than \$25,000 per year.



Table 13.7 Prevalence of Had the Shingles Vaccine Among Those Aged 45 and Older by Demographic Characteristics: WVBRFSS, 2015

		Men		,	Women			Total	
Characteristic	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
TOTAL	67,817	20.7	18.6-22.9	92,335	24.7	22.6-26.7	160,152	22.8	21.3-24.3
Age									
45-54	2,465	*4.1	1.4-6.8	2,420	*3.9	1.5-6.3	4,885	4.0	2.2-5.8
55-64	16,395	13.3	10.4-16.2	21,528	16.8	13.8-19.8	37,923	15.1	13.0-17.2
65+	48,778	34.6	30.7-38.5	67,101	37.5	34.1-40.9	115,879	36.2	33.7-38.8
Education									
Less than H.S.	9,763	14.6	9.4-19.8	14,546	20.5	15.1-26.0	24,309	17.7	13.9-21.5
H.S. or G.E.D.	23,930	17.7	14.5-21.0	40,235	24.7	21.5-27.9	64,165	21.5	19.2-23.8
Some Post-H.S.	17,325	23.9	19.1-28.7	19,639	23.1	18.9-27.3	36,964	23.5	20.3-26.6
College Graduate	16,800	32.1	27.2-37.0	17,681	32.3	27.7-36.8	34,481	32.2	28.8-35.5
Income									
Less than \$15,000	3,569	10.0	4.7-15.4	9,716	20.2	14.5-25.9	13,284	15.9	11.8-19.9
\$15,000 - 24,999	7,899	14.5	9.7-19.3	13,244	22.1	17.2-26.9	21,144	18.5	15.0-21.9
\$25,000 - 34,999	6,290	17.2	11.3-23.0	7,644	22.2	15.6-28.9	13,934	19.6	15.2-24.1
\$35,000 - 49,999	10,698	23.1	17.0-29.1	13,305	27.3	21.5-33.2	24,002	25.2	21.0-29.4
\$50,000 - 74,999	10,080	24.1	17.9-30.2	9,655	25.1	18.8-31.4	19,735	24.6	20.1-29.0
\$75,000+	15,725	29.4	23.8-35.1	9,814	23.6	18.0-29.2	25,539	26.9	22.9-30.9

^{*} Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 6.

CHAPTER 13: IMMUNIZATIONS

HPV Vaccine

Definition Responding "Yes" to the question, "A vaccine to prevent the human

papillomavirus or HPV infection is available and is called the cervical cancer or genital warts vaccine, HPV shot, Gardasil or Cervarix. Have you ever had an

HPV vaccination?" Responses restricted to adults aged 18-49.

Prevalence WV: 16.9% (95% CI: 14.9-19.0)

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: 10.4% (95% CI: 8.0-12.9)

Women: 23.0% (95% CI: 19.9-26.1)

The prevalence of ever had the HPV vaccine was significantly higher among

women than men.

Race/Ethnicity White, Non-Hispanic: 16.8% (95% CI: 14.7-18.9)

Black, Non-Hispanic: 24.1% (95% CI: 11.5-36.7) Other, Non-Hispanic: *11.0% (95% CI: 0.0-25.8) Multiracial, Non-Hispanic: *16.9% (95% CI: 2.1-31.6)

Hispanic: *21.0% (95% CI: 1.8-40.1)

There was no race/ethnicity difference in the prevalence of ever had the HPV

vaccine.

* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 6.

Age The prevalence of ever had the HPV vaccine was significantly higher among

those aged 18-24 (46.7%) than among all other age groups.

Education There was no educational attainment difference in the prevalence of ever had

the HPV vaccine.

Household Income There was no consistent annual household income difference in the prevalence

of ever had the HPV vaccine.



Table 13.8 Prevalence of Ever Had the HPV Vaccine Among Those Aged 18-49 by Demographic Characteristics: WVBRFSS, 2015

		Men			Women			Total	
Characteristic	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
TOTAL	30,155	10.4	8.0-12.9	71,010	23.0	19.9-26.1	101,165	16.9	14.9-19.0
Age									
18-24	17,740	28.4	19.9-37.0	44,108	62.9	54.9-71.0	61,848	46.7	40.4-53.0
25-34	7,665	8.9	4.9-13.0	19,934	22.7	17.3-28.1	27,599	15.9	12.4-19.3
35-44	3,264	*3.5	1.4-5.7	4,411	4.5	2.0-7.0	7,676	4.0	2.4-5.7
45-49	1,485	*3.3	0.4-6.2	2,557	*5.6	2.1-9.0	4,042	4.4	2.2-6.7
Education									
Less than H.S.	1,516	*5.2	0.5-9.9	7,243	19.8	10.0-29.5	8,759	13.4	7.3-19.4
H.S. or G.E.D.	12,826	10.3	6.4-14.2	22,918	24.8	18.8-30.7	35,745	16.4	13.0-19.9
Some Post-H.S.	11,603	13.4	8.2-18.7	28,310	26.7	21.1-32.4	39,913	20.8	16.8-24.7
College Graduate	4,210	8.7	4.4-13.1	12,539	17.3	12.7-21.8	16,749	13.9	10.6-17.2
Income									
Less than \$15,000	2,101	*7.6	1.2-14.1	11,741	33.7	23.8-43.5	13,842	22.2	15.6-28.8
\$15,000 - 24,999	2,557	*7.7	1.9-13.5	13,171	28.8	19.8-37.7	15,728	19.9	13.9-25.9
\$25,000 - 34,999	2,869	*11.0	1.9-20.1	8,428	32.5	20.6-44.4	11,297	21.7	14.0-29.4
\$35,000 - 49,999	4,248	*11.3	4.0-18.7	5,533	14.0	7.0-21.0	9,782	12.7	7.7-17.8
\$50,000 - 74,999	2,787	*7.1	1.6-12.6	4,118	12.4	5.2-19.5	6,905	9.5	5.1-14.0
\$75,000+	5,622	8.9	3.8-13.9	10,884	17.2	10.9-23.5	16,506	13.0	9.0-17.1

 $^{^{}st}$ Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 6.



HPV Vaccine - Full Course

Definition Reporting they had the HPV vaccine and responding "3" to the question, "How

many HPV shots did you receive?" Responses restricted to adults aged 18-49.

Prevalence WV: 77.1% (95% CI: 70.9-83.3)

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: 70.0% (95% CI: 57.0-83.1)

Women: 79.7% (95% CI: 72.6-86.7)

There was no gender difference in the prevalence of had the full course of the

HPV vaccine.

Race/Ethnicity No race/ethnicity statistics are reported due to unreliable estimates.

Age There was no age difference in the prevalence of had the full course of the HPV

vaccine.

Education There was no educational attainment difference in the prevalence of had the full

course of the HPV vaccine.

Household Income There was no consistent annual household income difference in the prevalence

of had the full course of the HPV vaccine.

CHAPTER 13: IMMUNIZATIONS

Table 13.9 Prevalence of Had the Full Course of the HPV Vaccine Among Those Aged 18-49 by Demographic Characteristics: WVBRFSS, 2015

		Men			Women			Total	
Characteristic	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
TOTAL	15,509	70.0	57.0-83.1	49,508	79.7	72.6-86.7	65,017	77.1	70.9-83.3
Age									
18-24	9,360	68.4	50.0-86.8	34,030	82.0	73.5-90.5	43,389	78.6	70.7-86.5
25-34	3,973	76.7	54.5-98.8	12,737	79.2	67.3-91.0	16,710	78.6	68.3-88.8
35-44	1,611	75.9	48.2-100.0	1,267	*42.4	7.1-77.7	2,878	56.3	28.1-84.5
45-49	565	*48.6	0.0-99.2	1,475	94.5	83.2-100.0	2,040	74.9	46.7-100.0
Education									
Less than H.S.	896	*73.9	29.6-100.0	3,119	61.2	27.9-94.6	4,016	63.7	35.2-92.2
H.S. or G.E.D.	6,423	65.8	43.8-87.8	17,239	82.5	70.5-94.4	23,662	77.2	66.2-88.1
Some Post-H.S.	7,083	82.5	65.5-99.4	20,619	82.5	72.1-92.9	27,702	82.5	73.6-91.4
College Graduate	1,106	*42.7	11.2-74.3	8,531	76.4	63.2-89.6	9,638	70.1	57.3-82.8
Income									
Less than \$15,000	426	*25.6	0.0-69.1	6,680	64.7	45.8-83.7	7,106	59.3	41.3-77.3
\$15,000 - 24,999	853	79.9	43.1-100.0	5,957	55.6	33.5-77.8	6,810	57.8	37.1-78.6
\$25,000 - 34,999	2,389	90.9	72.3-100.0	7,310	95.4	86.5-100.0	9,700	94.3	86.2-100.0
\$35,000 - 49,999	1,685	64.3	27.4-100.0	4,336	89.1	73.3-100.0	6,021	80.4	63.1-97.7
\$50,000 - 74,999	1,417	80.5	50.9-100.0	3,230	90.8	77.2-100.0	4,647	87.4	74.2-100.0
\$75,000+	2,058	*45.6	9.9-81.3	8,020	80.2	64.4-96.0	10,078	69.4	52.5-86.4

^{*} Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 6.



HPV Vaccine, Women Aged 18-26

Definition Responding "Yes" to the question, "A vaccine to prevent the human

papillomavirus or HPV infection is available and is called the cervical cancer or genital warts vaccine, HPV shot, Gardasil or Cervarix. Have you ever had an

HPV vaccination?" Responses restricted to women aged 18-26.

Prevalence WV: 60.1% (95% CI: 52.7-67.4)

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.

Race/Ethnicity No race/ethnicity statistics are reported due to unreliable estimates.

Age There was no age difference in the prevalence of ever had the HPV vaccine

among women aged 18-26.

Education There was no consistent educational attainment difference in the prevalence of

ever had the HPV vaccine among women aged 18-26.

Household Income There was no annual household income difference in the prevalence of ever had

the HPV vaccine among women aged 18-26.



Table 13.10 Prevalence of Ever Had the HPV Vaccine Among Women Aged 18-26 by Demographic Characteristics: WVBRFSS, 2015

		Total	
Characteristic	Weighted Frequency	%	95% CI
TOTAL	51,101	60.1	52.7-67.4
Age			
18-24	44,108	62.9	54.7-71.1
25-26	6,993	46.6	31.2-62.1
Education			
Less than H.S.	5,134	55.2	29.7-80.6
H.S. or G.E.D.	17,869	68.9	57.1-80.6
Some Post-H.S.	23,621	61.3	49.9-72.7
College Graduate	4,476	39.6	23.9-55.4
Income			
Less than \$15,000	9,622	74.0	57.3-90.7
\$15,000 - 24,999	8,231	73.5	56.6-90.4
\$25,000 - 34,999	6,448	70.3	51.3-89.4
\$35,000 - 49,999	3,703	60.5	34.3-86.7
\$50,000 - 74,999	2,565	*44.0	16.5-71.6
\$75,000+	5,789	54.9	32.0-77.8

 $^{^{}st}$ Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 6.



HPV Vaccine, Women Aged 18-26 - Full Course

Definition Reporting they had the HPV vaccine and responding "Yes" to the question, "A

vaccine to prevent the human papillomavirus or HPV infection is available and is called the cervical cancer or genital warts vaccine, HPV shot, Gardasil or Cervarix. Have you ever had an HPV vaccination?" Responses restricted to

women aged 18-26.

Prevalence WV: 82.7% (95% CI: 74.9-90.5)

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.

Race/Ethnicity No race/ethnicity statistics are reported due to unreliable estimates.

Age There was no age difference in the prevalence of had the full course of the HPV

vaccine among women aged 18-26.

Education There was no educational attainment difference in the prevalence of had the full

course of the HPV vaccine among women aged 18-26.

Household Income There was no annual household income difference in the prevalence of had the

full course of the HPV vaccine among women aged 18-26.



Table 13.11 Prevalence of Had the Full Course of the HPV Vaccine Among Women Aged 18-26 by Demographic Characteristics: WVBRFSS, 2015

		Total	
Characteristic	Weighted Frequency	%	95% CI
TOTAL	39,183	82.7	74.9-90.5
Age			
18-24	34,030	82.0	73.4-90.5
25-26	5,153	88.2	72.5-100.0
Education			
Less than H.S.	1,940	*49.6	10.4-88.7
H.S. or G.E.D.	15,168	90.7	81.9-99.5
Some Post-H.S.	18,376	82.6	71.5-93.7
College Graduate	3,699	82.6	61.0-100.0
Income			
Less than \$15,000	5,829	64.9	44.2-85.5
\$15,000 - 24,999	4,683	62.4	35.3-89.5
\$25,000 - 34,999	5,681	94.2	82.9-100.0
\$35,000 - 49,999	3,335	90.1	70.8-100.0
\$50,000 - 74,999	2,360	100.0	100.0-100.0
\$75,000+	4,793	92.1	76.7-100.0

^{*} Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 6.



SECTION 4: CHRONIC DISEASES

CHAPTER 14: 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: 42.7% (95% CI: 41.2-44.1)

U.S.: 32.0% (95% CI: 31.7-32.3)

West Virginia's prevalence of hypertension was significantly higher than the U.S.

prevalence. West Virginia ranked the highest among 53 BRFSS participants.

Gender Men: 44.4% (95% CI: 42.2-46.6)

Women: 41.1% (95% CI: 39.1-43.0)

There was no gender difference in the prevalence of hypertension.

Race/Ethnicity White, Non-Hispanic: 42.9% (95% CI: 41.4-44.4)

Black, Non-Hispanic: 47.1% (95% CI: 38.5-55.8)

Other, Non-Hispanic: *41.8% (95% CI: 27.0-56.7)

Multiracial, Non-Hispanic: *31.8% (95% CI: 20.0-43.6)

Hispanic: *18.8% (95% CI: 6.8-30.9)

There was no race/ethnicity difference in the prevalence of hypertension.

* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 6.

Age The prevalence of hypertension significantly increased with increasing age. The

prevalence ranged from a low of 11.3% among the youngest adults to a high of

65.7% among those aged 65 and older.

Education Adults with less than a high school education had the highest prevalence of

hypertension (56.8%) and was significantly higher than the prevalence among

those with some college and college graduates.

Household Income The prevalence of hypertension was 51.5% in the lowest income group (less than

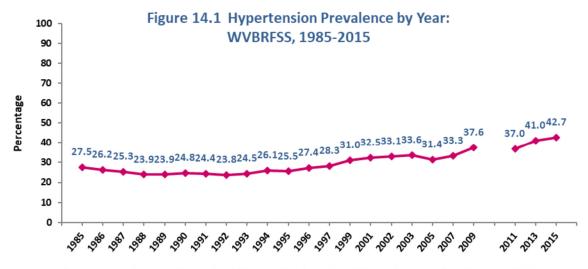
\$15,000 annually). The lowest prevalence of hypertension (30.4%) was among those in the highest income bracket (\$75,000 or more annually) and was

significantly lower than the prevalence among all other income groups.

CHAPTER 14: HYPERTENSION

Table 14.1 Hypertension Prevalence by Demographic Characteristics: WVBRFSS, 2015

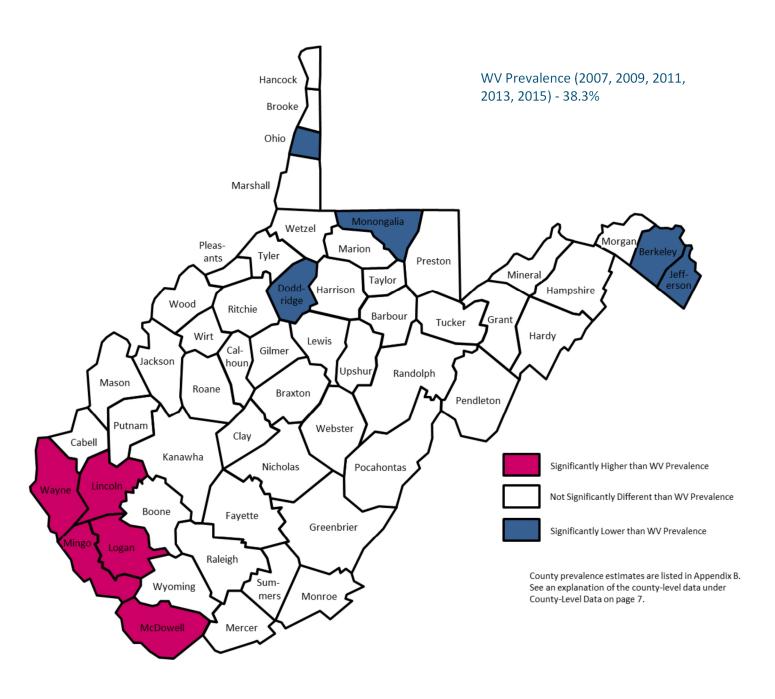
		Men			Women			Total	
Characteristic	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
TOTAL	318,554	44.4	42.2-46.6	307,999	41.1	39.1-43.0	626,552	42.7	41.2-44.1
Age									
18-24	10,237	11.7	6.7-16.6	9,067	10.9	6.0-15.7	19,303	11.3	7.8-14.7
25-34	22,838	21.0	15.7-26.2	18,450	17.5	12.6-22.4	41,288	19.3	15.7-22.9
35-44	38,593	34.2	28.7-39.8	35,420	31.8	26.3-37.3	74,013	33.0	29.1-36.9
45-54	63,856	52.9	47.7-58.2	50,088	41.4	36.6-46.1	113,944	47.1	43.6-50.7
55-64	80,455	61.2	57.0-65.4	69,687	51.9	47.8-55.9	150,141	56.5	53.5-59.4
65+	100,813	66.0	62.2-69.8	122,671	65.4	62.2-68.7	223,484	65.7	63.2-68.2
Education									
Less than H.S.	64,870	57.3	51.0-63.5	66,617	56.4	50.5-62.2	131,488	56.8	52.6-61.1
H.S. or G.E.D.	140,710	46.3	42.8-49.8	140,103	49.4	46.2-52.7	280,813	47.8	45.4-50.2
Some Post-H.S.	69,101	37.5	33.4-41.7	67,813	32.3	28.8-35.8	136,914	34.7	32.0-37.4
College Graduate	43,084	37.9	33.9-41.9	33,069	24.1	21.2-27.0	76,154	30.4	27.9-32.8
Income									
Less than \$15,000	37,597	52.6	45.5-59.8	45,688	50.6	44.8-56.3	83,284	51.5	47.0-56.0
\$15,000 - 24,999	51,597	50.6	44.7-56.5	58,825	49.9	44.8-55.0	110,423	50.2	46.4-54.1
\$25,000 - 34,999	33,802	44.9	38.0-51.9	27,761	41.9	35.3-48.5	61,563	43.5	38.7-48.3
\$35,000 - 49,999	41,346	43.7	37.8-49.7	36,620	39.0	33.4-44.7	77,966	41.4	37.3-45.5
\$50,000 - 74,999	43,927	48.5	42.5-54.6	29,246	37.4	31.6-43.2	73,174	43.4	39.1-47.6
\$75,000+	50,561	36.9	32.2-41.5	25,963	22.6	18.6-26.6	46,524	30.4	27.2-33.5



Due to changes in sample composition and weighting methodology, 2011-2015 results are not directly comparable to previous years.

CHAPTER 14: HYPERTENSION

Figure 14.2 Hypertension Prevalence by County: WVBRFSS, 2007, 2009, 2011, 2013, 2015





Hypertension Medication

Definition Reported having been told they have high blood pressure and responding "Yes" to

the question, "Are you currently taking medicine for your high blood pressure?"

Prevalence WV: 79.7% (95% CI: 77.8-81.6)

U.S.: 77.3% (95% CI: 76.9-77.7)

The West Virginia prevalence of taking medication for hypertension was significantly higher than the U.S. prevalence. West Virginia ranked the 14th highest

among the 53 BRFSS participants.

Gender Men: 78.4% (95% CI: 75.7-81.2)

Women: 80.9% (95% CI: 78.3-83.6)

There was no gender difference in the prevalence of taking medication for

hypertension.

Race/Ethnicity White, Non-Hispanic: 80.1% (95% CI: 78.1-82.1)

Black, Non-Hispanic: 81.3% (95% CI: 71.5-91.2) Other, Non-Hispanic: *68.6% (95% CI: 44.5-92.8) Multiracial, Non-Hispanic: *69.5% (95% CI: 49.4-89.6)

Hispanic: *45.2% (95% CI: 10.5-79.8)

There was no race/ethnicity difference in the prevalence of taking medication for

nynertension

* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 6.

Age The prevalence of taking medication for hypertension increased with advancing

age. The prevalence ranged from a low of 24.4% among those aged 18-24 to a

high of 92.4% among those aged 65 and older.

Education There was no educational attainment difference in the prevalence of taking

medication for hypertension.

Household Income There was no difference in the prevalence of taking medication for hypertension

between income brackets.



Table 14.2 Use of Hypertension Medication by Demographic Characteristics: WVBRFSS, 2015

Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
TOTAL	249,887	78.4	75.7-81.2	248,986	80.9	78.3-83.6	498,873	79.7	77.8-81.6
Age									
18-24	2,707	*26.4	7.1-45.8	2,000	*22.1	2.2-41.9	4,707	*24.4	10.5-38.2
25-34	7,483	*32.8	19.9-45.7	7,634	*41.4	25.9-56.9	15,117	36.6	26.6-46.6
35-44	23,555	*61.0	50.8-71.2	22,453	*63.7	53.0-74.4	46,008	62.3	54.9-69.7
45-54	51,972	81.4	75.9-86.8	40,445	80.7	74.6-86.9	92,417	81.1	77.0-85.2
55-64	70,520	87.7	83.7-91.6	59,923	86.0	81.9-90.1	130,443	86.9	84.0-89.7
65+	92,190	91.4	88.7-94.2	114,106	93.1	90.9-95.4	206,296	92.4	90.6-94.1
Education									
Less than H.S.	51,173	78.9	72.2-85.5	54,516	81.8	75.5-88.2	105,689	80.4	75.8-85.0
H.S. or G.E.D.	109,881	78.1	73.7-82.4	115,327	82.3	78.4-86.2	225,208	80.2	77.3-83.1
Some Post-H.S.	52,784	76.4	70.5-82.3	51,272	76.0	70.2-81.8	104,056	76.2	72.0-80.3
College Graduate	35,331	82.0	76.5-87.5	27,476	83.1	77.8-88.4	62,807	82.5	78.6-86.3
Income									
Less than \$15,000	28,933	77.0	69.2-84.8	36,895	80.8	74.2-87.3	65,828	79.0	74.0-84.0
\$15,000 - 24,999	39,146	75.9	68.3-83.5	45,011	76.5	70.0-83.0	84,157	76.2	71.2-81.2
\$25,000 - 34,999	27,075	80.1	72.0-88.1	21,791	78.5	69.3-87.7	48,866	79.4	73.3-85.4
\$35,000 - 49,999	33,711	81.5	74.3-88.8	29,348	80.6	71.7-89.4	63,059	81.1	75.4-86.8
\$50,000 - 74,999	34,440	78.4	70.7-86.1	22,231	76.0	66.8-85.2	56,672	77.4	71.5-83.4
\$75,000+	39,710	78.5	71.6-85.5	21,196	81.6	73.4-89.9	60,906	79.6	74.2-85.0

 $^{^{*}}$ Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 6.



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: 39.0% (95% CI: 37.5-40.5)

U.S.: 36.5% (95% CI: 36.2-36.8)

The WV prevalence of high cholesterol was significantly higher than the U.S. prevalence. West Virginia ranked the 9th highest among 53 BRFSS participants.

Gender Men: 40.3% (95% CI: 37.9-42.6)

Women: 37.8% (95% CI: 35.8-39.8)

There was no gender difference in the prevalence of high cholesterol.

Race/Ethnicity White, Non-Hispanic: 39.7% (95% CI: 38.1-41.3)

Black, Non-Hispanic: 28.9% (95% CI: 20.5-37.3) Other, Non-Hispanic: *28.0% (95% CI: 10.2-45.7) Multiracial, Non-Hispanic: *29.4% (95% CI: 16.9-41.8)

Hispanic: *19.1% (95% CI: 6.7-31.6)

The prevalence of high cholesterol was significantly higher among White, Non-Hispanic adults than among Black, Non-Hispanic adults and Hispanic adults.

* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 6.

Age The prevalence of high cholesterol increased with age and was highest among

those aged 45 and older, significantly higher than among those younger than 45.

Education The prevalence of high cholesterol was highest among those with less than a high

school education (51.9%), significantly higher than among all other educational

attainment levels.

Household Income The prevalence of high cholesterol was highest among those with an annual

household income of less than \$15,000 (50.8%) and was significantly higher than

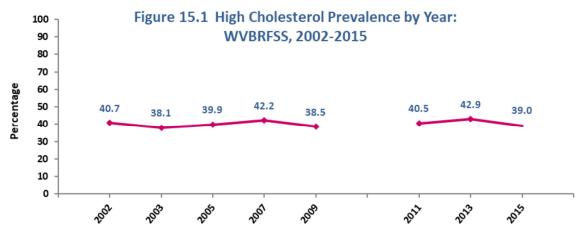
the prevalence among those with an income of \$25,000 or more.



Table 15.1 Prevalence of High Cholesterol by Demographic Characteristics: WVBRFSS, 2015

Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
TOTAL	231,961	40.3	37.9-42.6	239,457	37.8	35.8-39.8	471,418	39.0	37.5-40.5
Age									
18-24	4,407	*8.8	2.5-15.2	1,700	*3.8	0.4-7.2	6,107	6.5	2.8-10.2
25-34	11,942	18.0	11.3-24.7	8,954	12.1	7.3-16.9	20,896	14.9	10.8-18.9
35-44	31,747	35.9	29.6-42.2	27,491	29.4	23.9-35.0	59,238	32.6	28.4-36.8
45-54	47,686	46.0	40.3-51.7	46,275	42.8	37.8-47.8	93,962	44.4	40.6-48.2
55-64	61,752	51.3	46.7-55.9	63,401	49.5	45.3-53.6	125,153	50.4	47.3-53.4
65+	72,664	50.4	46.3-54.5	89,838	50.3	46.7-53.8	162,501	50.3	47.7-53.0
Education									
Less than H.S.	46,595	52.6	45.6-59.6	49,335	51.3	45.1-57.6	95,930	51.9	47.3-56.6
H.S. or G.E.D.	89,542	38.2	34.5-41.8	94,614	39.3	36.0-42.6	184,155	38.7	36.3-41.2
Some Post-H.S.	58,026	38.4	33.8-43.0	59,338	34.7	30.8-38.6	117,363	36.4	33.5-39.4
College Graduate	37,527	37.4	33.2-41.6	35,691	28.8	25.4-32.1	73,218	32.6	30.0-35.3
Income									
Less than \$15,000	28,507	54.9	46.8-63.1	33,572	47.7	41.4-54.0	62,080	50.8	45.7-55.8
\$15,000 - 24,999	38,762	46.3	40.0-52.6	40,266	40.8	35.5-46.0	79,028	43.3	39.3-47.4
\$25,000 - 34,999	19,590	32.5	25.5-39.5	21,139	37.8	31.0-44.6	40,729	35.0	30.1-39.9
\$35,000 - 49,999	32,434	42.0	35.7-48.3	32,488	38.8	33.1-44.5	64,922	40.3	36.1-44.5
\$50,000 - 74,999	32,993	42.2	35.9-48.5	26,561	38.0	32.3-43.8	59,555	40.2	35.9-44.5
\$75,000+	44,379	36.7	31.8-41.6	26,418	26.4	21.8-30.9	70,798	32.0	28.7-35.4

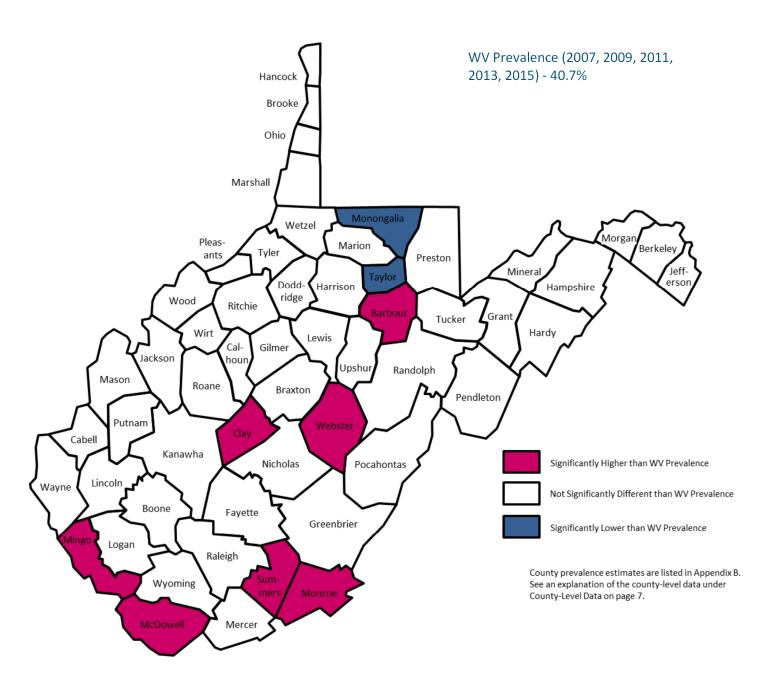
^{*} Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 6.



Due to changes in sample composition and weighting methodology, 2011-2015 results are not directly comparable to previous years.

CHAPTER 15: HIGH CHOLESTEROL

Figure 15.2 Prevalence of High Cholesterol by County: WVBRFSS, 2007, 2009, 2011, 2013, 2015





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: 7.0% (95% CI: 6.3-7.7)

U.S.: 4.3% (95% CI: 4.2-4.4)

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: 9.1% (95% CI: 8.0-10.3)

Women: 5.0% (95% CI: 4.2-5.8)

The prevalence of heart attack was significantly higher among men than among

women.

Race/Ethnicity White, Non-Hispanic: 7.0% (95% CI: 6.3-7.8)

Black, Non-Hispanic: 9.1% (95% CI: 4.5-13.6)
Other, Non-Hispanic: *7.0% (95% CI: 1.6-12.3)
Multiracial, Non-Hispanic: *6.1% (95% CI: 0.0-12.3)

Hispanic: *2.0% (95% CI: 0.0-6.0)

There was no race/ethnicity difference in the prevalence of heart attack.

* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 6.

Age The prevalence of heart attack was highest among those aged 65 and older

(15.1%), significantly higher than all other age groups.

Education The prevalence of heart attack was significantly higher among those with less

than a high school education (12.9%) than all other educational attainment groups. College graduates had the lowest heart attack prevalence (2.6%),

significantly lower than all other educational attainment groups.

Household Income The prevalence of heart attack decreased with increasing household income.

The prevalence of heart attack was highest among those with an annual household income of less than \$15,000 (12.0%) and was significantly higher than the prevalence among those earning \$25,000 or more. The prevalence of heart attack was lowest among those with a household income of \$75,000 or more per year (2.8%) and was significantly lower than among those earning less than

\$35,000 annually.



CHAPTER 16: CARDIOVASCULAR DISEASE

Table 16.1 Heart Attack Prevalence by Demographic Characteristics: WVBRFSS, 2015

Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
TOTAL	65,553	9.1	8.0-10.3	37,392	5.0	4.2-5.8	102,945	7.0	6.3-7.7
Age									
18-24	0	0.0	0.0-0.0	0	0.0	0.0-0.0	0	0.0	0.0-0.0
25-34	0	0.0	0.0-0.0	2,126	2.0	0.2-3.9	2,126	1.0	0.1-1.9
35-44	3,479	3.1	1.0-5.2	939	0.8	0.0-1.7	4,419	2.0	0.8-3.1
45-54	9,527	7.9	5.0-10.8	7,428	6.2	3.9-8.4	16,955	7.0	5.2-8.8
55-64	20,982	16.0	12.8-19.2	7,293	5.4	3.6-7.3	28,275	10.6	8.8-12.5
65+	31,262	20.5	17.3-23.8	19,605	10.6	8.2-12.9	50,866	15.1	13.1-17.0
Education									
Less than H.S.	18,319	16.0	12.0-20.1	11,499	9.8	6.5-13.1	29,818	12.9	10.3-15.5
H.S. or G.E.D.	28,356	9.4	7.6-11.2	15,358	5.4	4.1-6.8	43,713	7.5	6.3-8.6
Some Post-H.S.	14,502	7.9	6.0-9.8	8,176	3.9	2.6-5.3	22,678	5.8	4.6-6.9
College Graduate	4,272	3.8	2.5-5.0	2,359	1.7	0.9-2.6	6,631	2.6	1.9-3.4
Income									
Less than \$15,000	11,075	15.8	11.2-20.4	8,046	9.0	5.9-12.0	19,121	12.0	9.3-14.6
\$15,000 - 24,999	13,693	13.4	9.7-17.1	8,070	6.9	4.7-9.1	21,764	9.9	7.8-12.0
\$25,000 - 34,999	7,024	9.4	5.8-13.1	2,342	3.5	1.4-5.6	9,366	6.6	4.5-8.8
\$35,000 - 49,999	6,735	7.1	4.5-9.7	1,950	2.1	0.5-3.7	8,685	4.6	3.1-6.1
\$50,000 - 74,999	6,906	7.6	4.8-10.4	1,820	2.3	0.6-4.0	8,726	5.2	3.5-6.9
\$75,000+	6,117	4.5	2.7-6.2	1,002	0.9	0.0-1.7	7,119	2.8	1.8-3.9

^{*} Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 6.



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: 7.4% (95% CI: 6.7-8.1)

U.S.: 4.1% (95% CI: 4.0-4.2)

The West Virginia prevalence of coronary heart disease was significantly higher than the U.S. prevalence. West Virginia ranked highest among the 53 BRFSS

participants.

Gender Men: 8.9% (95% CI: 7.7-10.1)

Women: 6.0% (95% CI: 5.2-6.9)

The prevalence of coronary heart disease was significantly higher among men

than among women.

Race/Ethnicity White, Non-Hispanic: 7.5% (95% CI: 6.7-8.3)

Black, Non-Hispanic: 5.7% (95% CI: 2.2-9.2)
Other, Non-Hispanic: *6.5% (95% CI: 0.5-12.5)
Multiracial, Non-Hispanic: *9.6% (95% CI: 1.9-17.2)

Hispanic: *2.0% (95% CI: 0.0-6.0)

The prevalence of coronary heart disease was significantly higher among White,

Non-Hispanic adults than among Hispanic adults.

* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 6.

Age The prevalence of coronary heart disease increased with age. The prevalence of

coronary heart disease was significantly higher among those aged 65 and older

(16.2%) than among all other age groups.

Education The prevalence of coronary heart disease decreased with each increasing

educational attainment level and was significantly higher among those with less than a high school education (11.9%) than among those with some college or a

college degree.

Household Income The prevalence of coronary heart disease was significantly higher among those

with an annual household income of less than \$15,000 (12.1%) than among all

those earning \$75,000 or more annually (3.0%).



CHAPTER 16: CARDIOVASCULAR DISEASE

Table 16.2 Angina or Coronary Heart Disease Prevalence by Demographic Characteristics: WVBRFSS, 2015

Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
TOTAL	63,060	8.9	7.7-10.1	45,048	6.0	5.2-6.9	108,108	7.4	6.7-8.1
Age									
18-24	735	*0.8	0.0-2.5	0	*0.0	0.0-0.0	735	*0.4	0.0-1.3
25-34	2,332	*2.1	0.0-4.4	953	*0.9	0.0-1.9	3,285	*1.5	0.3-2.8
35-44	3,261	*2.9	0.8-5.0	2,544	*2.3	0.5-4.0	5,805	2.6	1.2-4.0
45-54	8,467	7.1	4.4-9.9	6,379	5.3	3.2-7.4	14,846	6.2	4.5-7.9
55-64	18,824	14.6	11.2-17.9	10,139	7.6	5.4-9.7	28,963	11.0	9.0-13.0
65+	29,441	19.8	16.6-23.0	24,615	13.4	10.9-15.8	54,056	16.2	14.3-18.2
Education									
Less than H.S.	15,441	14.1	9.7-18.5	11,548	9.9	6.7-13.1	26,989	11.9	9.2-14.6
H.S. or G.E.D.	26,074	8.6	6.9-10.4	20,451	7.3	5.7-8.8	46,525	8.0	6.8-9.2
Some Post-H.S.	14,511	7.9	5.9-9.9	8,381	4.0	2.8-5.2	22,892	5.8	4.7-7.0
College Graduate	7,034	6.2	4.4-8.0	4,585	3.3	2.1-4.6	11,619	4.6	3.6-5.7
Income									
Less than \$15,000	9,892	14.4	9.2-19.6	9,300	10.3	7.1-13.5	19,192	12.1	9.2-15.0
\$15,000 - 24,999	12,346	12.3	8.6-15.9	10,607	9.1	6.4-11.8	22,953	10.5	8.3-12.8
\$25,000 - 34,999	6,487	8.7	5.1-12.3	1,916	2.9	1.2-4.6	8,403	6.0	3.9-8.1
\$35,000 - 49,999	6,651	7.0	4.5-9.5	3,757	4.0	1.8-6.2	10,408	5.5	3.9-7.2
\$50,000 - 74,999	9,713	10.9	7.2-14.5	2,867	3.7	1.7-5.7	12,580	7.5	5.3-9.7
\$75,000+	5,450	4.0	2.5-5.5	1,985	*1.7	0.6-2.9	7,435	3.0	2.0-3.9

 $^{^{*}}$ Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 6.



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: 4.7% (95% CI: 4.1-5.3)

U.S.: 3.0% (95% CI: 2.9-3.1)

The West Virginia prevalence of stroke was significantly higher than the U.S. prevalence. West Virginia ranked the highest among the 53 BRFSS participants.

Gender Men: 4.2% (95% CI: 3.3-5.0)

Women: 5.3% (95% CI: 4.4-6.2)

There was no gender difference for the prevalence of stroke.

Race/Ethnicity No race/ethnicity statistics are reported due to unreliable estimates.

Age The prevalence of stroke increased with age. The prevalence of stroke was

significantly higher among those aged 65 and older (8.7%) than the prevalence

among all other age groups under age 45.

Education The prevalence of stroke was highest among those with less than a high school

education (11.2%) and was significantly higher than the prevalence among all

other educational attainment levels.

Household Income The prevalence of stroke was highest among those with an annual household

income less than \$15,000 (9.4%) and was significantly higher than the

prevalence among those earning \$25,000 or more per year.



Table 16.3 Stroke Prevalence by Demographic Characteristics: WVBRFSS, 2015

		Men			Women			Total	
Characteristic	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
TOTAL	29,744	4.2	3.3-5.0	39,800	5.3	4.4-6.2	69,544	4.7	4.1-5.3
Age									
18-24	226	*0.3	0.0-0.8	437	*0.5	0.0-1.6	663	*0.4	0.0-0.9
25-34	426	*0.4	0.0-1.1	2,117	*2.0	0.2-3.8	2,543	*1.2	0.2-2.2
35-44	2,039	*1.8	0.3-3.3	3,875	*3.5	1.2-5.7	5,914	2.7	1.3-4.0
45-54	5,985	5.0	2.7-7.3	7,940	6.6	4.1-9.0	13,925	5.8	4.1-7.5
55-64	7,514	5.7	3.5-8.0	9,118	6.8	4.7-8.9	16,632	6.3	4.7-7.8
65+	13,554	8.9	6.7-11.2	16,039	8.6	6.5-10.6	29,593	8.7	7.2-10.3
Education									
Less than H.S.	11,598	10.3	6.8-13.7	14,306	12.1	8.5-15.8	25,904	11.2	8.7-13.8
H.S. or G.E.D.	11,656	3.8	2.7-5.0	14,552	5.1	3.8-6.5	26,208	4.5	3.6-5.4
Some Post-H.S.	4,624	2.5	1.4-3.7	6,759	3.2	2.1-4.4	11,383	2.9	2.1-3.7
College Graduate	1,762	1.6	0.8-2.3	4,183	3.0	1.8-4.3	5,945	2.4	1.6-3.1
Income									
Less than \$15,000	5,504	7.9	4.5-11.4	9,404	10.5	7.2-13.8	14,908	9.4	7.0-11.8
\$15,000 - 24,999	7,952	7.8	4.8-10.8	8,497	7.2	4.7-9.7	16,450	7.5	5.5-9.4
\$25,000 - 34,999	2,558	3.4	1.5-5.4	2,052	*3.1	0.5-5.7	4,610	3.3	1.7-4.9
\$35,000 - 49,999	3,064	*3.2	1.2-5.2	5,327	5.7	3.0-8.3	8,391	4.5	2.8-6.1
\$50,000 - 74,999	1,706	*1.9	0.6-3.1	1,118	*1.4	0.2-2.6	2,824	1.7	0.8-2.6
\$75,000+	2,782	*2.0	0.8-3.3	1,331	*1.2	0.0-2.3	4,113	1.6	0.8-2.5

 $^{^{}st}$ Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 6.



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: 14.0% (95% CI: 13.0-14.9)

U.S.: 8.4% (95% CI: 8.2-8.5)

The West Virginia prevalence of cardiovascular disease was significantly higher than the U.S. prevalence. West Virginia ranked the highest among the 53 BRFSS

participants.

Gender Men: 15.7% (95% CI: 14.2-17.2)

Women: 12.3% (95% CI: 11.1-13.6)

The prevalence of cardiovascular disease was significantly higher among men

than among women.

Race/Ethnicity White, Non-Hispanic: 14.2% (95% CI: 13.1-15.2)

Black, Non-Hispanic: 13.8% (95% CI: 8.4-19.3)
Other, Non-Hispanic: *12.1% (95% CI: 4.4-19.8)
Multiracial, Non-Hispanic: *12.2% (95% CI: 3.8-20.7)

Hispanic: *3.0% (95% CI: 0.0-7.4)

The prevalence of cardiovascular disease was significantly higher among White,

Non-Hispanic and Black, Non-Hispanic adults than among Hispanic adults.

* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 6.

Age The prevalence of cardiovascular disease increased with age. The prevalence of

cardiovascular disease was significantly higher among those aged 65 and older

(28.9%) than among all other age groups.

Education The prevalence of cardiovascular disease was highest among those with less

than a high school education (26.0%) and was significantly higher than the

prevalence among all other educational attainment levels.

Household Income The prevalence of cardiovascular disease was highest among those with an

annual household income less than \$15,000 (24.8%) and was significantly higher

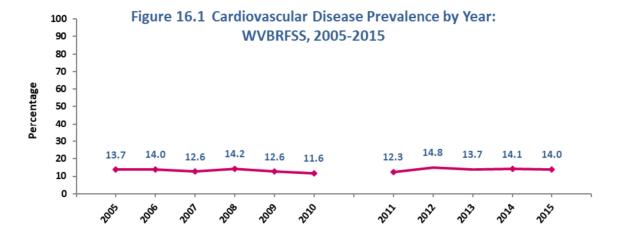
than the prevalence among those earning \$25,000 or more per year.



Table 16.4 Cardiovascular Disease Prevalence by Demographic Characteristics: WVBRFSS, 2015

		Men			Women			Total	
Characteristic	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
TOTAL	111,666	15.7	14.2-17.2	92,036	12.3	11.1-13.6	203,702	14.0	13.0-14.9
Age									
18-24	961	*1.1	0.0-2.8	437	*0.5	0.0-1.6	1,398	*0.8	0.0-1.8
25-34	2,758	*2.5	0.1-4.9	4,400	*4.2	1.6-6.7	7,158	3.3	1.6-5.1
35-44	6,291	5.7	3.0-8.3	6,394	5.7	2.9-8.6	12,685	5.7	3.8-7.6
45-54	15,685	13.2	9.6-16.8	15,813	13.1	9.8-16.4	31,498	13.2	10.7-15.6
55-64	33,164	25.5	21.5-29.5	20,257	15.1	12.1-18.1	53,421	20.2	17.7-22.7
65+	52,504	34.9	31.1-38.8	44,116	24.0	20.9-27.1	96,619	28.9	26.5-31.4
Education									
Less than H.S.	30,933	27.8	22.4-33.2	28,471	24.3	19.4-29.1	59,404	26.0	22.4-29.6
H.S. or G.E.D.	45,512	15.1	12.9-17.4	38,942	13.8	11.7-15.9	84,455	14.5	13.0-16.1
Some Post-H.S.	24,892	13.6	11.0-16.2	16,542	7.9	6.1-9.7	41,434	10.6	9.0-12.1
College Graduate	10,225	9.0	7.0-11.1	7,997	5.8	4.3-7.4	18,222	7.3	6.0-8.6
Income									
Less than \$15,000	18,548	27.2	21.0-33.5	20,496	22.9	18.2-27.5	39,043	24.8	21.0-28.5
\$15,000 - 24,999	22,398	22.2	17.5-26.9	20,025	17.2	13.6-20.7	42,423	19.5	16.6-22.4
\$25,000 - 34,999	10,587	14.4	10.1-18.7	5,724	8.6	5.0-12.2	16,312	11.7	8.8-14.5
\$35,000 - 49,999	12,404	13.1	9.6-16.7	9,059	9.7	6.2-13.1	21,463	11.4	8.9-13.9
\$50,000 - 74,999	13,644	15.1	11.0-19.2	4,236	5.4	3.0-7.8	17,880	10.6	8.1-13.1
\$75,000+	11,290	8.3	5.9-10.6	3,089	2.7	1.2-4.2	14,379	5.7	4.3-7.2

^{*} Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 6.

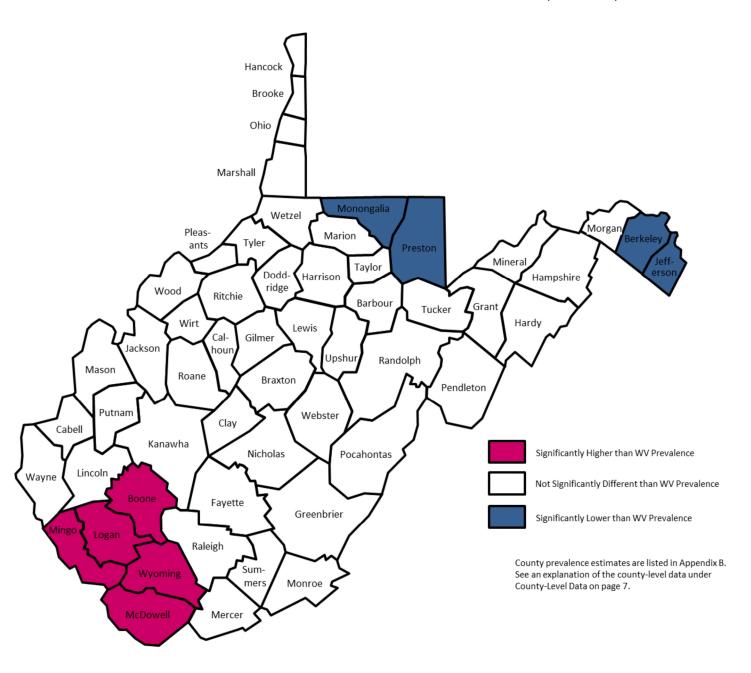


^{*}Due to changes in sample composition and weighting methodology, 2011-2015 results are not directly comparable to previous years.

CHAPTER 16: CARDIOVASCULAR DISEASE

Figure 16.2 Cardiovascular Disease Prevalence by County: WVBRFSS, 2011-2015

WV Prevalence (2011-2015) - 13.8%



CHAPTER 17: DIABETES

Diabetes Prevalence

Definition Responding "Yes" to the question, "Has doctor, nurse, or other health

professional ever told you that you have diabetes?"

Prevalence WV: 14.5% (95% CI: 13.5-15.4)

U.S.: 10.5% (95% CI: 10.3-10.7)

The West Virginia prevalence of diabetes was significantly higher than the U.S. prevalence. West Virginia ranked the 3rd highest among the 53 BRFSS

participants.

Gender Men: 14.7% (95% CI: 13.3-16.2)

Women: 14.2% (95% CI: 12.9-15.5)

There was no gender difference for the prevalence of diabetes.

Race/Ethnicity White, Non-Hispanic: 14.6% (95% CI: 13.5-15.6)

Black, Non-Hispanic: 17.4% (95% CI: 10.9-23.9) Other, Non-Hispanic: *13.6% (95% CI: 5.4-21.9) Multiracial, Non-Hispanic: *13.1% (95% CI: 4.4-21.7)

Hispanic: *4.1% (95% CI: 0.0-9.1)

The prevalence of diabetes was significantly higher among White, Non-Hispanic

and Black, Non-Hispanic adults than among Hispanic adults.

* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 6.

Age The prevalence of diabetes increased with age. The prevalence of diabetes was

significantly higher among those aged 65 and older (25.7%) than among those

under age 55.

Education The prevalence of diabetes decreased with increasing education. It was

significantly higher among those with less than a high school education (22.1%)

than among all other educational attainment levels.

Household Income The prevalence of diabetes decreased as income increased. The prevalence of

diabetes was significantly higher among those with an annual household income of less than \$15,000 (21.2%) than all income brackets over \$35,000. The diabetes prevalence was significantly lower among those earning \$75,000 or

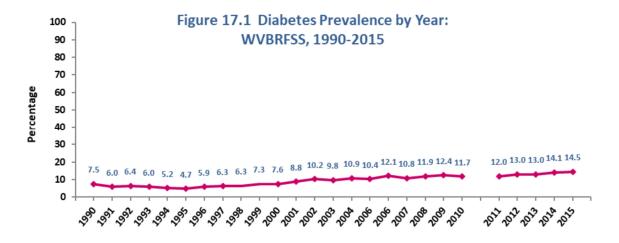
more a year (9.2%) than among those earning less than \$35,000.

CHAPTER 17: DIABETES

Table 17.1 Diabetes Prevalence by Demographic Characteristics: WVBRFSS, 2015

		Men			Women			Total	
Characteristic	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
TOTAL	105,814	14.7	13.3-16.2	106,460	14.2	12.9-15.5	212,274	14.5	13.5-15.4
Age									
18-24	1,454	*1.6	0.0-3.3	1,615	2.0	0.0-4.0	3,069	*1.8	0.5-3.1
25-34	3,843	*3.5	1.1-5.9	2,730	2.6	0.6-4.6	6,573	3.1	1.5-4.6
35-44	10,700	9.5	6.2-12.8	9,780	8.8	5.6-12.0	20,479	9.1	6.8-11.4
45-54	17,722	14.7	10.9-18.5	20,784	17.2	13.4-21.0	38,506	15.9	13.2-18.6
55-64	28,608	21.8	18.1-25.6	27,538	20.5	17.1-23.8	56,146	21.1	18.6-23.6
65+	43,208	28.5	24.9-32.2	43,801	23.4	20.4-26.3	87,009	25.7	23.4-28.0
Education									
Less than H.S.	24,652	21.7	16.8-26.6	26,534	22.4	17.8-27.0	51,185	22.1	18.7-25.4
H.S. or G.E.D.	42,360	13.9	11.7-16.2	49,458	17.5	15.2-19.8	91,818	15.6	14.0-17.3
Some Post-H.S.	24,108	13.1	10.5-15.8	21,776	10.4	8.3-12.4	45,884	11.7	10.0-13.3
College Graduate	14,694	12.9	10.3-15.5	8,691	6.3	4.7-8.0	23,386	9.3	7.8-10.8
Income									
Less than \$15,000	15,016	21.0	15.3-26.8	19,228	21.3	16.8-25.7	34,243	21.2	17.6-24.7
\$15,000 - 24,999	20,156	19.9	15.6-24.3	20,484	17.4	13.8-21.0	40,640	18.6	15.8-21.3
\$25,000 - 34,999	11,264	15.0	10.4-19.6	10,597	16.0	11.4-20.6	21,862	15.5	12.2-18.7
\$35,000 - 49,999	13,036	13.8	10.0-17.5	12,109	12.9	9.3-16.5	25,144	13.3	10.7-16.0
\$50,000 - 74,999	12,415	13.7	9.7-17.7	7,120	9.2	6.0-12.3	19,535	11.6	9.0-14.2
\$75,000+	16,637	12.1	9.2-15.1	6,629	5.8	3.4-8.1	23,266	9.2	7.3-11.1

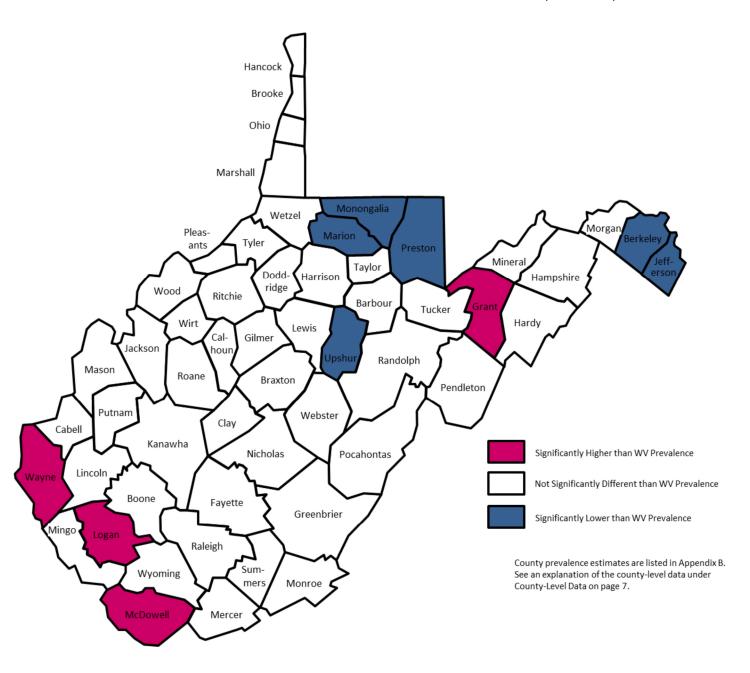
^{*} Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 6.



^{*}Due to changes in sample composition and weighting methodology, 2011-2015 results are not directly comparable to previous years.

Figure 17.2 Diabetes Prevalence by County: WVBRFSS, 2011-2015

WV Prevalence (2011-2015) - 13.3%



CHAPTER 17: DIABETES

Pre-Diabetes or Borderline Diabetes

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 WV: 9.7% (95% CI: 8.7-10.6)

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: 9.3% (95% CI: 8.0-10.6)

Women: 10.0% (95% CI: 8.7-11.3)

There was no gender difference in the prevalence of pre-diabetes or borderline

diabetes.

Race/Ethnicity White, Non-Hispanic: 9.6% (95% CI: 8.6-10.5)

Black, Non-Hispanic: 14.0% (95% CI: 8.0-20.0) Other, Non-Hispanic: *11.2% (95% CI: 0.0-24.2) Multiracial, Non-Hispanic: *4.7% (95% CI: 0.1-9.3)

Hispanic: *9.9% (95% CI: 0.4-19.4)

There was no race/ethnic difference in the prevalence of pre-diabetes or

borderline diabetes.

* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 6.

Age The prevalence of pre-diabetes or borderline diabetes generally increased with

age. The prevalence of pre-diabetes or borderline diabetes was significantly higher among those aged 55 and older than among those aged 44 and younger.

Education The prevalence of pre-diabetes or borderline diabetes generally decreased with

higher levels of educational attainment.

Household Income The prevalence of pre-diabetes or borderline diabetes generally decreased with

increasing income. It was highest among those with a household income less than \$15,000 (14.4%), significantly higher than among those earning \$50,000 or more. It was lowest among those with a household income of \$75,000 or more (6.3%), significantly lower than among those earning less than \$25,000 a year.

CHAPTER 17: DIABETES

Table 17.2 Prevalence of Pre-Diabetes or Borderline Diabetes by Demographic Characteristics: WVBRFSS, 2015

		Men			Women			Total	
Characteristic	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
TOTAL	56,174	9.3	8.0-10.6	63,674	10.0	8.7-11.3	119,848	9.7	8.7-10.6
Age									
18-24	832	*1.0	0.0-2.3	3,108	*3.9	0.8-7.0	3,940	*2.4	0.7-4.0
25-34	4,236	*4.0	1.4-6.7	3,343	*3.3	1.1-5.6	7,579	3.7	2.0-5.4
35-44	5,619	5.7	2.7-8.7	11,450	11.4	7.1-15.6	17,069	8.6	6.0-11.2
45-54	11,670	11.4	7.5-15.4	9,549	9.6	6.7-12.5	21,220	10.5	8.1-13.0
55-64	16,586	16.4	12.7-20.1	15,145	14.4	11.1-17.7	31,730	15.4	12.9-17.9
65+	16,912	15.7	12.3-19.0	19,883	13.9	11.1-16.6	36,795	14.6	12.5-16.7
Education									
Less than H.S.	11,715	13.2	8.3-18.1	10,549	11.6	7.4-15.7	22,265	12.4	9.2-15.6
H.S. or G.E.D.	25,888	10.1	8.0-12.2	27,506	11.9	9.5-14.2	53,394	10.9	9.3-12.5
Some Post-H.S.	9,086	5.8	3.9-7.6	15,549	8.4	6.1-10.6	24,636	7.2	5.7-8.6
College Graduate	9,192	9.5	7.0-12.0	9,591	7.6	5.7-9.5	18,783	8.4	6.9-9.9
Income									
Less than \$15,000	8,589	15.5	9.4-21.7	9,553	13.6	9.4-17.7	18,142	14.4	10.8-18.0
\$15,000 - 24,999	8,913	11.0	6.9-15.1	10,426	10.8	7.2-14.4	19,339	10.9	8.2-13.6
\$25,000 - 34,999	3,952	6.2	3.2-9.3	6,397	11.9	7.0-16.8	10,349	8.8	6.0-11.7
\$35,000 - 49,999	9,142	11.3	7.2-15.3	8,512	10.4	6.0-14.8	17,654	10.8	7.8-13.8
\$50,000 - 74,999	4,285	5.7	3.1-8.3	6,238	8.8	5.6-12.1	10,522	7.2	5.1-9.3
\$75,000+	8,530	7.2	4.7-9.7	5,673	5.3	3.1-7.6	14,203	6.3	4.6-8.0

 $^{^{*}}$ Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 6.

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: 7.7% (95% CI: 7.0-8.4)

U.S.: 5.9% (95% CI: 5.8-6.0)

The West Virginia prevalence of skin cancer is significantly higher than the U.S. prevalence. West Virginia ranked the 5th highest among the 53 BRFSS

participants.

Gender Men: 8.5% (95% CI: 7.4-9.6)

Women: 7.0% (95% CI: 6.1-7.9)

There was no gender difference in the prevalence of skin cancer.

Race/Ethnicity White, Non-Hispanic: 8.1% (95% CI: 7.3-8.8)

Black, Non-Hispanic: *3.4% (95% CI: 0.4-6.4)
Other, Non-Hispanic: *2.5% (95% CI: 0.0-6.8)
Multiracial, Non-Hispanic: *5.9% (95% CI: 0.1-11.8)

Hispanic: *2.2% (95% CI: 0.0-6.4)

The prevalence of skin cancer was significantly higher among White, Non-Hispanic adults than among Black, Non-Hispanic; Other, Non-Hispanic; and

Hisnanic adults

* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 6.

Age The prevalence of skin cancer was significantly higher among those aged 65 and

older (20.4%) than among all other age groups.

Education There was no consistent educational attainment difference in the prevalence of

skin cancer.

Household Income There was no consistent annual household income difference in prevalence of

skin cancer.

Table 18.1 Skin Cancer Prevalence by Demographic Characteristics: WVBRFSS, 2015

		Men			Women			Total	
Characteristic	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
TOTAL	60,805	8.5	7.4-9.6	52,329	7.0	6.1-7.9	113,133	7.7	7.0-8.4
Age									
18-24	1,193	*1.4	0.0-3.3	0	*0.0	0.0-0.0	1,193	*0.7	0.0-1.7
25-34	1,437	*1.3	0.0-3.1	1,082	*1.0	0.0-0.2	2,519	*1.2	0.1-2.3
35-44	2,526	*2.2	0.5-4.0	2,459	*2.2	0.6-3.8	4,985	2.2	1.0-3.4
45-54	5,899	4.9	2.6-7.1	5,029	4.2	2.5-5.9	10,929	4.5	3.1-6.0
55-64	12,870	9.8	7.2-12.4	10,247	7.6	5.5-9.7	23,117	8.7	7.0-10.4
65+	36,361	24.0	20.6-27.4	32,880	17.6	14.8-20.3	69,241	20.4	18.3-22.6
Education									
Less than H.S.	14,275	12.5	8.8-16.3	10,676	9.1	5.9-12.2	24,951	10.8	8.3-13.2
H.S. or G.E.D.	20,685	6.8	5.2-8.4	23,632	8.4	6.7-10.0	44,316	7.6	6.4-8.7
Some Post-H.S.	15,076	8.2	6.1-10.4	10,377	4.9	3.6-6.3	25,453	6.5	5.2-7.7
College Graduate	10,769	9.5	7.3-11.6	7,165	5.2	3.7-6.8	17,934	7.1	5.8-8.4
Income									
Less than \$15,000	5,933	8.3	4.7-12.0	5,829	6.5	3.8-9.2	11,762	7.3	5.1-9.5
\$15,000 - 24,999	10,008	9.9	6.5-13.4	9,128	7.8	5.4-10.2	19,137	8.8	6.8-10.8
\$25,000 - 34,999	6,444	8.6	5.0-12.1	4,129	6.2	3.5-8.9	10,572	7.5	5.2-9.7
\$35,000 - 49,999	10,126	10.7	7.3-14.1	6,256	6.7	4.2-9.1	16,382	8.7	6.6-10.8
\$50,000 - 74,999	5,644	6.2	3.9-8.6	3,755	4.8	2.7-6.9	9,399	5.6	4.0-7.2
\$75,000+	11,446	8.4	6.1-10.7	5,524	4.8	2.9-6.7	16,970	6.8	5.2-8.3

 $[\]hbox{* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 6.}\\$

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: 7.9% (95% CI: 7.2-8.6)

U.S.: 6.6% (95% CI: 6.5-6.7)

The West Virginia prevalence of other cancer was significantly higher than the U.S. prevalence. West Virginia ranked the 4th highest among the 53 BRFSS

participants.

Gender Men: 5.9% (95% CI: 5.0-6.9)

Women: 9.8% (95% CI: 8.7-10.9)

The prevalence of other cancer was significantly higher among women than

among men.

Race/Ethnicity White, Non-Hispanic: 8.1% (95% CI: 7.3-8.8)

Black, Non-Hispanic: 6.7% (95% CI: 3.0-10.4)
Other, Non-Hispanic: *3.9% (95% CI: 0.0-8.5)
Multiracial, Non-Hispanic: *7.9% (95% CI: 1.1-14.7)

Hispanic: *2.8% (95% CI: 0.0-7.0)

The prevalence of other cancer was significantly higher among White, Non-

Hispanic adults than among Hispanic adults.

* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 6.

Age The prevalence of other cancer was significantly higher among those aged 65

and older (16.8%) than among all other age groups.

Education The prevalence of other cancer was significantly higher among those with less

than a high school education (12.3%) than among any other educational

attainment levels.

Household Income The prevalence of other cancer decreased with increasing income. It was

highest among those with a household income of less than \$15,000 (11.7%) and

was significantly higher than among those earning \$35,000 or more per year.

Table 18.2 Other Cancer Prevalence by Demographic Characteristics: WVBRFSS, 2015

		Men			Women		Total			
Characteristic	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	
TOTAL	42,772	5.9	5.0-6.9	73,249	9.8	8.7-10.9	116,021	7.9	7.2-8.6	
Age										
18-24	458	*0.5	0.0-1.5	103	*0.1	0.0-0.4	560	*0.3	0.0-0.9	
25-34	1,987	*1.8	0.0-3.7	4,147	*3.9	1.5-6.4	6,134	2.9	1.3-4.4	
35-44	1,794	*1.6	0.2-3.0	8,975	8.1	5.1-11.1	10,769	4.8	3.1-6.5	
45-54	5,548	4.6	2.2-7.0	11,574	9.6	6.8-12.4	17,122	7.1	5.3-8.9	
55-64	8,294	6.3	4.0-8.7	15,833	11.8	9.3-14.3	24,126	9.1	7.4-10.8	
65+	24,691	16.2	13.2-19.2	32,383	17.3	14.6-19.9	57,074	16.8	14.8-18.8	
Education										
Less than H.S.	10,273	9.0	5.5-12.6	18,258	15.5	11.6-19.5	28,531	12.3	9.7-15.0	
H.S. or G.E.D.	16,453	5.4	4.0-6.8	25,705	9.1	7.4-10.8	42,158	7.2	6.1-8.3	
Some Post-H.S.	9,522	5.2	3.4-7.0	17,978	8.6	6.6-10.5	27,500	7.0	5.6-8.3	
College Graduate	5,544	4.9	3.3-6.4	11,307	8.3	6.4-10.1	16,851	6.7	5.5-8.0	
Income										
Less than \$15,000	6,561	9.2	4.9-13.5	12,236	13.7	10.1-17.3	18,797	11.7	8.9-14.5	
\$15,000 - 24,999	7,762	7.6	4.7-10.5	13,540	11.5	8.3-14.7	21,303	9.7	7.5-11.9	
\$25,000 - 34,999	4,783	6.4	3.3-9.4	6,298	9.5	6.2-12.9	11,081	7.8	5.6-10.1	
\$35,000 - 49,999	4,112	4.3	2.4-6.3	8,337	8.9	5.8-11.9	12,449	6.6	4.8-8.4	
\$50,000 - 74,999	3,616	4.0	2.0-6.0	6,070	7.8	5.0-10.5	9,686	5.8	4.1-7.4	
\$75,000+	6,945	5.1	3.1-7.0	6,329	5.5	3.4-7.6	13,273	5.3	3.8-6.7	

 $^{^{}st}$ Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 6.

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: 14.1% (95% CI: 13.2-15.1)

U.S.: 11.3% (95% CI: 11.1-11.4)

The West Virginia prevalence of cancer was significantly higher than the U.S. prevalence. West Virginia ranked the 3rd highest among 53 BRFSS participants.

Gender Men: 13.2% (95% CI: 11.8-14.6)

Women: 15.0% (95% CI: 13.7-16.3)

There was no gender difference in the prevalence of cancer.

Race/Ethnicity White, Non-Hispanic: 14.6% (95% CI: 13.6-15.6)

Black, Non-Hispanic: 8.5% (95% CI: 4.2-12.8)
Other, Non-Hispanic: *6.3% (95% CI: 0.0-12.6)
Multiracial, Non-Hispanic: *10.3% (95% CI: 2.8-17.8)

Hispanic: *4.9% (95% CI: 0.0-10.9)

The prevalence of cancer was significantly higher among White, Non-Hispanic adults than among Black, Non-Hispanic; Other, Non-Hispanic; and Hispanic

adults.

st Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 6.

Age The prevalence of cancer was significantly higher among those aged 55 and

older than among those aged 54 and younger.

Education The prevalence of cancer decreased with increasing education. The prevalence

of cancer was significantly higher among those with less than a high school

education (20.7%) than among all other educational attainment levels.

Household Income The prevalence of cancer was significantly higher among those with an annual

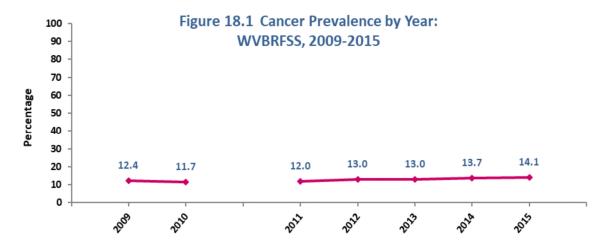
household income of less than \$15,000 (17.5%) than among all other income

brackets over \$50,000.

Table 18.3 Cancer Prevalence by Demographic Characteristics: WVBRFSS, 2015

		Men			Women			Total	
Characteristic	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
TOTAL	94,502	13.2	11.8-14.6	112,264	15.0	13.7-16.3	206,766	14.1	13.2-15.1
Age									
18-24	1,651	*1.9	0.0-4.0	103	*0.1	0.0-0.4	1,753	*1.0	0.0-2.2
25-34	3,424	*3.1	0.6-5.7	5,230	5.0	2.3-7.7	8,654	4.0	2.2-5.9
35-44	4,321	3.8	1.6-6.1	11,434	10.3	7.0-13.6	15,754	7.0	5.0-9.1
45-54	10,985	9.1	6.0-12.2	14,911	12.4	9.4-15.5	25,896	10.8	8.6-13.0
55-64	20,127	15.4	12.1-18.7	23,671	17.6	14.6-20.6	43,798	16.5	14.3-18.7
65+	53,477	35.3	31.4-39.2	56,285	30.0	26.8-33.3	109,762	32.4	29.9-34.9
Education									
Less than H.S.	22,737	20.0	15.3-24.7	25,027	21.3	16.8-25.8	47,764	20.7	17.4-24.0
H.S. or G.E.D.	33,666	11.1	9.1-13.1	44,136	15.6	13.4-17.8	77,802	13.3	11.8-14.7
Some Post-H.S.	22,246	12.1	9.5-14.8	26,464	12.6	10.4-14.9	48,710	12.4	10.7-14.1
College Graduate	14,872	13.1	10.6-15.6	16,158	11.8	9.6-14.1	31,031	12.4	10.7-14.1
Income									
Less than \$15,000	11,612	16.4	11.1-21.7	16,546	18.5	14.3-22.6	28,158	17.5	14.3-20.8
\$15,000 - 24,999	16,237	16.1	12.0-20.3	21,140	18.1	14.3-21.8	37,377	17.2	14.4-20.0
\$25,000 - 34,999	9,370	12.5	8.2-16.8	9,196	13.9	9.9-17.8	18,566	13.1	10.2-16.1
\$35,000 - 49,999	13,032	13.8	10.0-17.5	13,211	14.0	10.4-17.7	26,243	13.9	11.3-16.5
\$50,000 - 74,999	8,874	9.8	6.8-12.8	8,634	11.1	7.8-14.3	17,508	10.4	8.2-12.6
\$75,000+	17,127	12.6	9.6-15.5	10,870	9.5	6.7-12.2	27,997	11.2	9.1-13.2

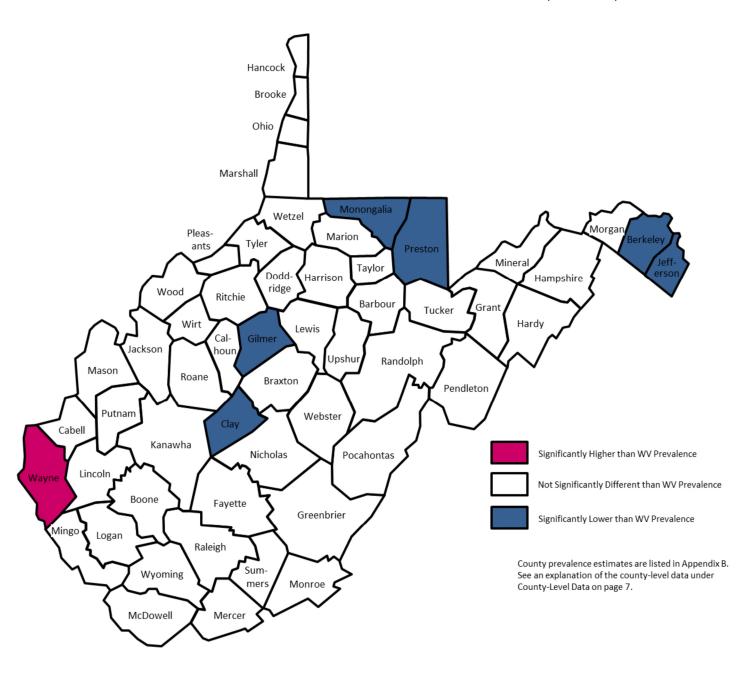
^{*} Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 6.



^{*}Due to changes in sample composition and weighting methodology, 2011-2015 results are not directly comparable to previous years.

Figure 18.2 Cancer Prevalence by County: WVBRFSS, 2011-2015

WV Prevalence (2011-2015) - 13.4%





Lifetime Asthma

Definition Responding "Yes" to the question, "Has a doctor, nurse, or other health

professional ever told you that you had asthma?"

Prevalence WV: 15.1 (95% CI: 14.0-16.2)

U.S.: 13.8% (95% CI: 13.6-14.0)

The West Virginia prevalence of lifetime asthma was similar to the U.S. prevalence. West Virginia ranked the 16th highest among 53 BRFSS participants.

Gender Men: 12.7% (95% CI: 11.2-14.2)

Women: 17.3% (95% CI: 15.8-18.9)

The prevalence of lifetime asthma was significantly higher among women than

among men.

Race/Ethnicity White, Non-Hispanic: 15.1% (95% CI: 14.0-16.2)

Black, Non-Hispanic: 18.5% (95% CI: 11.1-25.8) Other, Non-Hispanic: *13.8% (95% CI: 5.1-22.6) Multiracial, Non-Hispanic: *15.6% (95% CI: 6.0-25.1)

Hispanic: *10.8% (95% CI: 2.6-18.9)

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 6.

Age There was no age difference in the prevalence of lifetime asthma.

Education The prevalence of lifetime asthma was significantly higher among those with

less than a high school education (21.6%) than among all other educational

attainment levels.

Household Income The prevalence of lifetime asthma was highest among those with a household

income of less than \$15,000 per year (24.3%), and lowest among those with an

income of \$75,000 per year (9.9%), a significant difference.



Table 19.1 Lifetime Asthma Prevalence by Demographic Characteristics: WVBRFSS, 2015

		Men			Women			Total	
Characteristic	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
TOTAL	91,279	12.7	11.2-14.2	129,825	17.3	15.8-18.9	221,104	15.1	14.0-16.2
Age									
18-24	11,078	12.5	7.5-17.5	14,787	17.9	11.9-23.9	25,865	15.1	11.2-19.0
25-34	16,472	15.1	10.2-19.9	18,739	17.9	13.4-22.3	35,211	16.4	13.1-19.7
35-44	14,283	12.7	8.7-16.6	20,565	18.6	14.0-23.1	34,848	15.6	12.6-18.6
45-54	15,476	12.8	9.1-16.5	19,853	16.4	12.9-20.0	35,328	14.6	12.0-17.2
55-64	15,183	11.6	8.6-14.6	24,851	18.5	15.3-21.7	40,034	15.1	12.9-17.3
65+	18,517	12.2	9.5-14.8	30,021	16.1	13.4-18.7	48,538	14.3	12.4-16.2
Education									
Less than H.S.	19,644	17.4	12.6-22.2	30,109	25.6	20.6-30.6	49,754	21.6	18.1-25.1
H.S. or G.E.D.	37,550	12.4	10.0-14.7	49,945	17.7	15.2-20.1	87,495	14.9	13.2-16.6
Some Post-H.S.	24,232	13.1	10.1-16.2	28,786	13.8	10.9-16.6	53,018	13.5	11.4-15.5
College Graduate	9,330	8.2	5.8-10.5	20,902	15.2	12.5-18.0	30,232	12.0	10.2-13.9
Income									
Less than \$15,000	15,546	21.8	15.7-27.9	23,588	26.3	21.3-31.4	39,134	24.3	20.4-28.2
\$15,000 - 24,999	20,031	19.7	14.9-24.5	24,169	20.5	16.4-24.6	44,201	20.1	17.0-23.3
\$25,000 - 34,999	9,813	13.1	8.3-17.9	10,332	15.7	10.6-20.8	20,145	14.3	10.8-17.8
\$35,000 - 49,999	7,776	8.2	5.0-11.4	13,530	14.4	10.4-18.4	21,306	11.3	8.7-13.9
\$50,000 - 74,999	8,903	9.8	5.8-13.9	9,451	12.1	8.2-16.0	18,354	10.9	8.1-13.7
\$75,000+	10,315	7.5	5.0-10.0	14,577	12.7	9.4-16.0	24,892	9.9	7.9-11.9



Current Asthma

Definition Responding "Yes" to the lifetime asthma question, and "Yes" to the question,

"Do you still have asthma?"

Prevalence WV: 10.8% (95% CI: 9.9-11.8)

U.S.: 8.8% (95% CI: 8.7-9.0)

The West Virginia prevalence of current asthma was significantly higher than the U.S. prevalence. West Virginia ranked the 6th highest among 53 BRFSS

participants.

Gender Men: 7.8% (95% CI: 6.6-9.0)

Women: 13.7% (95% CI: 12.4-15.1)

The prevalence of current asthma was significantly higher among women than

among men.

Race/Ethnicity White, Non-Hispanic: 10.9% (95% CI: 9.9-11.8)

Black, Non-Hispanic: 12.0% (95% CI: 6.2-17.8)

Other, Non-Hispanic: *10.5% (95% CI: 2.9-18.1)

Multiracial, Non-Hispanic: *11.7% (95% CI: 2.9-20.5)

Hispanic: *8.3% (95% CI: 1.6-14.9)

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 6.

Age The prevalence of current asthma was significantly higher among those 55-64

(12.7%) than among those 18-24 (7.3%).

Education The prevalence of current asthma was significantly higher among those with less

than a high school education (18.3%) than among all other education levels.

Household Income The prevalence of current asthma was significantly higher among those earning

less than \$25,000 a year than among those with an annual household income of

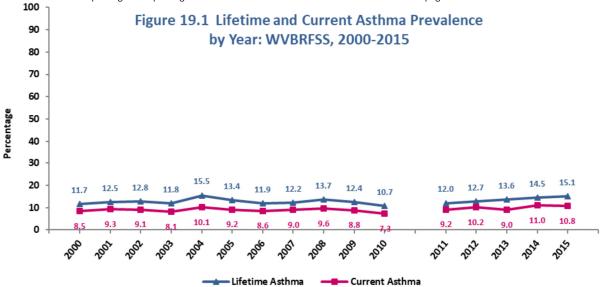
\$25,000 or more.

CHAPTER 19: RESPIRATORY DISEASES

Table 19.2 Current Asthma Prevalence by Demographic Characteristics: WVBRFSS, 2015

		Men			Women			Total	
Characteristic	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
TOTAL	56,043	7.8	6.6-9.0	102,485	13.7	12.4-15.1	158,528	10.8	9.9-11.8
Age									
18-24	3,585	*4.1	1.3-6.8	8,896	10.8	5.9-15.8	12,481	7.3	4.5-10.1
25-34	9,444	8.6	4.8-12.5	13,291	12.8	9.0-16.6	22,735	10.7	8.0-13.4
35-44	8,246	7.3	4.3-10.4	17,735	16.0	11.7-20.3	25,981	11.6	9.0-14.3
45-54	9,449	7.8	5.0-10.7	17,064	14.1	10.8-17.4	26,513	11.0	8.8-13.1
55-64	12,129	9.3	6.5-12.1	21,279	15.9	12.9-19.0	33,408	12.7	10.6-14.8
65+	13,189	8.7	6.4-11.1	23,212	12.4	10.1-14.8	36,402	10.8	9.1-12.4
Education									
Less than H.S.	15,551	13.8	9.5-18.1	26,375	22.6	17.8-27.4	41,926	18.3	15.1-21.5
H.S. or G.E.D.	23,725	7.8	6.0-9.7	39,928	14.2	12.0-16.4	63,653	10.9	9.4-12.3
Some Post-H.S.	11,074	6.0	4.1-7.9	20,776	10.0	7.6-12.4	31,851	8.1	6.5-9.7
College Graduate	5,170	4.5	2.7-6.4	15,405	11.3	8.8-13.7	20,575	8.2	6.6-9.8
Income									
Less than \$15,000	13,046	18.4	12.5-24.3	19,944	22.4	17.6-27.2	32,990	20.6	16.9-24.4
\$15,000 - 24,999	12,074	11.9	8.1-15.7	21,761	18.5	14.5-22.5	33,835	15.4	12.6-18.2
\$25,000 - 34,999	6,341	8.5	4.6-12.5	6,389	9.7	5.7-13.8	12,729	9.1	6.3-11.9
\$35,000 - 49,999	4,269	4.5	2.2-6.8	11,843	12.6	8.8-16.3	16,113	8.6	6.3-10.8
\$50,000 - 74,999	2,988	3.3	1.1-5.5	6,787	8.7	5.2-12.2	9,775	5.8	3.8-7.8
\$75,000+	6,761	4.9	2.8-7.0	10,137	8.9	6.2-11.6	16,898	6.7	5.0-8.4

^{*} Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 6.

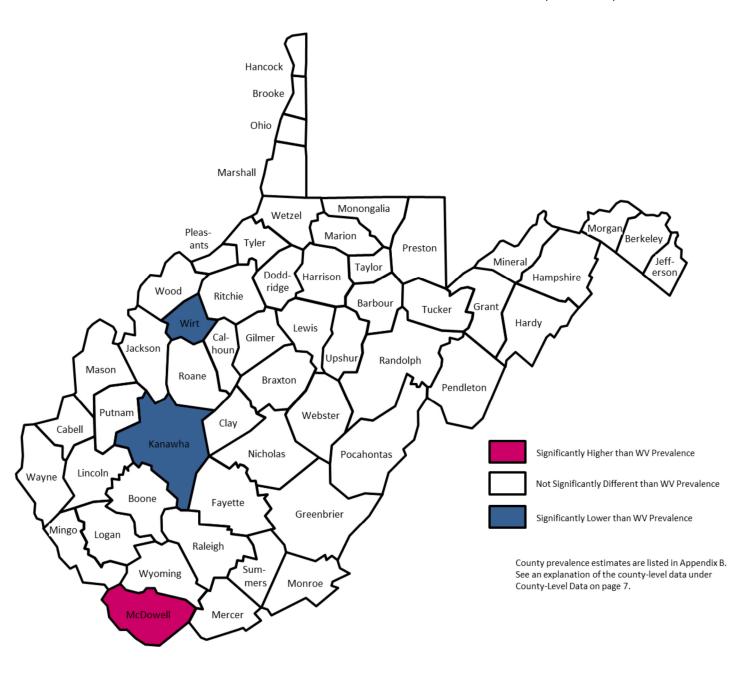


^{*}Due to changes in sample composition and weighting methodology, 2011-2015 results are not directly comparable to previous years.

CHAPTER 19: RESPIRATORY DISEASES

Figure 19.2 Current Asthma Prevalence by County: WVBRFSS, 2011-2015

WV Prevalence (2011-2015) - 10.1%





Chronic Obstructive Pulmonary Disease

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: 13.3% (95% CI: 12.4-14.3)

U.S.: 6.3% (95% CI: 6.1-6.4)

The prevalence of chronic obstructive pulmonary disease (COPD) was significantly higher in West Virginia than in the U.S. West Virginia ranked the

highest among 53 BRFSS participants.

Gender Men: 12.2% (95% CI: 10.7-13.6)

Women: 14.5% (95% CI: 13.1-15.8)

There was no gender difference in the prevalence of COPD.

Race/Ethnicity White, Non-Hispanic: 13.8% (95% CI: 12.7-14.8)

Black, Non-Hispanic: 7.9% (95% CI: 3.3-12.5)
Other, Non-Hispanic: *6.8% (95% CI: 0.5-13.0)
Multiracial, Non-Hispanic: *10.9% (95% CI: 3.0-18.7)

Hispanic: *5.1% (95% CI: 0.0-13.0)

The prevalence of COPD was significantly higher among White, Non-Hispanic

adults than among Black, Non-Hispanic adults.

* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 6.

Age The highest prevalence of COPD was among those aged 65 and older (20.8%),

significantly higher than the prevalence among those aged 54 and younger.

Education Those with less than a high school education had the highest prevalence of

COPD (27.6%), significantly higher than all other educational attainment levels.

Household Income The prevalence of COPD was highest among those with an income of less than

\$15,000 per year (26.3%) and lowest among those with an income of \$75,000 or

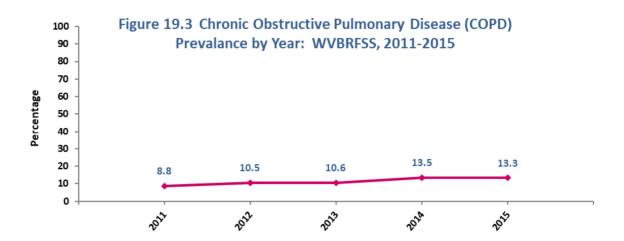
more per year (4.3%), a significant difference.

CHAPTER 19: RESPIRATORY DISEASES

Table 19.3 Chronic Obstructive Pulmonary Disease (COPD) Prevalence by Demographic Characteristics: WVBRFSS, 2015

		Men			Women			Total	
Characteristic	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
TOTAL	87,089	12.2	10.7-13.6	108,379	14.5	13.1-15.8	195,468	13.3	12.4-14.3
Age									
18-24	4,592	*5.2	1.3-9.1	2,289	*2.7	0.5-5.0	6,880	4.0	1.7-6.3
25-34	7,076	6.5	2.9-10.1	3,317	*3.2	1.0-5.3	10,394	4.8	2.7-7.0
35-44	8,536	7.6	4.3-10.9	12,096	10.9	7.4-14.4	20,632	9.2	6.8-11.6
45-54	10,443	8.7	5.6-11.8	24,036	19.9	15.9-23.8	34,478	14.3	11.8-16.8
55-64	24,430	18.8	15.1-22.5	26,380	19.7	16.4-23.0	50,810	19.3	16.8-21.7
65+	31,773	20.9	17.6-24.2	38,765	20.8	17.9-23.7	70,538	20.8	18.6-23.0
Education									
Less than H.S.	27,685	24.5	19.2-29.8	35,920	30.5	25.5-35.6	63,605	27.6	23.9-31.2
H.S. or G.E.D.	36,252	12.0	9.8-14.1	46,012	16.3	14.0-18.5	82,264	14.0	12.5-15.6
Some Post-H.S.	17,027	9.3	6.8-11.7	20,042	9.6	7.5-11.7	37,069	9.4	7.8-11.0
College Graduate	5,603	4.9	3.3-6.5	6,321	4.6	3.1-6.1	11,924	4.8	3.7-5.8
Income									
Less than \$15,000	17,534	24.7	18.6-30.9	24,720	27.5	22.5-32.5	42,254	26.3	22.4-30.2
\$15,000 - 24,999	18,656	18.4	13.8-23.0	24,888	21.2	17.2-25.2	43,544	19.9	16.9-22.9
\$25,000 - 34,999	12,852	17.1	11.9-22.4	8,530	12.9	8.4-17.3	21,382	15.1	11.6-18.6
\$35,000 - 49,999	8,100	8.5	5.5-11.6	12,050	12.8	9.3-16.4	20,150	10.7	8.3-13.0
\$50,000 - 74,999	5,129	5.7	2.7-8.6	4,436	5.7	3.1-8.2	9,566	5.7	3.7-7.6
\$75,000+	6,783	4.9	3.1-6.8	3,939	3.4	1.7-5.1	10,722	4.3	3.0-5.5

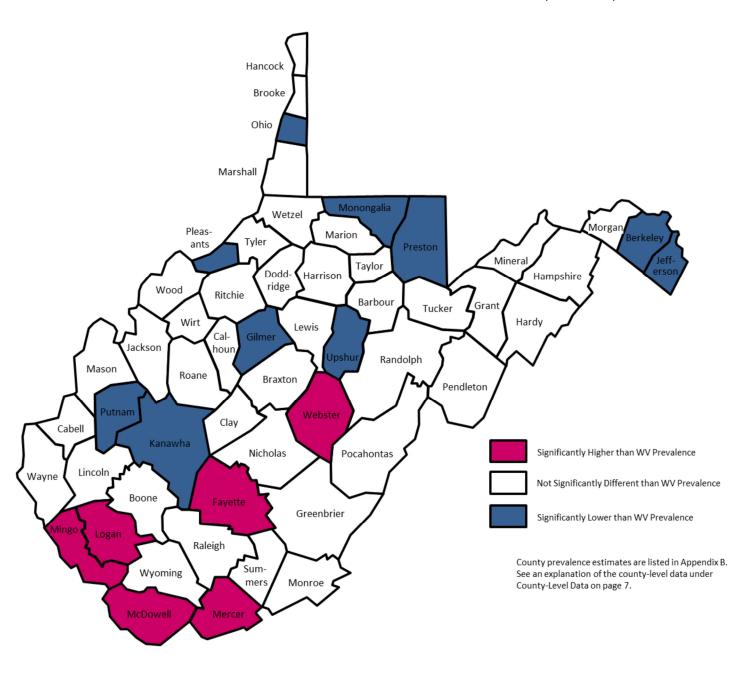
^{*} Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 6.



CHAPTER 19: RESPIRATORY DISEASES

Figure 19.4 Prevalence of Chronic Obstructive Pulmonary Disease (COPD) by County: WVBRFSS, 2011-2015

WV Prevalence (2011-2015) - 11.3%



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: 38.0% (95% CI: 36.6-39.4)

U.S.: 24.7% (95% CI: 24.5-24.9)

The prevalence of arthritis was significantly higher in West Virginia than in the

U.S. West Virginia ranked the highest among 53 BRFSS participants.

Gender Men: 36.3% (95% CI: 34.2-38.4)

Women: 39.6% (95% CI: 37.7-41.5)

There was no gender difference in the prevalence of arthritis.

Race/Ethnicity White, Non-Hispanic: 38.5% (95% CI: 37.0-39.9)

Black, Non-Hispanic: 34.5% (95% CI: 26.6-42.4)
Other, Non-Hispanic: *30.2% (95% CI: 16.3-44.1)
Multiracial, Non-Hispanic: *38.5% (95% CI: 25.6-51.4)

Hispanic: *26.3% (95% CI: 12.0-40.5)

There was no race/ethnicity difference in the prevalence of arthritis.

st Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 6.

Age The prevalence of arthritis significantly increased with age. The prevalence of

arthritis was significantly higher among those aged 55 and older than among

those younger than 55.

Education The prevalence of arthritis was highest among those with less than a high school

education (54.9%) and was significantly higher than all other educational attainment groups. The arthritis prevalence was lowest among those with a college degree (26.7%) and was significantly lower than all other education

groups.

Household Income The prevalence of arthritis was significantly higher among those with an annual

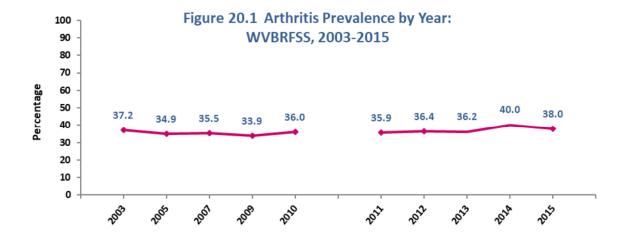
household income of less than \$15,000 (55.3%) than among those earning \$25,000 or more per year. The arthritis prevalence was significantly lower among than those earning \$75,000 or more per year (24.2%) than among all

other income brackets.

Table 20.1 Prevalence of Arthritis by Demographic Characteristics: WVBRFSS, 2015

		Men			Women		Total			
Characteristic	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	
TOTAL	260,604	36.3	34.2-38.4	296,186	39.6	37.7-41.5	556,790	38.0	36.6-39.4	
Age										
18-24	4,272	*4.8	1.5-8.1	1,533	1.8	0.2-3.5	5,805	3.4	1.5-5.3	
25-34	13,187	12.1	7.8-16.4	15,757	15.0	10.6-19.5	28,944	13.5	10.4-16.6	
35-44	32,324	28.7	23.5-34.0	31,205	28.1	22.9-33.4	63,530	28.4	24.7-32.1	
45-54	48,701	40.4	35.1-45.6	54,396	45.1	40.3-49.8	103,098	42.7	39.2-46.3	
55-64	76,468	58.5	54.2-62.8	71,129	53.2	49.1-57.2	147,597	55.8	52.8-58.8	
65+	83,983	55.1	51.1-59.1	118,574	63.7	60.4-67.0	202,557	59.8	57.3-62.4	
Education										
Less than H.S.	64,262	56.3	50.1-62.6	62,888	53.6	47.7-59.5	127,150	54.9	50.6-59.3	
H.S. or G.E.D.	107,600	35.4	32.2-38.6	125,540	44.6	41.4-47.8	233,140	39.8	37.5-42.1	
Some Post-H.S.	57,256	31.2	27.3-35.1	70,090	33.4	29.9-36.9	127,346	32.4	29.8-35.0	
College Graduate	30,568	27.0	23.4-30.5	36,351	26.5	23.4-29.7	66,919	26.7	24.4-29.1	
Income										
Less than \$15,000	38,334	53.6	46.5-60.8	50,676	56.6	50.7-62.4	89,010	55.3	50.7-59.8	
\$15,000 - 24,999	46,140	45.4	39.7-51.2	58,333	49.6	44.4-54.7	104,473	47.6	43.8-51.5	
\$25,000 - 34,999	33,879	45.4	38.4-52.5	27,498	41.6	35.0-48.1	61,376	43.6	38.8-48.5	
\$35,000 - 49,999	32,401	34.4	28.9-39.8	34,407	36.7	31.2-42.2	66,808	35.5	31.6-39.4	
\$50,000 - 74,999	31,613	35.0	29.4-40.6	21,760	27.9	22.7-33.0	53,373	31.7	27.9-35.6	
\$75,000+	34,438	25.2	21.1-29.2	26,427	23.1	19.1-27.2	60,865	24.2	21.3-27.1	

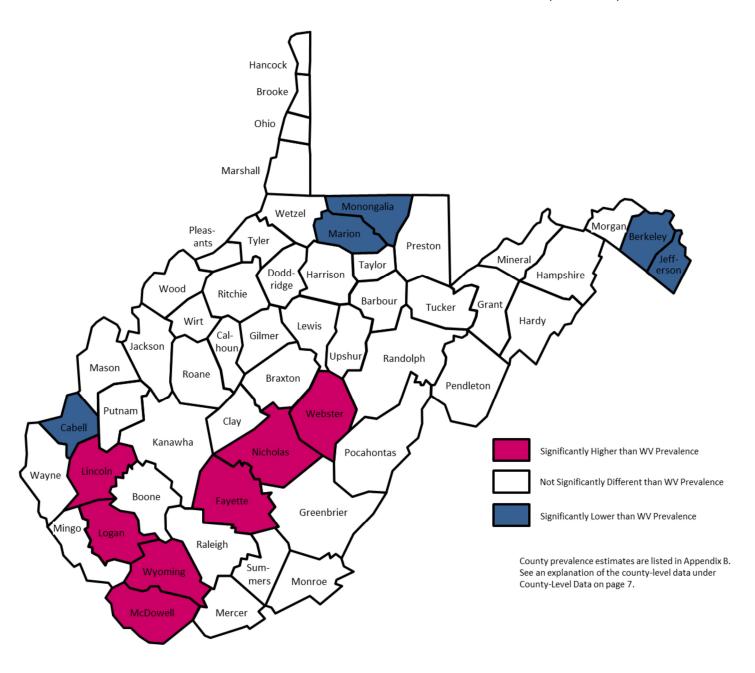
^{*} Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 6.



^{*}Due to changes in sample composition and weighting methodology, 2011-2015 results are not directly comparable to previous years.

Figure 20.2 Arthritis Prevalence by County: WVBRFSS, 2011-2015

WV Prevalence (2011-2015) - 37.3%



Activity Limitations

Definition Reported having been told 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: 57.3% (95% CI: 55.0-59.6)

U.S.: 50.1% (95% CI: 49.6-50.7)

The West Virginia prevalence of activity limitations due to arthritis was significantly higher than the national prevalence. West Virginia ranked the

highest among 53 BRFSS participants.

Gender Men: 55.8% (95% CI: 52.3-59.3)

Women: 58.6% (95% CI: 55.6-61.7)

There was no gender difference in the prevalence of activity limitations due to

arthritis.

Race/Ethnicity No race/ethnicity statistics are reported due to unreliable estimates.

Age There was no consistent age difference in the prevalence of activity limitations

due to arthritis.

Education The prevalence of activity limitations due to arthritis was significantly higher

among those with less than a high school education (65.2%) and those with some post high school education (53.4%) than among college graduates

(51.6%).

Household Income The prevalence of activity limitations due to arthritis became steadily lower as

household income increased. The prevalence of activity limitations due to arthritis was 40.8% for those earning \$75,000 or more per year and 74.3% for those earning less than \$15,000 per year. The prevalence of activity limitations due to arthritis was significantly higher among those earning less than \$25,000

than among those earning more than \$35,000.

Table 20.2 Prevalence of Activity Limitations Due to Arthritis by Demographic Characteristics: WVBRFSS, 2015

		Men			Women			Total	
Characteristic	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
TOTAL	137,129	55.8	52.3-59.3	165,437	58.6	55.6-61.7	302,566	57.3	55.0-59.6
Age									
18-24	1,237	*32.4	0.0-69.4	460	*30.0	0.0-67.9	1,698	*31.7	3.2-60.3
25-34	7,297	*63.3	44.6-82.1	7,000	*50.6	33.6-67.6	14,297	*56.4	43.5-69.3
35-44	18,626	*61.5	50.6-72.4	16,790	*56.8	45.2-68.5	35,416	59.2	51.2-67.2
45-54	25,742	56.0	47.3-64.7	36,800	71.4	64.6-78.1	62,542	64.1	58.7-69.6
55-64	40,912	56.4	50.4-62.5	44,169	65.1	59.5-70.6	85,081	60.6	56.5-64.7
65+	41,964	52.4	46.8-58.0	59,139	51.3	46.9-55.7	101,104	51.8	48.3-55.2
Education									
Less than H.S.	37,353	63.4	55.3-71.4	39,711	67.1	59.9-74.2	77,064	65.2	59.9-70.6
H.S. or G.E.D.	59,241	57.8	52.5-63.1	66,180	56.0	51.3-60.6	125,422	56.8	53.3-60.3
Some Post-H.S.	26,516	48.6	41.4-55.8	38,880	57.2	51.0-63.4	65,396	53.4	48.7-58.1
College Graduate	13,746	46.6	39.0-54.2	20,013	55.7	48.9-62.6	33,759	51.6	46.5-56.7
Income									
Less than \$15,000	27,822	75.8	67.9-83.7	35,903	73.2	66.7-79.6	63,724	74.3	69.3-79.3
\$15,000 - 24,999	26,600	60.4	52.5-68.3	36,182	65.7	59.1-72.2	62,783	63.3	58.3-68.4
\$25,000 - 34,999	18,193	55.5	45.2-65.8	14,234	53.6	43.9-63.3	32,428	54.7	47.5-61.8
\$35,000 - 49,999	14,751	48.0	38.6-57.3	15,877	48.6	39.0-58.1	30,628	48.3	41.6-55.0
\$50,000 - 74,999	12,889	41.3	32.1-50.5	8,796	*41.5	31.3-51.7	21,686	41.4	34.5-48.3
\$75,000+	11,364	35.5	26.4-44.7	12,030	47.6	37.6-57.6	23,395	40.8	34.1-47.6

^{*} Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 6.

Work Limitations

Definition Reported having been told 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: 45.6% (95% CI: 43.3-48.0)

U.S.: 35.5% (95% CI: 35.0-36.0)

The West Virginia prevalence of work limitations due to arthritis was significantly higher than the national prevalence. West Virginia ranked the 4th

highest among 53 BRFSS participants.

Gender Men: 45.3% (95% CI: 41.7-48.8)

Women: 46.0% (95% CI: 42.9-49.0)

There was no gender difference in the prevalence of work limitations due to

arthritis.

Race/Ethnicity No race/ethnicity statistics are reported due to unreliable estimates.

Age There was no consistent age difference in the prevalence of work limitations

due to arthritis.

Education The prevalence of work limitations due to arthritis was significantly higher

among those with less than a high school education (55.2%) than among those with a high school education (44.2%) or college graduates (33.8%). Additionally, the prevalence of work limitations due to arthritis was significantly lower among college graduates than among all other educational attainment

levels.

Household Income The prevalence of work limitations due to arthritis became steadily lower as

household income increased. The prevalence of work limitations due to arthritis was significantly higher among those earning less than \$15,000 per year

(65.9%) than among all other income brackets.

Table 20.3 Prevalence of Work Limitations Due to Arthritis by Demographic Characteristics: WVBRFSS, 2015

Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
TOTAL	109,990	45.3	41.7-48.8	128,435	46.0	42.9-49.0	238,425	45.6	43.3-48.0
Age									
18-24	1,880	*49.3	11.7-86.9	460	*30.0	0.0-67.9	2,341	*43.8	13.7-73.8
25-34	5,232	*44.2	24.6-63.9	8,063	*58.3	41.8-74.7	13,295	*51.8	38.9-64.7
35-44	15,030	*51.4	40.0-62.8	14,090	*47.5	36.1-58.9	29,121	49.4	41.4-57.5
45-54	22,252	48.9	40.0-57.9	31,605	62.4	55.3-69.4	53,857	56.0	50.3-61.7
55-64	35,249	49.3	43.1-55.6	36,483	54.6	48.8-60.4	71,732	51.9	47.6-56.2
65+	28,856	36.3	31.0-41.6	36,906	32.3	28.2-36.4	65,762	33.9	30.7-37.2
Education									
Less than H.S.	30,976	52.9	44.5-61.4	33,445	57.6	50.0-65.1	64,421	55.2	49.6-60.9
H.S. or G.E.D.	46,707	46.1	40.7-51.6	49,923	42.6	38.0-47.2	96,630	44.2	40.7-47.8
Some Post-H.S.	22,854	42.7	35.6-49.8	31,822	47.2	41.0-53.4	54,676	45.2	40.5-49.9
College Graduate	9,181	31.2	23.9-38.5	12,929	36.0	29.3-42.7	22,110	33.8	28.9-38.8
Income									
Less than \$15,000	24,113	66.2	57.1-75.4	31,298	65.7	58.7-72.6	55,411	65.9	60.3-71.5
\$15,000 - 24,999	22,891	53.6	45.3-62.0	30,005	54.9	48.1-61.8	52,895	54.4	49.1-59.7
\$25,000 - 34,999	16,029	49.2	38.8-59.5	13,710	52.1	42.4-61.8	29,739	50.5	43.3-57.7
\$35,000 - 49,999	13,623	44.3	35.0-53.6	10,937	33.4	24.5-42.4	24,561	38.7	32.2-45.2
\$50,000 - 74,999	8,524	27.3	19.3-35.3	6,469	*30.9	20.8-41.0	14,993	28.8	22.5-35.1
\$75,000+	7,344	23.6	14.8-32.5	7,242	*28.8	19.9-37.8	14,586	25.9	19.6-32.2

 $^{^{*}}$ Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 6.

Social Activity Limitations

Definition Reported having been told 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 our normal social activities, such as going shopping,

to the movies, or to religious or social gatherings?"

Prevalence WV: 26.7% (95% CI: 24.6-28.8)

U.S.: 20.2% (95% CI: 19.7-20.6)

The West Virginia prevalence of social activity limitations due to arthritis was significantly higher than the U.S. prevalence. West Virginia ranked the 7th

highest among 53 BRFSS participants.

Gender Men: 25.6% (95% CI: 22.3-28.8)

Women: 27.7% (95% CI: 24.9-30.5)

There was no gender difference in the prevalence of social activity limitations

due to arthritis.

Race/Ethnicity No race/ethnicity statistics are reported due to unreliable estimates.

Age There was no consistent age difference in the prevalence of social activity

limitations due to arthritis.

Education The prevalence of social activity limitations due to arthritis was significantly

higher among those with less than a high school education (39.6%) than among all other educational attainment levels. Additionally, prevalence of social activity limitations due to arthritis was significantly lower among college

graduates (13.2%) than among all other educational attainment levels.

Household Income The prevalence of social activity limitations due to arthritis was significantly

higher among those with an annual household income of less than \$15,000 (46.2%) than all other income brackets. The prevalence of social activity limitations due to arthritis was significantly lower among those earning \$75,000

or more per year (9.1%) than among those earning less than \$50,000 a year.

Table 20.4 Prevalence of Social Activity Limitations Due to Arthritis by Demographic Characteristics: WVBRFSS, 2015

Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
TOTAL	62,079	25.6	22.3-28.8	77,648	27.7	24.9-30.5	139,727	26.7	24.6-28.8
Age									
18-24	0	*0.0	0.0-0.0	0	*0.0	0.0-0.0	0	*0.0	0.0-0.0
25-34	2,373	*19.5	3.1-35.9	4,670	*33.8	17.7-49.9	7,043	*27.1	15.5-38.7
35-44	8,075	*27.0	16.8-37.2	8,223	27.7	17.9-37.5	16,298	27.4	20.3-34.4
45-54	12,342	26.8	18.6-35.0	19,628	38.1	30.9-45.2	31,970	32.7	27.3-38.2
55-64	22,428	31.6	25.5-37.8	19,307	29.0	23.6-34.5	41,735	30.4	26.2-34.5
65+	16,175	20.6	16.1-25.2	24,887	21.7	18.0-25.4	41,062	21.3	18.4-24.1
Education									
Less than H.S.	23,614	40.3	32.0-48.7	22,997	38.9	31.6-46.2	46,610	39.6	34.1-45.1
H.S. or G.E.D.	24,848	24.8	20.0-29.5	29,823	25.5	21.5-29.5	54,670	25.2	22.1-28.3
Some Post-H.S.	9,836	18.1	12.6-23.7	19,402	28.7	23.0-34.4	29,239	24.0	19.9-28.0
College Graduate	3,782	12.8	7.6-18.0	4,856	13.5	8.8-18.2	8,638	13.2	9.7-16.7
Income									
Less than \$15,000	17,932	48.8	39.0-58.7	21,507	44.3	37.1-51.5	39,439	46.2	40.3-52.2
\$15,000 - 24,999	13,475	31.4	23.3-39.5	19,007	34.9	28.3-41.4	32,482	33.3	28.2-38.5
\$25,000 - 34,999	8,675	26.8	17.5-36.2	6,336	23.9	15.1-32.7	15,011	25.5	19.0-32.0
\$35,000 - 49,999	5,676	18.5	11.5-25.4	6,555	20.1	11.8-28.4	12,230	19.3	13.9-24.8
\$50,000 - 74,999	2,625	8.4	3.7-13.1	2,987	14.1	6.8-21.4	5,612	10.7	6.6-14.8
\$75,000+	1,765	5.6	1.7-9.6	3,380	13.4	6.7-20.1	5,145	9.1	5.3-12.9

^{*} Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 6.



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: 3.6% (95% CI: 3.1-4.2)

U.S.: 2.7% (95% CI: 2.6-2.8)

The prevalence of kidney disease was significantly higher in West Virginia than in the U.S. West Virginia ranked the 3rd highest among 53 BRFSS participants.

Gender Men: 3.6% (95% CI: 2.9-4.4)

Women: 3.6% (95% CI: 2.9-4.4)

There was no gender difference in the prevalence of kidney disease.

Race/Ethnicity No race/ethnicity statistics are reported due to unreliable estimates.

Age The prevalence of kidney disease was significantly higher among those aged 65

and older (7.3%) than among all other age groups.

Education The prevalence of kidney disease was highest among those with less than a high

school education (7.1%) and was significantly higher than all other educational

attainment groups.

Household Income The prevalence of kidney disease was significantly higher among those with an

annual household income of less than \$15,000 (8.2%) than among those earning \$25,000 or more per year. The kidney disease prevalence was significantly lower among than those earning \$75,000 or more per year (1.5%) than among

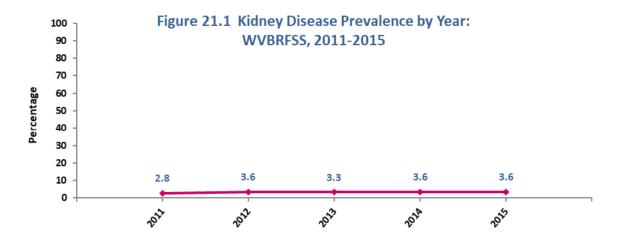
those earning \$25,000 or less.



Table 21.1 Prevalence of Kidney Disease by Demographic Characteristics: WVBRFSS, 2015

Characteristic	Men			Women			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
TOTAL	26,081	3.6	2.9-4.4	27,340	3.6	2.9-4.4	53,421	3.6	3.1-4.2
Age									
18-24	396	*0.4	0.0-1.3	0	*0.0	0.0-0.0	396	*0.2	0.0-0.7
25-34	242	*0.2	0.0-0.7	2,068	*2.0	0.5-3.5	2,310	*1.1	0.3-1.8
35-44	1,962	*1.7	0.4-3.1	3,805	*3.4	1.4-5.5	5,768	2.6	1.3-3.8
45-54	3,948	3.3	1.5-5.0	5,589	4.6	2.6-6.7	9,537	4.0	2.6-5.3
55-64	6,077	4.6	2.5-6.8	4,504	3.4	2.0-4.7	10,582	4.0	2.7-5.3
65+	13,455	8.9	6.4-11.3	11,374	6.1	4.3-7.8	24,828	7.3	5.9-8.8
Education									
Less than H.S.	8,796	7.7	4.5-11.0	7,583	6.5	3.8-9.1	16,379	7.1	5.0-9.2
H.S. or G.E.D.	10,537	3.5	2.4-4.5	9,345	3.3	2.3-4.3	19,882	3.4	2.7-4.1
Some Post-H.S.	4,181	2.3	1.0-3.5	7,182	3.4	2.1-4.8	11,363	2.9	2.0-3.8
College Graduate	2,566	2.3	1.2-3.3	3,230	2.4	1.3-3.4	5,797	2.3	1.5-3.1
Income									
Less than \$15,000	7,557	10.6	6.2-15.0	5,615	6.2	3.6-8.9	13,172	8.2	5.7-10.6
\$15,000 - 24,999	5,654	5.6	3.2-8.0	5,461	4.7	2.7-6.6	11,116	5.1	3.6-6.6
\$25,000 - 34,999	1,919	*2.6	0.7-4.5	1,646	*2.5	0.7-4.2	3,565	2.5	1.2-3.8
\$35,000 - 49,999	2,369	*2.5	1.0-4.0	1,140	*1.2	0.1-2.3	3,509	1.9	0.9-2.8
\$50,000 - 74,999	963	*1.1	0.1-2.0	1,640	*2.1	0.6-3.6	2,603	1.5	0.7-2.4
\$75,000+	2,698	2.0	0.8-3.1	2,664	*2.3	0.8-3.8	5,361	2.1	1.2-3.0

^{*} Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 6.

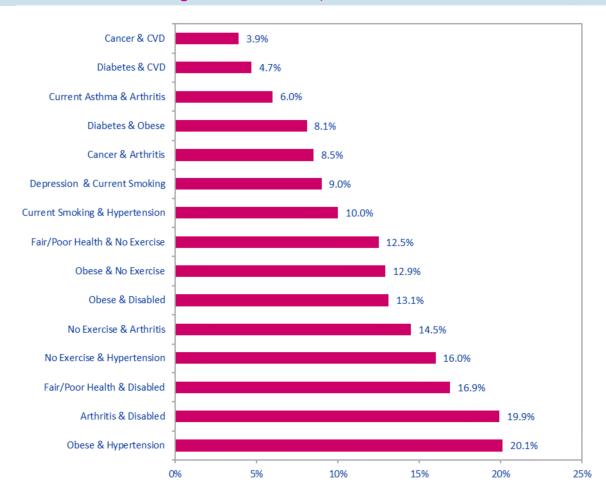


CHAPTER 22: COMORBIDITIES

Comorbid Health Conditions and Risk Factors

Many behavioral 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 2015 (see Figure 22.1 and Table 22.1). For definitions of risk factors and health conditions, please refer to appropriate chapter in this report.

Figure 22.1 Comorbidities: The Prevalence of Multiple Risk Behaviors and/or Health Conditions Among Adults: WVBRFSS, 2015



Percentage of Adults with Both Conditions/Risk Factors

CHAPTER 22: COMORBIDITIES

Table 22.1 Comorbidities: The Prevalence of Multiple Risk Behaviors and/or Health Conditions Among Adults: WVBRFSS, 2015

% of Total Population	Fair/Poor Health	No Health Coverage	No Exercise	Obese	Current	CVD	Diabetes	Current Asthma	Disabled	Cancer	Arthritis	Hyper- tension	Depres- sion
Fair/Poor Health	25.9 (24.6-27.2)	1.6 (1.2-2.0)	12.5 (11.5-13.5)	11.8 (10.8-12.8)	8.7 (7.8-9.6)	8.4 (7.6-9.2)	7.6 (6.9-8.4)	5.7 (5.0-6.3)	16.9 (15.8-18.0)	6.0 (5.3-6.6)	17.1 (16.0-18.2)	16.8 (15.8-17.9)	11.2 (10.3-12.1)
No Health Coverage	1.6 (1.2-2.0)	7.6 (6.7-8.4)	2.0 (1.6-2.4)	2.5 (2.0-3.0)	3.2 (2.6-3.8)	0.5 (0.3-0.8)	0.4 (0.2-0.6)	0.8 (0.6-1.1)	1.3 (1.0-1.7)	0.4 (0.3-0.6)	1.7 (1.4-2.1)	2.0 (1.6-2.5)	1.6 (1.2-2.1)
No Exercise	12.5 (11.5-13.5)	2.0 (1.6-2.4)	30.8 (29.4-32.2)	12.9 (11.8-14.0)	9.9 (8.9-10.9)	5.5 (4.8-6.1)	6.1 (5.4-6.8)	4.5 (3.9-5.1)	12.9 (11.9-13.9)	5.0 (4.4 -5.6)	14.5 (13.5-15.5)	16.0 (14.9-17.1)	9.4 (8.5-10.3)
Obese	11.8 (10.8-12.8)	2.5 (2.0-3.0)	12.9 (11.8-14.0)	35.6 (34.1-37.1)	7.6 (6.8-8.5)	5.4 (4.8-6.1)	8.1 (7.3-8.9)	4.6 (4.0-5.2)	13.1 (12.1-14.1)	4.9 (4.3-5.5)	16.6 (15.5-17.7)	20.1 (18.9-21.4)	10.1 (9.2-11.1)
Current Smoking	8.7 (7.8-9.6)	3.2 (2.6-3.8)	9.9 (8.9-10.9)	7.6 (6.8-8.5)	25.7 (24.3-27.1)	3.5 (3.0-4.1)	3.3 (2.8-3.9)	3.4 (2.9-4.0)	9.2 (8.3-10.1)	2.4 (2.0-2.9)	9.9 (9.0-10.8)	10.0 (9.1-10.9)	9.0 (8.1-9.9)
CVD	8.4 (7.6-9.2)	0.5 (0.3-0.8)	5.5 (4.8-6.1)	5.4 (4.8-6.1)	3.5 (3.0-4.1)	14.0 (13.0-14.9)	4.7 (4.1-5.3)	2.7 (2.2-3.2)	8.2 (7.4-9.0)	3.9 (3.4-4.4)	8.9 (8.1-9.7)	10.6 (9.7-11.5)	4.6 (4.0-5.2)
Diabetes	7.6 (6.9-8.4)	0.4 (0.2-0.6)	6.1 (5.4-6.8)	8.1 (7.3-8.9)	3.3 (2.8-3.9)	4.7 (4.1-5.3)	14.5 (13.5-15.4)	2.7 (2.2-3.2)	7.1 (6.4-7.9)	3.7 (3.2-4.2)	9.0 (8.2-9.8)	11.0 (10.1-11.8)	4.5 (3.9-5.1)
Current Asthma	5.7 (5.0-6.3)	0.8 (0.6-1.1)	4.5 (3.9-5.1)	4.6 (4.0-5.2)	3.4 (2.9-4.0)	2.7 (2.2-3.2)	2.7 (2.2-3.2)	10.8 (9.9-11.8)	5.6 (4.9-6.3)	2.6 (2.2-3.1)	6.0 (5.3-6.7)	5.6 (5.0-6.3)	4.5 (3.9-5.2)
Disabled	16.9 (15.8-18.0)	1.3 (1.0-1.7)	12.9 (11.9-13.9)	13.1 (12.1-14.1)	9.2 (8.3-10.1)	8.2 (7.4-9.0)	7.1 (6.4-7.9)	5.6 (4.9-6.3)	28.3 (27.0-29.6)	6.3 (5.6-6.9)	19.9 (18.7-21.0)	17.4 (16.3-18.5)	12.4 (11.4-13.4)
Cancer	6.0 (5.3-6.6)	0.4 (0.3-0.6)	5.0 (4.4-5.6)	4.9 (4.3-5.5)	2.4 (2.0-2.9)	3.9 (3.4-4.4)	3.7 (3.2-4.2)	2.6 (2.2-3.1)	6.3 (5.6-6.9)	14.1 (13.2-15.1)	8.5 (7.8-9.3)	8.5 (7.8-9.3)	4.2 (3.7-4.8)
Arthritis	17.1 (16.0-18.2)	1.7 (1.4-2.1)	14.5 (13.5-15.5)	16.6 (15.5-17.7)	9.9 (9.0-10.8)	8.9 (8.1-9.7)	9.0 (8.2-9.8)	6.0 (5.3-6.7)	19.9 (18.7-21.0)	8.5 (7.8-9.3)	38.0 (36.6-39.4)	23.6 (22.4-24.8)	12.8 (11.8-13.8)
Hypertension	16.8 (15.8-17.9)	2.0 (1.6-2.5)	16.0 (14.9-17.1)	20.1 (18.9-21.4)	10.0 (9.1-10.9)	10.6 (9.7-11.5)	11.0 (10.1-11.8)	5.6 (5.0-6.3)	17.4 (16.3-18.5)	8.5 (7.8-9.3)	23.6 (22.4-24.8)	42.7 (41.2-44.1)	11.8 (10.9-12.7)
Depression	11.2 (10.3-12.1)	1.6 (1.2-2.1)	9.4 (8.5-10.3)	10.1 (9.2-11.1)	9.0 (8.1-9.9)	4.6 (4.0-5.2)	4.5 (3.9-5.1)	4.5 (3.9-5.2)	12.4 (11.4-13.4)	4.2 (3.7-4.8)	12.8 (11.8-13.8)	11.8 (10.9-12.7)	23.1 (21.8-24.4)

Table interpretation: Each cell represents the percentage of West Virginia adults with both of the conditions/risk factors. For example, 6.0% of West Virginia adults have both asthma and arthritis. Page 165 WV BRFSS 2015 Report



SECTION 5: MENTAL HEALTH

Ever Diagnosed with 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: 23.1% (95% CI: 21.8-24.4)

U.S.: 17.6% (95% CI: 17.4-17.8)

The West Virginia prevalence of ever diagnosed with depression was significantly higher than the U.S. prevalence. West Virginia ranked the 4th highest among 53

BRFSS participants.

Gender Men: 17.2% (95% CI: 15.5-18.9)

Women: 28.7% (95% CI: 26.9-30.6)

The prevalence of ever diagnosed with depression was significantly higher among

females than among males.

Race/Ethnicity White, Non-Hispanic: 23.4% (95% CI: 22.1-24.7)

Black, Non-Hispanic: 18.4% (95% CI: 11.3-25.4)
Other, Non-Hispanic: *19.4% (95% CI: 6.5-32.4)
Multiracial, Non-Hispanic: *29.7% (95% CI: 17.8-41.6)

Hispanic: *23.5% (95% CI: 8.7-38.2)

There was no race/ethnicity difference in the prevalence of ever diagnosed with

depression.

* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 6.

Age The prevalence of ever diagnosed with depression was lowest among those 65

and older (15.7%), which was significantly lower than all age groups between the ages of 25-64. The prevalence of ever diagnosed with depression was highest among those 45-54 (30.3%), significantly higher than among those under 35 and

those over 65.

Education The prevalence of ever diagnosed with depression decreased as educational

attainment level increased and was significantly higher among those with less than a high school education (32.2%) than among all other educational attainment levels and significantly lower among college graduates (15.7%) than

among all other attainment levels.

Household Income The prevalence of ever diagnosed with depression generally decreased with

increasing household income and was highest among those with an income less than \$15,000 (42.9%), significantly higher than among all other income levels. The prevalence of ever diagnosed with depression was lowest among those with an income of \$75,000 or more (14.0%), which was significantly lower than among

those with an income of less than \$35,000.



Table 23.1 Prevalence of Ever Diagnosed with Depression by Demographic Characteristics: WVBRFSS, 2015

		Men			Women			Total	
Characteristic	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
TOTAL	123,327	17.2	15.5-18.9	214,921	28.7	26.9-30.6	338,248	23.1	21.8-24.4
Age									
18-24	11,364	12.9	7.8-17.9	22,395	27.1	20.4-33.9	33,759	19.8	15.5-24.1
25-34	16,148	14.9	10.1-19.7	32,316	30.8	25.2-36.5	48,464	22.7	19.0-26.5
35-44	25,578	22.7	17.9-27.6	37,897	34.0	28.6-39.4	63,475	28.3	24.7-32.0
45-54	26,587	22.1	17.5-26.6	46,620	38.4	33.8-43.1	73,207	30.3	27.0-33.6
55-64	22,707	17.3	13.9-20.8	41,772	31.3	27.6-35.1	64,479	24.4	21.8-27.0
65+	20,256	13.4	10.8-16.0	32,690	17.5	14.8-20.1	52,946	15.7	13.8-17.5
Education									
Less than H.S.	30,403	27.2	21.5-33.0	43,488	36.9	31.3-42.5	73,891	32.2	28.2-36.2
H.S. or G.E.D.	52,320	17.2	14.6-19.8	85,840	30.4	27.4-33.4	138,160	23.6	21.6-25.6
Some Post-H.S.	27,488	15.0	12.0-18.0	58,743	28.1	24.6-31.6	86,231	22.0	19.6-24.3
College Graduate	12,659	11.1	8.5-13.7	26,850	19.6	16.6-22.6	39,508	15.7	13.7-17.8
Income									
Less than \$15,000	29,091	40.9	33.8-48.0	39,998	44.4	38.7-50.1	69,089	42.9	38.4-47.3
\$15,000 - 24,999	22,164	21.9	17.1-26.8	43,960	37.4	32.4-42.4	66,123	30.3	26.7-33.8
\$25,000 - 34,999	15,427	20.6	14.9-26.3	17,571	26.5	20.4-32.5	32,997	23.3	19.2-27.5
\$35,000 - 49,999	11,234	11.9	8.4-15.4	19,369	20.6	16.0-25.2	30,603	16.2	13.3-19.2
\$50,000 - 74,999	12,961	14.6	10.3-18.9	19,576	25.3	19.9-30.6	32,537	19.5	16.1-23.0
\$75,000+	10,903	8.0	5.4-10.6	24,386	21.3	17.0-25.6	35,289	14.0	11.6-16.5

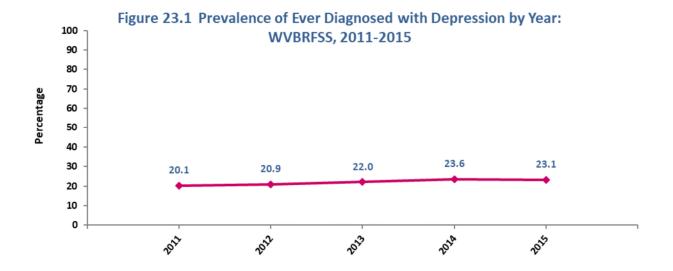
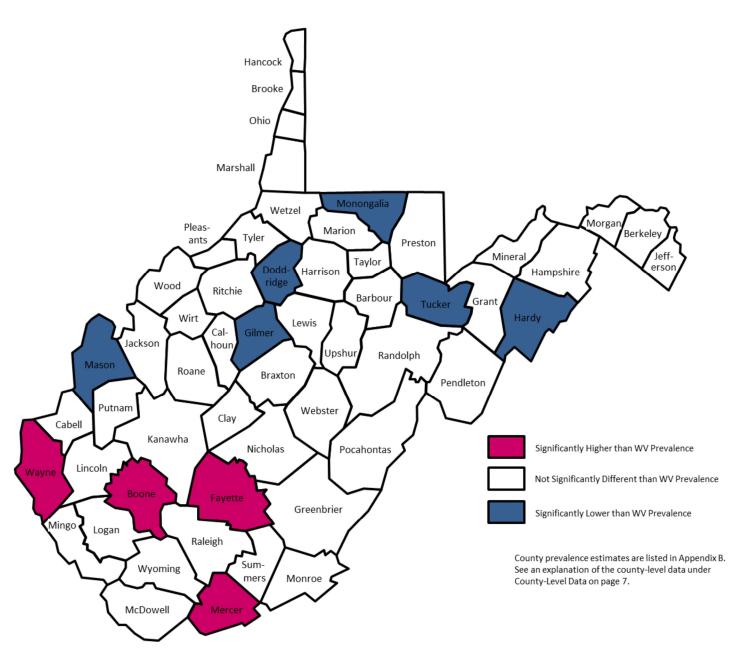


Figure 23.2 Prevalence of Ever Diagnosed with Depression by County: WVBRFSS, 2011-2015

WV Prevalence (2011-2015) - 21.9%



Current Depression

Definition Current depression is defined using responses to the Anxiety and

Depression module, which is based on the Patient Health Questionnaire 8 (PHQ-8), a screening tool used for depression. The questions cover eight categories of depressive symptoms experienced in the past two weeks. A rating scale was used to calculate the severity of the symptoms and anyone experiencing a score of 10 or higher was considered to have symptoms consistent with current depression. If any response to the eight questions was missing, respondent was excluded from analysis.

Prevalence WV: 13.7% (95% CI: 12.6-14.9)

This question was part of a state added module and national data are not

available, therefore, a U.S. comparison was not conducted.

Gender Men: 11.3% (95% CI: 9.8-12.9)

Women: 16.1% (95% CI: 14.4-17.7)

The prevalence of current depression was significantly higher among females than

among males.

Race/Ethnicity White, Non-Hispanic: 13.7% (95% CI: 12.5-14.8)

Black, Non-Hispanic: 15.0% (95% CI: 7.5-22.4)
Other, Non-Hispanic: *12.4% (95% CI: 2.1-22.6)
Multiracial, Non-Hispanic: *17.7% (95% CI: 7.3-28.2)

Hispanic: *11.5% (95% CI: 0.0-23.9)

There was no race/ethnicity difference in the prevalence of current depression.

* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 6.

Age The prevalence of current depression was highest among those aged 45-54

(19.1%) and lowest among those 65 and older (6.9%) which was a significantly

lower than all other age groups.

Education The prevalence of current depression was significantly higher among those with

less than a high school education (23.0%) than among all other educational attainment levels and was significantly lower among college graduates (6.7%)

than among all other educational attainment levels.

Household Income The prevalence of current depression generally decreased with increasing

household income and was highest among those with an income less than \$15,000 (34.8%), significantly higher than among all other income levels. The prevalence of current depression was lowest among those with an income of \$75,000 or more (5.4%), which was significantly lower than among those with an

income of less than \$35,000.



Table 23.2 Prevalence of Current Depression by Demographic Characteristics: WVBRFSS, 2015

		Men			Women			Total	
Characteristic	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
TOTAL	68,787	11.3	9.8-12.9	101,215	16.1	14.4-17.7	170,002	13.7	12.6-14.9
Age									
18-24	7,759	10.6	5.3-15.9	11,308	15.7	9.8-21.6	19,067	13.1	9.1-17.1
25-34	9,123	10.3	6.0-14.6	14,224	17.1	12.2-22.0	23,347	13.6	10.3-16.8
35-44	12,226	12.7	8.5-16.9	21,702	22.7	17.4-27.9	33,928	17.7	14.3-21.1
45-54	15,255	14.7	10.6-18.8	23,649	23.5	19.1-28.0	38,904	19.1	16.0-22.1
55-64	14,445	12.5	9.2-15.8	20,372	17.2	13.9-20.5	34,817	14.9	12.5-17.2
65+	9,700	7.6	5.2-10.0	9,725	6.3	4.5-8.1	19,425	6.9	5.4-8.3
Education									
Less than H.S.	16,564	19.2	13.7-24.8	24,142	26.6	20.7-32.4	40,706	23.0	18.9-27.1
H.S. or G.E.D.	27,833	10.9	8.6-13.3	38,995	16.6	13.9-19.3	66,828	13.7	11.9-15.4
Some Post-H.S.	19,547	11.9	8.8-14.9	27,675	15.6	12.6-18.6	47,222	13.8	11.7-16.0
College Graduate	4,843	4.7	2.7-6.8	10,403	8.2	6.1-10.4	15,246	6.7	5.2-8.2
Income									
Less than \$15,000	18,230	32.1	24.6-39.6	27,469	37.0	30.9-43.0	45,699	34.8	30.1-39.6
\$15,000 - 24,999	12,245	14.3	9.7-18.9	20,506	21.5	16.6-26.4	32,751	18.1	14.7-21.5
\$25,000 - 34,999	6,971	10.7	6.1-15.4	6,665	11.4	6.8-15.9	13,636	11.0	7.8-14.3
\$35,000 - 49,999	5,840	6.8	3.9-9.7	6,011	7.3	4.5-10.1	11,851	7.0	5.0-9.0
\$50,000 - 74,999	5,896	7.2	3.8-10.7	7,520	10.4	6.7-14.1	13,416	8.7	6.2-11.2
\$75,000+	4,835	3.9	2.0-5.9	7,345	7.1	4.3-9.9	12,180	5.4	3.7-7.1

Depression Severity

Definition Five categories of depression severity were defined based on the previous

rating scale for current depression with the following classifications: mild depression (5-9), moderate depression (10-14), moderately severe depression (15-19), and

severe depression (20-24).

Prevalence Mild Depression

WV: 19.6% (95% CI: 18.3-20.9)

Moderate Depression
WV: 7.8% (95% CI: 6.9-8.7)
Moderately Severe Depression
WV: 4.0% (95% CI: 3.4-4.7)

Severe Depression

WV: 1.9% (95% CI: 1.4-2.3)

This question was part of a state added module and national data are not

available; therefore, a U.S. comparison was not conducted.

Gender Mild Depression

Men: 17.7% (95% CI: 15.9-19.6) **Women**: 21.4% (95% CI: 19.6-23.2)

Moderate Depression
Men: 7.1% (95% CI: 5.8-8.3)
Women: 8.5% (95% CI: 7.3-9.7)
Moderately Severe Depression
Men: 2.7% (95% CI: 1.9-3.5)

Women: 5.3% (95% CI: 4.3-6.4)

Severe Depression

Men: 1.5% (95% CI: 0.9-2.1) Women: 2.2% (95% CI: 1.6-2.9)

The prevalence of mild depression, moderate depression, moderately severe depression, and severe depression were significantly higher among females than

among males.

Race/Ethnicity No race/ethnicity statistics are reported due to unreliable estimates.

Age The prevalence of mild depression was significantly higher among those 25-34

(23.4%) than among those 65 and older (16.4%) and the prevalence of mild depression was significantly lower among those 65 and older than all other age groups. The prevalence of moderately severe depression was lowest among those 65 and older (1.7%), significantly lower than among those between the ages of 35-64. The prevalence of severe depression was lowest among those 65 and older

(0.3%), which was significantly lower than among those aged 25-64.

Education

The prevalence of mild depression was significantly lower among those with a college degree (14.4%) than among those with less than a high school degree or those with a high school degree. The prevalence of moderate depression was significantly higher among those with less than a high school education (11.8%) than among those with a high school degree (7.0%) and among college graduates (4.8%). The prevalence of moderately severe depression was lower among college graduates (1.2%) than among all other educational attainment levels. The prevalence of severe depression was significantly higher among those with less than a high school education (4.2%) than among those with more than a high school education.

Household Income

The prevalence of mild depression was significantly lower among those with an income of \$75,000 (15.1%) than among those with an income below \$35,000. The prevalence of moderate depression was significantly higher among those with an income below \$15,000 (14.7%) than among those with an income of \$25,000 or more. The prevalence of moderately severe depression and severe depression were significantly higher among those with an income less than \$15,000 than among all other income levels.

Table 23.3 Depression Severity by Demographic Characteristics: WVBRFSS, 2015

		Mild		IV	loderat	e	Mode	rately Se	evere		Severe	
Characteristic	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
TOTAL	242,826	19.6	18.3-20.9	96,603	7.8	6.9-8.7	50,161	4.0	3.4-4.7	23,238	1.9	1.4-2.3
Sex												
Male	107,898	17.7	15.9-19.6	43,047	7.0	5.8-8.3	16,579	2.7	1.9-3.5	9,161	1.5	0.9-2.1
Female	134,929	21.4	19.6-23.2	53,556	8.5	7.3-9.7	33,582	5.3	4.3-6.4	14,077	2.2	1.6-2.9
Age												
18-24	29,829	20.5	15.7-25.3	10,607	7.3	4.2-10.4	6,404	4.4	2.0-6.8	2,056	1.4	0.1-2.7
25-34	40,241	23.4	19.2-27.6	16,824	9.8	6.9-12.7	3,533	2.1	0.9-3.2	2,990	1.7	0.6-2.9
35-44	36,400	19.0	15.5-22.4	17,238	9.0	6.5-11.5	10,956	5.7	3.5-7.9	5,734	3.0	1.6-4.4
45-54	42,617	20.9	17.7-24.1	19,483	9.5	7.3-11.8	11,985	5.9	4.1-7.6	7,435	3.6	2.1-5.2
55-64	46,477	19.8	17.2-22.4	18,510	7.9	6.2-9.6	12,048	5.1	3.6-6.7	4,258	1.8	1.1-2.6
65+	46,566	16.4	14.3-18.5	13,940	4.9	3.6-6.2	4,720	1.7	1.0-2.4	765	0.3	0.0-0.5
Education												
Less than H.S.	43,155	24.4	20.2-28.6	20,840	11.8	8.7-14.8	12,381	7.0	4.5-9.5	7,485	4.2	2.3-6.1
H.S. or G.E.D.	105,544	21.6	19.4-23.7	34,234	7.0	5.7-8.3	22,161	4.5	3.4-5.7	10,433	2.1	1.4-2.8
Some Post-H.S.	61,193	17.9	15.5-20.3	30,644	9.0	7.1-10.8	12,799	3.7	2.7-4.8	3,780	1.1	0.5-1.7
College Graduate	32,802	14.4	12.2-16.5	10,885	4.8	3.4-6.1	2,820	1.2	0.6-1.8	1,541	*0.7	0.3-1.1
Income												
Less than \$15,000	29,089	22.2	18.2-26.2	19,279	14.7	11.3-18.1	17,657	13.5	10.0-16.9	8,763	6.7	4.2-9.2
\$15,000 - 24,999	44,327	24.5	20.8-28.2	18,616	10.3	7.6-12.9	9,448	5.2	3.1-7.3	4,687	2.6	1.3-3.9
\$25,000 - 34,999	28,941	23.4	18.9-27.9	8,096	6.6	4.0-9.1	3,185	*2.6	0.9-4.2	2,355	*1.9	0.4-3.4
\$35,000 - 49,999	32,144	19.1	15.6-22.5	7,320	4.3	2.7-5.9	2,764	*1.6	0.6-2.6	1,767	*1.0	0.3-1.8
\$50,000 - 74,999	28,828	18.7	15.1-22.3	9,919	6.4	4.2-8.7	3,249	2.1	0.9-3.3	249	*0.2	0.0-0.5
\$75,000+	34,052	15.1	12.2-17.9	9,755	4.3	2.8-5.9	1,688	*0.7	0.2-1.3	737	*0.3	0.0-0.6

st Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 6.

Ever Diagnosed with Anxiety

Definition

Responding "Yes" to the question, "Has a doctor or other healthcare provider

ever

told you that you have an anxiety disorder (including acute stress disorder, anxiety, generalized anxiety disorder, obsessive-compulsive disorder, panic disorder, phobia, post-traumatic stress disorder, or social anxiety disorder?"

Prevalence

WV: 21.0.% (95% CI: 19.7-22.3)

This question was part of a state added module and national data are not

available, therefore, a U.S. comparison was not conducted.

Gender

Men: 15.6% (95% CI: 14.0-17.3) **Women**: 26.1% (95% CI: 24.2-27.9)

The prevalence of ever diagnosed with anxiety was significantly higher among

females than among males.

Race/Ethnicity

White, Non-Hispanic: 21.2% (95% CI: 19.9-22.5)
Black, Non-Hispanic: 14.5% (95% CI: 8.3-20.6)
Other, Non-Hispanic: *18.8% (95% CI: 3.9-33.8)
Multiracial, Non-Hispanic: *22.7% (95% CI: 11.2-34.2)

Hispanic: *31.0% (95% CI: 14.6-47.4)

There was no race/ethnicity difference in the prevalence of current depression.

* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 6.

Age

The prevalence of ever diagnosed with anxiety was lowest among those 65 and older (13.9%), which was significantly lower than all other age groups.

Education

The prevalence of ever diagnosed with anxiety was significantly higher among those with less than a high school education (29.3%) than among all other educational attainment levels and was significantly lower among college graduates (15.1%) than among all other educational attainment levels.

Household Income

The prevalence of ever diagnosed with anxiety decreased with increasing household income and was highest among those with an income less than \$15,000 (38.6%), significantly higher than among all other income levels. The prevalence of current depression was lowest among those with an income of \$75,000 or more (12.8%), which was significantly lower than among those with an income of less than \$35,000.



Table 24.1 Prevalence of Ever Diagnosed with Anxiety by Demographic Characteristics: WVBRFSS, 2015

		Men			Women			Total	
Characteristic	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
TOTAL	102,301	15.6	14.0-17.3	180,516	26.1	24.2-27.9	282,817	21.0	19.7-22.3
Age									
18-24	10,213	12.8	7.5-18.1	22,891	29.9	22.7-37.0	33,104	21.2	16.6-25.7
25-34	13,713	14.6	9.9-19.3	30,660	33.3	27.3-39.3	44,372	23.8	19.9-27.7
35-44	17,758	17.5	12.9-22.1	35,437	34.4	28.7-40.1	53,195	26.0	22.3-29.8
45-54	24,862	22.2	17.5-26.9	31,764	28.6	24.2-33.0	56,626	25.4	22.2-28.6
55-64	18,060	14.7	11.4-17.9	32,320	25.5	21.8-29.3	50,380	20.2	17.7-22.7
65+	17,415	12.3	9.7-14.9	26,790	15.1	12.6-17.6	44,204	13.9	12.0-15.7
Education									
Less than H.S.	23,325	23.4	17.7-29.2	37,209	34.8	29.1-40.6	60,535	29.3	25.2-33.4
H.S. or G.E.D.	41,785	15.2	12.7-17.7	68,351	26.4	23.4-29.4	110,136	20.6	18.6-22.6
Some Post-H.S.	24,325	14.0	11.0-17.0	52,418	26.9	23.3-30.5	76,743	20.8	18.4-23.2
College Graduate	12,866	12.4	9.4-15.3	22,536	17.2	14.2-20.2	35,403	15.1	12.9-17.2
Income									
Less than \$15,000	23,293	35.6	28.3-42.8	34,489	41.0	35.1-46.9	57,783	38.6	34.0-43.2
\$15,000 - 24,999	17,059	18.6	14.0-23.2	38,901	36.1	31.0-41.3	55,960	28.1	24.5-31.7
\$25,000 - 34,999	14,902	21.8	15.7-28.0	14,833	23.9	17.9-29.9	29,735	22.8	18.5-27.1
\$35,000 - 49,999	9,891	11.0	7.6-14.4	18,496	21.0	16.1-25.9	28,387	15.9	12.9-19.0
\$50,000 - 74,999	11,542	13.7	9.5-17.9	11,769	15.8	11.5-20.1	23,311	14.7	11.7-17.7
\$75,000+	9,231	7.3	4.8-9.9	20,663	19.2	15.1-23.4	29,894	12.8	10.4-15.2



Current Treatment for Mental Health

Definition Responding "Yes" to the question, "Are you now taking medicine or receiving

treatment from a doctor or other health professional for any type of mental

health condition or emotional problem?"

Prevalence WV: 16.8% (95% CI: 15.7-18.0)

This question was part of a state added module and national data are not

available, therefore, a U.S. comparison was not conducted.

Gender Men: 11.5% (95% CI: 10.0-13.0)

Women: 21.9% (95% CI: 20.2-23.6)

The prevalence of current treatment for mental health was significantly higher

among females than among males.

Race/Ethnicity White, Non-Hispanic: 17.1% (95% CI: 16.0-18.3)

Black, Non-Hispanic: 9.1% (95% CI: 4.2-13.9)
Other, Non-Hispanic: *13.1% (95% CI: 0.6-25.5)
Multiracial, Non-Hispanic: *12.2% (95% CI: 3.4-20.9)

Hispanic: *18.8% (95% CI: 5.5-32.1)

The prevalence of current treatment for mental health was significantly higher

among White, Non-Hispanics than among Black, Non-Hispanics.

* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 6.

Age The prevalence of current treatment for mental health was highest among those

45-54 (23.8%), significantly higher than among those aged 34 and younger and among those aged 65 and older. The prevalence of current treatment for mental health was lowest among those 65 and older (11.4%), which was significantly

lower than among those aged 35-64.

Education The prevalence of current treatment for mental health was significantly higher

among those with less than a high school education (22.9%) than among all other educational attainment levels except those with some post-high school education, and was significantly lower among college graduates (15.1%) than among all other

educational attainment levels except those with a high school education or G.E.D.

Household Income The prevalence of current treatment for mental health decreased with increasing

household income and was highest among those with an income less than \$15,000 (30.7%), significantly higher than among all other income levels over \$25,000. The prevalence of current treatment for mental health was lowest among those with an income of \$75,000 or more (10.6%), which was significantly

lower than among those with an income of less than \$35,000.



CHAPTER 25: CURRENT TREATMENT FOR MENTAL HEALTH

Table 25.1 Current Treatment for Mental Health by Demographic Characteristics: WVBRFSS, 2015

		Men			Women			Total	
Characteristic	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
TOTAL	75,594	11.5	10.0-13.0	152,024	21.9	20.2-23.6	227,619	16.8	15.7-18.0
Age									
18-24	8,917	11.2	6.3-16.1	12,088	15.8	10.1-21.4	21,005	13.4	9.7-17.2
25-34	6,355	6.7	3.3-10.1	21,112	22.9	17.5-28.4	27,467	14.7	11.4-18.0
35-44	14,543	14.2	10.2-18.3	26,162	25.0	20.0-30.1	40,706	19.7	16.4-23.0
45-54	17,792	15.8	11.5-20.2	35,406	32.0	27.3-36.7	53,199	23.8	20.6-27.1
55-64	14,800	12.1	8.9-15.2	33,331	26.4	22.7-30.0	48,132	19.3	16.9-21.8
65+	12,906	9.0	6.8-11.3	23,561	13.3	11.0-15.6	36,467	11.4	9.8-13.0
Education									
Less than H.S.	17,229	17.1	11.7-22.5	30,292	28.3	22.8-33.8	47,520	22.9	19.0-26.7
H.S. or G.E.D.	27,303	9.9	7.9-11.9	56,348	21.7	18.9-24.5	83,651	15.6	13.9-17.4
Some Post-H.S.	20,962	12.0	9.2-14.8	44,706	22.9	19.6-26.2	65,668	17.8	15.5-20.0
College Graduate	9,766	9.3	6.8-11.8	20,679	15.8	13.0-18.6	30,445	12.9	11.0-14.8
Income									
Less than \$15,000	18,640	27.6	20.5-34.7	28,140	33.2	27.7-38.8	46,780	30.7	26.3-35.1
\$15,000 - 24,999	15,352	16.7	12.1-21.3	30,821	28.7	23.9-33.5	46,173	23.1	19.8-26.5
\$25,000 - 34,999	7,991	11.8	7.4-16.1	13,245	21.3	15.7-27.0	21,236	16.3	12.8-19.9
\$35,000 - 49,999	7,358	8.2	5.1-11.2	16,960	19.2	14.6-23.8	24,318	13.6	10.8-16.4
\$50,000 - 74,999	7,469	8.8	5.7-12.0	12,813	17.3	12.9-21.7	20,283	12.8	10.1-15.5
\$75,000+	7,031	5.6	3.5-7.6	17,710	16.4	12.6-20.2	24,741	10.6	8.5-12.7



Confusion or Memory Loss

Definition Responding "Yes" to the question, "During the past 12 months, have you

experienced confusion or memory loss that is happening more often or is getting

worse?" Question asked of respondents aged 45 and older.

Prevalence WV: 10.0% (95% CI: 8.9-11.1)

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 Men: 10.3% (95% CI: 8.6-12.0)

Women: 9.7% (95% CI: 8.3-11.2)

There was no gender difference in the prevalence of cognitive decline in past

year.

Race/Ethnicity No race/ethnicity statistics are reported due to unreliable estimates.

Age The prevalence of cognitive decline in past year was significantly lower among

those aged 65 and older (7.7%) than among those younger than 65.

Education The prevalence of cognitive decline in past year was significantly higher among

those with less than a high school education (16.5%) than among all other

educational attainment groups.

Household Income The prevalence of cognitive decline in past year was significantly higher among

those with an annual household income of less than \$15,000 (22.6%) than all

other income brackets.



Table 26.1 Prevalence of Cognitive Decline in the Past Year Among Those Aged 45 and Older by Demographic Characteristics: WVBRFSS, 2015

		Men			Women			Total	
Characteristic	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
TOTAL	39,586	10.3	8.6-12.0	41,220	9.7	8.3-11.2	80,805	10.0	8.9-11.1
Age									
45-54	12,530	11.0	7.3-14.7	13,942	12.7	9.3-16.0	26,472	11.8	9.3-14.3
55-64	13,117	10.6	7.8-13.3	15,085	11.8	9.1-14.6	28,202	11.2	9.3-13.2
65+	13,659	9.5	6.9-12.0	11,152	6.2	4.5-7.9	24,811	7.7	6.2-9.1
Education									
Less than H.S.	13,627	17.8	12.3-23.3	11,601	15.1	10.5-19.7	25,228	16.5	12.9-20.1
H.S. or G.E.D.	14,786	9.2	6.8-11.5	17,532	9.9	7.7-12.1	32,317	9.5	7.9-11.1
Some Post-H.S.	7,754	9.1	5.7-12.6	8,421	8.2	5.7-10.8	16,176	8.7	6.6-10.7
College Graduate	3,419	5.6	3.2-7.9	3,665	5.5	3.3-7.7	7,085	5.5	3.9-7.1
Income									
Less than \$15,000	8,759	20.9	14.1-27.8	12,745	23.9	17.7-30.2	21,504	22.6	18.0-27.3
\$15,000 - 24,999	8,406	13.5	8.7-18.3	7,711	11.4	7.9-14.9	16,118	12.4	9.5-15.4
\$25,000 - 34,999	5,177	12.0	6.8-17.3	2,568	6.5	2.9-10.1	7,745	9.4	6.1-12.7
\$35,000 - 49,999	4,181	7.8	4.0-11.5	3,798	6.9	3.8-10.1	7,979	7.3	4.9-9.8
\$50,000 - 74,999	3,703	7.1	3.2-11.0	2,781	*6.3	2.5-10.0	6,484	6.7	4.0-9.4
\$75,000+	3,440	*5.3	1.5-9.0	2,084	*4.0	1.6-6.5	5,524	4.7	2.3-7.1

 $^{^{}st}$ Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 6.

CHAPTER 26: COGNITIVE DECLINE

Day-to-Day Household Activities/Chores

Definition

Gave up household activities or chores: Responding "Always" or "Usually" to the question, "During the past 12 months, as a result of confusion or memory loss, how often have you given up day-to-day household activities or chores you used to do, such as cooking, cleaning, taking medications, driving, or paying bills?"

Need assistance with activities: Responding "Always" or "Usually" to the question, "As a result of confusion or memory loss, how often do you need

assistance with these day-to-day activities?"

Rarely or never get help with activities: Responding "Never" or "Rarely" to the question, "When you need help with these day-to-day activities, how often are you able to get the help that you need?"

Prevalence

Gave up household activities or chores: 17.2% (95% CI: 12.6-21.7)

Need assistance with activities: 16.2% (95% CI: 11.9-20.4)

Rarely or never get help with activities: 13.9% (95% CI: 7.6-20.2)

Because these questions are part of a state selected optional module and complete national data are not available, a U.S. comparison was not conducted.

Gender

There was no gender difference for any of these indictors.

Race/Ethnicity

No race/ethnicity statistics are reported due to unreliable estimates.

Age

There was no age difference for any of these indicators.

Education

There was no educational attainment difference for any of these indicators.

Household Income

There was no household income difference in the prevalence of usually or always gave up household activities or chores in past year due to cognitive decline. The prevalence of usually or always need assistance with activities was significantly higher among those with an annual household income of less than \$15,000 (25.2%) than among those earning \$50,000 or more per year (2.1%). There was no household income difference in the prevalence of rarely or never get help with activities.



Table 26.2 Prevalence of Effects of Cognitive Decline on Day-to-Day Household Activities or Chores by Demographic Characteristics: WVBRFSS, 2015

		or Always ties in Pas	Gave Up st Year		or Alwa ce With	ys Need Activities	Rarely o Wi	r Never C th Activit	iet Help ies
Characteristic	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
TOTAL	14,506	17.2	12.6-21.7	13,691	16.2	11.9-20.4	3,992	13.9	7.6-20.2
Gender									
Male	7,533	18.4	11.2-25.6	5,672	13.9	8.0-19.8	1,682	*13.2	4.8-21.6
Female	6,973	16.1	10.4-21.7	8,019	18.3	12.3-24.3	2,310	*14.4	5.4-23.5
Age									
45-54	5,293	18.9	10.2-27.7	5,769	20.8	12.1-29.4	1,258	*11.2	1.4-21.0
55-64	4,691	16.0	9.2-22.9	3,735	12.6	6.4-18.9	2,078	23.3	9.7-36.8
65+	4,522	17.5	8.9-26.0	3,985	15.3	8.1-22.5	656	*8.3	0.0-16.7
Education									
Less than H.S.	4,325	16.7	7.5-25.9	5,118	20.0	10.9-29.1	1,815	*18.8	5.1-32.4
H.S. or G.E.D.	6,274	18.2	11.8-24.7	5,954	17.1	10.7-23.5	2,177	18.1	8.2-28.0
Some Post-H.S.	3,394	20.3	8.7-31.8	2,197	*13.0	4.5-21.6	0	0.0	0.0-0.0
College Graduate	513	*7.0	0.4-13.6	421	*5.7 0.0-11.3		0	0.0	0.0-0.0
Income									
Less than \$15,000	3,979	17.6	9.0-26.2	5,698	25.2	15.1-35.2	955	*9.2	0.0-18.9
\$15,000 - 24,999	2,037	18.9	8.6-29.3	1,759	*10.7	3.5-17.9	850	*16.7	2.4-31.1
\$25,000 - 34,999	1,693	*21.7	4.9-38.5	1,176	*14.7	0.0-29.6	306	*12.2	0.0-29.3
\$35,000 - 49,999	1,536	*18.4	3.6-33.1	622	*7.4	0.0-15.2	280	*25.2	0.0-56.7
\$50,000 - 74,999	73	*1.1	0.0-3.2	498	*7.4	0.0-17.3	644	*34.1	0.0-73.1
\$75,000+	268	*4.5	0.0-11.5	130	*2.1	0.0-6.4	0	0.0	0.0-0.0

^{*} Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 6.



Work/Social Activities

Definition Responding "Always" or "Usually" to the question, "During the past 12 months,

how often has confusion of memory loss interfered with your ability to work,

volunteer, or engage in social activities outside the home?"

Prevalence WV: 18.3% (95% CI: 13.9-22.6)

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: 14.7% (95% CI: 8.9-20.5)

Women: 21.7% (95% CI: 15.3-28.0)

There was no gender difference in the prevalence of cognitive decline interfered

with work or social activities in past year.

Race/Ethnicity No race/ethnicity statistics are reported due to unreliable estimates.

Age There was no age difference in the prevalence of cognitive decline interfered

with work or social activities in past year.

Education There was no educational attainment difference in the prevalence of cognitive

decline interfered with work or social activities in past year.

Household Income There was no annual household income difference in the prevalence of cognitive

decline interfered with work or social activities in past year.



Table 26.3 Prevalence of Cognitive Decline Interfered With Work or Social Activities in Past Year by Demographic Characteristics: WVBRFSS, 2015

		Total	
Characteristic	Weighted Frequency	%	95% CI
TOTAL	15,132	18.3	13.9-22.6
Age			
45-54	6,422	23.7	14.8-32.6
55-64	5,130	18.1	10.9-25.3
65+	3,097	11.9	5.8-18.0
Education			
Less than H.S.	4,352	17.5	9.2-25.7
H.S. or G.E.D.	6,748	19.9	13.1-26.7
Some Post-H.S.	3,087	18.5	8.6-28.5
College Graduate	945	*12.9	2.6-23.1
Income			
Less than \$15,000	5,885	26.4	16.6-36.2
\$15,000 - 24,999	2,565	15.8	7.4-24.2
\$25,000 - 34,999	758	*10.4	0.3-20.5
\$35,000 - 49,999	635	*7.9	0.0-16.1
\$50,000 - 74,999	498	*7.4	0.0-17.4
\$75,000+	501	*8.3	0.0-17.9

^{*} Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 6.



Discussed with Doctor

Definition Responding "Yes" to the question, "Have you or anyone else discussed your

confusion or memory loss with a health care professional?"

Prevalence WV: 46.5% (95% CI: 40.8-52.2)

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: 41.9% (95% CI: 33.4-50.5)

Women: 50.7% (95% CI: 43.2-58.3)

There was no gender difference in the prevalence of discussed cognitive decline

with doctor.

Race/Ethnicity No race/ethnicity statistics are reported due to unreliable estimates.

Age There was no age difference in the prevalence of discussed cognitive decline

with doctor.

Education The prevalence of discussed cognitive decline with doctor was significantly

lower among those with less than a high school education (35.2%) than among

those with some college (60.8%).

Household Income There was no annual household income difference in the prevalence of

discussed cognitive decline with doctor.



Table 26.4 Prevalence of Discussed Cognitive Decline With Doctor by Demographic Characteristics: WVBRFSS, 2015

		Men			Women			Total	
Characteristic	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
TOTAL	17,205	41.9	33.4-50.5	22,167	50.7	43.2-58.3	39,372	46.5	40.8-52.2
Age									
45-54	5,156	*41.4	24.1-58.7	7,681	*50.8	37.1-64.5	12,837	*46.6	35.6-57.5
55-64	4,423	*32.7	19.9-45.5	8,615	*53.6	41.4-65.8	13,038	44.0	35.1-53.0
65+	7,346	*49.7	36.1-63.3	5,345	*46.7	32.5-60.9	12,691	48.4	38.6-58.2
Education									
Less than H.S.	4,395	*31.0	15.8-46.2	4,631	*40.4	24.3-56.4	9,027	*35.2	24.1-46.2
H.S. or G.E.D.	5,850	*39.0	26.3-51.7	10,465	*52.9	41.9-63.9	16,315	46.9	38.4-55.3
Some Post-H.S.	5,364	*65.7	47.9-83.5	4,828	*56.2	40.5-71.9	10,192	*60.8	48.9-72.8
College Graduate	1,595	*43.6	22.5-64.7	2,243	*58.5	37.9-79.2	3,838	*51.3	36.5-66.0
Income									
Less than \$15,000	3,879	*42.2	24.7-59.7	4,342	*32.6	19.4-45.8	8,221	*36.5	25.8-47.2
\$15,000 - 24,999	2,900	*34.5	16.5-52.5	5,047	*62.9	47.4-78.4	7,947	*48.4	36.0-60.7
\$25,000 - 34,999	3,252	*62.5	40.2-84.7	1,660	*64.7	38.3-91.1	4,912	*63.2	45.8-80.5
\$35,000 - 49,999	1,684	*38.9	15.2-62.6	2,517	*62.5	41.0-83.9	4,201	*50.3	33.2-67.3
\$50,000 - 74,999	1,540	*41.6	12.2-71.0	1,350	*44.6	15.4-73.8	2,890	*42.9	22.2-63.7
\$75,000+	831	*22.6	1.3-43.9	1,328	*55.1	24.5-85.6	2,159	*35.4	14.9-56.0

^{*} Use caution when interpreting and reporting this estimate. See discussion of unstable estimates on page 6.

Appendix A Behavioral Risk Factor Prevlance in 50 States, District of Columbia, and Territories United States, 2015

		Poor	Obe	sity		sical	Curi			vascular	Diab	etes	Can	cer	Arth	nritis	Depre	ession
State	Hea %	Rank	%	Rank	Inact	Rank	Smo %	king Rank	Dis %	ease Rank	%	Rank	%	Rank	%	Rank	%	Rank
Alabama	22.2	6	35.6	2	31.9	7	21.4	11	11.1	5	13.5	4	14.0	7	33.3	2	22.1	7
Alaska	13.6	46	29.8	27	22.0	43	19.1	17	6.0	52	7.6	50	7.6	51	21.2	47	16.0	46
Arizona	18.8	14	28.4	36	24.7	34	14.0	46	8.0	25	10.1	26	13.6	9	23.6	35	18.5	32
Arkansas	23.8	3	34.5	6	34.2	3	24.9	4	10.9	6	12.6	8	12.4	19	29.7	7	23.5	3
				49														
California	18.0	19	24.2		20.0	49	11.7	51	16.5	49	10.0	27	9.7	46	19.1	50	12.9	50
Colorado	13.9	42	20.2	53	17.9	53	15.6	38	6.2	51	6.8	53	11.7	29	22.7	44	19.3	25
Connecticut	14.9	35	25.3	44	23.5	37	13.5	50	7.2	44	9.3	34	11.5	32	24.5	31	17.6	37
Delaware	17.6	24	29.7	29	29.4	13	17.4	28	9.3	17	11.5	13	12.9	15	28.1	13	17.8	36
D.C.	12.0	53	22.1	52	19.4	50	16.0	34	6.8	46	8.5	42	8.4	50	18.5	52	18.0	35
Florida	18.4	17	26.8	37	26.2	26	15.8	37	9.4	15	11.3	17	14.6	1	25.9	23	16.5	42
Georgia	18.1	18	30.7	21	27.3	17	17.7	25	9.2	20	11.3	18	11.7	28	24.6	28	18.3	33
Guam	19.8	11	31.6	14	31.1	8	27.4	1	6.5	48	12.0	9	4.1	53	15.8	53	9.4	53
Hawaii	13.6	47	22.7	51	22.5	41	14.1	45	6.2	50	8.5	41	9.5	48	18.9	51	11.6	52
Idaho	14.6	40	28.6	35	21.2	47	13.8	48	7.3	43	8.1	48	13.0	12	25.3	26	19.7	21
Illinois	16.4	28	30.8	19	24.8	32	15.1	42	8.1	22	9.9	28	9.8	45	23.3	39	15.3	49
Indiana	18.8	15	31.3	16	29.4	12	20.6	13	10.0	11	11.4	15	11.2	34	27.6	16	20.4	16
Iowa	13.0	48	32.1	12	26.3	25	18.1	23	7.6	35	8.8	39	12.1	21	25.9	24	19.0	26
Kansas	15.7	32	34.2	7	26.5	23	17.7	24	7.9	27	9.7	31	12.2	20	24.5	29	19.4	24
Kentucky	22.2	5	34.6	5	32.5	5	25.9	2	12.1	2	13.4	5	14.1	5	32.0	4	18.7	30
Louisiana	21.9	7	36.2	1	31.9	6	21.9	9	10.9	7	12.7	6	11.1	36	27.9	14	20.1	18
Maine	16.1	30	30.0	25	24.8	33	19.5	16	9.7	12	9.9	29	14.5	2	31.0	5	24.0	2
Maryland	13.9	44	28.9	33	24.1	36	15.1	43	7.9	28	10.3	25	10.3	42	23.5	36	16.3	43
Massachusetts	14.6	39	24.3	48	26.5	24	14.0	47	7.6	32	8.9	37	11.6	30	24.1	34	20.9	14
Michigan	17.7	22	31.2	17	25.5	29	20.7	12	9.2	18	10.7	20	11.8	26	30.0	6	19.7	20
Minnesota	12.4	51	26.1	41	21.8	44	16.2	33	6.7	47	7.6	51	11.1	35	21.6	45	18.9	27
Mississippi	23.6	4	35.6	3	36.8	2	22.5	5	11.2	3	14.7	2	11.9	24	28.6	11	18.2	34
Missouri	17.8	21	32.4	11	27.0	20	22.3	6	10.7	8	11.5	14	13.1	10	29.3	8	21.8	8
Montana	15.1	34	23.6	50	22.5	40	18.9	20	7.6	33	7.9	49	14.1	4	26.8	20	19.9	19
Nebraska	13.9	41	31.4	15	25.3	30	17.1	31	7.5	37	8.8	38	11.6	31	23.4	37	17.5	38
Nevada	17.6	23	26.7	38	24.7	35	17.5	26	7.7	30	9.7	32	10.6	40	21.5	46	16.6	41
New Hampshire	12.1	52	26.3	40	22.6	38	15.9	36	7.4	41	8.1	47	12.9	13	26.6	22	20.9	12
New Jersey	16.0	31	25.6	43	27.2	18	13.5	49	7.1	45	9.0	36	9.8	44	22.9	41	12.7	51
New Mexico	20.8	10	28.8	34	22.6	39	17.5	27	8.0	26	11.5	12	10.6	39	24.5	30	20.2	17
New York	16.8	25	25.0	46	29.3	14	15.2	40	7.4	39	9.8	30	9.6	47	23.4	38	15.7	47
North Carolina	19.2	13	30.1	23	26.2	27	19.0	19	9.2	19	10.7	22	13.1	11	26.9	18	18.8	29
North Dakota	13.9	43	31.0	18	26.8	21	18.7	21	7.3	42	8.7	40	9.9	43	22.9	42	18.8	28
Ohio	16.5	26	29.8	28	27.0	19	21.6	10	9.3	16	11.0	19	11.8	27	28.4	12	19.6	22
Oklahoma	21.8	8	33.9	8	33.2	4	22.2	7	10.7	9	11.7	11	10.7	38	27.7	15	22.7	6
		-		24		52		-		31				6		21		1
Oregon Pennsylvania	18.6	16	30.1		18.8		17.1	30	7.7		10.7	21	14.0		26.8		26.7	
· '	16.4	27	30.0	26	27.8	16	18.1	22	9.5	13	10.4	23	12.6	18	29.2	9	18.5	31
Puerto Rico	36.4	1	29.5	30	48.1	1	10.7	52	10.4	10	16.5	1	5.2	52	22.8	43	17.1	40
Rhode Island	16.2	29	26.0	42	28.1	15	15.5	39	7.5	36	9.0	35	12.0	22	26.9	19	21.3	10
South Carolina	18.0	20	31.7	13	26.7	22	19.7	15	9.5	14	11.8	10	12.7	16	29.1	10	19.5	23
South Dakota	13.7	45	30.4	22	21.5	46	20.1	14	8.6	21	9.3	33	12.0	23	24.3	33	16.1	44
Tennessee	21.1	9	33.8	9	30.4	10	21.9	8	11.2	4	12.7	7	12.9	14	32.0	3	21.2	11
Texas	19.4	12	32.4	10	29.5	11	15.2	41	8.0	23	11.4	16	8.9	49	20.0	48	16.1	45
Utah	12.5	50	24.5	47	20.3	48	9.1	53	5.5	53	7.0	52	11.5	33	19.6	49	20.8	15
Vermont	12.6	49	25.1	45	22.2	42	16.0	35	8.0	24	8.2	46	12.6	17	27.0	17	22.8	5
Virginia	15.2	33	29.2	31	25.1	31	16.5	32	7.5	38	10.3	24	10.8	37	23.2	40	15.7	48
Washington	14.9	36	26.4	39	19.0	51	15.0	44	7.6	34	8.4	43	11.9	25	24.5	32	21.7	9
West Virginia	25.9	2	35.6	4	30.8	9	25.7	3	14.0	1	14.5	3	14.1	3	38.0	1	23.1	4
Wisconsin	14.6	38	30.7	20	21.6	45	17.3	29	7.4	40	8.4	45	10.5	41	24.7	27	17.5	39
Wyoming	14.9	37	29.0	32	26.2	28	19.1	18	7.8	29	8.4	44	14.0	8	25.9	25	20.9	13
United States	17.7		28.9		26.1		16.7		8.4		10.5		11.3		24.7		17.6	

Source: Centers for Disease Control & Prevention, 2014 Behavioral Risk Factor Surveillance System data; West Virginia Health Statistics Center, 2016

Appendix B 2011-2015 WV Behavioral Risk Factors and Health Conditions by County

	Fa	ir or Po	or				No I	lealth (^are					bese o	r			
County		Health	•	D	isabilit	У		age (1			Obesity	/		erweig		Physi	cal Inac	ctivity
	%	Rank	Sig	%	Rank	Sig.												
Barbour	26.2	25	ns	26.4	39	ns	30.7	2	Н	35.1	32	ns	72.0	20	ns	38.2	7	ns
Berkeley -	21.7	47	L	24.3	49	L	18.9	34	ns	34.8	34	ns	71.5	25	ns	27.6	46	L
Boone	37.3	3	Н	37.1	7	Н	20.6	22	ns	35.6	30	ns	74.5	9	ns	32.7	29	ns
Braxton	27.9	21	ns	25.2	43	ns	22.1	14	ns	29.9	51	ns	68.9	40	ns	31.8	33	ns
Brooke	26.4	24	ns	31.5	19	ns	19.1	31	ns	35.5	31	ns	69.8	35	ns	32.5	30	ns
Cabell	21.2	50	L	26.0	41	ns	19.4	29	ns	30.3	50	L	66.7	46	ns	28.9	42	ns
Calhoun	32.1	12	ns	31.3	20	ns	*22.9	11	ns	31.7	47	ns	*63.3	52	ns	29.1	41	ns
Clay	32.2	11	ns	34.0	11	ns	21.4	17	ns	40.4	9	ns	76.3	6	ns	42.0	1	Н
Doddridge	25.1	31	ns	22.6	50	ns	*27.2	4	ns	*37.4	19	ns	76.9	5	ns	*32.3	31	ns
Fayette	33.6	8	Н	32.6	15	ns	17.9	40	ns	37.7	18	ns	69.7	36	ns	35.4	18	ns
Gilmer	*25.3	29	ns	*27.9	33	ns	*20.8	21	ns	*42.8	3	ns	*80.5	1	ns	*41.5	2	ns
Grant	28.0	20	ns	30.3	23	ns	*23.1	10	ns	*41.7	5	ns	77.8	3	ns	36.1	15	ns
Greenbrier	27.0	23 19	ns	32.6	14	ns	22.8	12	ns	33.6	41	ns	66.6	48	ns	33.2	26	ns
Hampshire	28.4		ns	27.5	36 48	ns	15.3	50	ns	36.9	20	ns	71.6	23	ns	28.7	43	ns
Hancock	25.7	26 42	ns	24.8		ns	20.4	23	ns L	38.3	17	ns	74.3	10	ns	36.1	16	ns
Hardy Harrison	23.0	42	ns ns	21.6 29.8	52 26	L ns	11 20.9	55 20	ns	38.3 33.5	15 43	ns ns	78.9	2	Н	36.3 33.3	12 25	ns ns
								44					70.9	28	ns			
Jackson Jefferson	23.1 12.7	41 55	ns L	25.4 21.5	42 53	ns L	17.4 15.9	44	ns ns	32.6 31.9	45 46	ns ns	69.6	38	ns	30.9 24.7	36 52	ns L
Kanawha		39	L	28.4	30		18.9	33		33.8	40		63.2	53	L	30.3	37	
Lewis	23.2	33	ns	27.5	35	ns ns	16.9	33 46	ns ns	36.9	21	ns	68.6	41	ns	28.5	44	ns ns
Lincoln		9	H	35.5	8		18	39		38.8	14	ns	71.0	27	ns	36.1	14	
	33.5 35.9	5	Н	38.0	5	ns H	24.3	6	ns ns	40.9	7	ns H	72.5	16	ns	39.1	5	ns H
Logan Marion	21.0	51	L	24.9	47	L	18.7	36	ns	31.5	48	ns	73.4	13	ns	25.8	50	Ľ
Marshall	23.4	36	ns	29.2	29	ns	19.7	25	ns	34.7	36	ns	66.7	45	ns	27.1	48	ns
Mason	22.4	45	ns	27.4	38	ns	17.4	43	ns	36.4	26	ns	70.6	29	ns	38.7	6	Н
McDowell	43.2	1	H	42.2	2	H	23.8	7	ns	47.1	1	Н	75.0	8	ns	36.3	11	ns
Mercer	28.9	15	ns	30.0	24	ns	21.4	16	ns	34.6	37	ns	72.2 71.8	17 22	ns	35.1	19	ns
Mineral	19.1	53	L	28.2	31	ns	19.1	32	ns	36.6	24	ns	66.6	47	ns ns	23.5	54	L
Mingo	35.8	6	Н	37.9	6	Н	18.5	37	ns	39.3	12	ns	74.2	11	ns	40.8	3	н
Monongalia	15.7	54	L	20.3	54	L	14.2	51	L	27.2	55	L	61.3	54	L	23.0	55	L
Monroe	25.1	30	ns	32.3	16	ns	24.5	5	ns	27.6	54	ns	61.2	55	ns	31.8	34	ns
Morgan	24.3	34	ns	27.5	37	ns	19.4	27	ns	38.3	16	ns	70.4	30	ns	29.6	38	ns
Nicholas	31.8	13	Н	34.1	10	ns	22.3	13	ns	36.5	25	ns	70.1	31	ns	36.8	9	ns
Ohio	19.6	52	L	26.3	40	ns	12.8	53	L	29.0	52	L	64.4	50	ns	23.9	53	L
Pendleton	21.3	49	ns	*29.5	28	ns	13.6	52	ns	*44.4	2	ns	77.7	4	ns	*32.1	32	ns
Pleasants	21.5	48	ns	29.8	25	ns	16.5	48	ns	*34.0	39	ns	*69.7	37	ns	25.7	51	ns
Pocahontas	28.7	17	ns	27.7	34	ns	*27.9	3	ns	30.8	49	ns	64.0	51	ns	27.4	47	ns
Preston	23.4	37	ns	25.0	46	ns	16.9	45	ns	33.5	42	ns	65.9	49	ns	33.2	27	ns
Putnam	23.4	38	ns	25.0	45	L	12.2	54	L	32.9	44	ns	72.2	18	ns	27.8	45	ns
Raleigh	27.8	22	ns	31.5	18	ns	19.4	28	ns	34.9	33	ns	71.2	26	ns	31.6	35	ns
Randolph	25.4	28	ns	29.5	27	ns	19.1	30	ns	35.6	29	ns	70.1	32	ns	29.2	40	ns
Ritchie	33.7	7	ns	38.9	4	ns	21.2	19	ns	*41.7	6	ns	70.0	33	ns	35.7	17	ns
Roane	28.6	18	ns	30.6	21	ns	16.5	47	ns	39.7	11	ns	71.6	24	ns	33.2	28	ns
Summers	32.4	10	ns	31.7	17	ns	18.8	35	ns	34.1	38	ns	71.9	21	ns	33.5	23	ns
Taylor	22.9	43	ns	22.5	51	L	21.6	15	ns	36.7	22	ns	72.1	19	ns	34.9	21	ns
Tucker	24.4	32	ns	18.8	55	L	*23.2	9	ns	*40.7	8	ns	73.9	12	ns	36.6	10	ns
Tyler	22.3	46	ns	28.2	32	ns	21.3	18	ns	28.0	53	ns	67.4	43	ns	37.3	8	ns
Upshur	22.7	44	ns	25.0	44	ns	17.8	41	ns	35.7	28	ns	66.9	44	ns	26.4	49	ns
Wayne	28.7	16	ns	33.4	13	ns	17.8	42	ns	35.8	27	ns	68.0	42	ns	35.0	20	ns
Webster	*40.5	2	Н	40.6	3	Н	*31.0	1	ns	*40.0	10	ns	75.2	7	ns	36.2	13	ns
Wetzel	30.3	14	ns	33.4	12	ns	18.4	38	ns	36.6	23	ns	69.8	34	ns	33.4	24	ns
Wirt	23.8	35	ns	*34.4	9	ns	*23.5	8	ns	*42.7	4	ns	*72.8	15	ns	*34.2	22	ns
Wood	25.7	27	ns	30.5	22	ns	20	24	ns	34.7	35	ns	69.6	39	ns	29.4	39	ns
Wyoming	36.2	4	Н	42.7	1	Н	19.5	26	ns	39.2	13	ns	73.3	14	ns	40.6	4	Н
West Virginia		25.5			25.2			23.7			34.5			68.8			31.4	

Source: West Virginia Behavioral Risk Factor Surveillance System (WVBRFSS), West Virginia Health Statistics Center, 2015.
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.

Appendix B, continued 2011-2015 WV Behavioral Risk Factors and Health Conditions by County

County	< 5 Servings of Fruits & Vegetables**			Curi	rent Smo	king	Smokel	ess Toba	cco Use	Bir	nge Drinki	ing	Нур	pertensio	n**	High	Choleste	rol**
County	%	Rank	Sig	%	Rank	Sig.	%	Rank	Sig.	%	Rank	Sig.	%	Rank	Sig.	%	Rank	Sig.
Barbour	87.5	25	ns	34.9	3	ns	11.1	18	ns	*6.3	48	ns	41.2	18	ns	49.9	7	Н
Berkeley	86.4	38	ns	28.7	27	ns	5.9	48	L	10.8	16	ns	30.9	53	L	38.0	42	ns
Boone	90.2	8	ns	33.1	6	ns	11.5	15	ns	8.8	34	ns	43.7	11	ns	42.0	25	ns
Braxton	85.5	46	ns	23.6	45	ns	13.7	8	ns	7.5	42	ns	36.1	44	ns	40.3	31	ns
Brooke	87.7	24	ns	29.6	19	ns	7.1	43	ns	14.1	9	ns	38.2	33	ns	35.3	49	ns
Cabell	87.1	30	ns	29.7	17	ns	5.6	52	L	12.3	12	ns	36.6	41	ns	40.7	29	ns
Calhoun	83.0	53	ns	*37.2	2	ns	*8.9	33	ns	17.6	2	ns	36.5	43	ns	*36.4	47	ns
Clay	92.0	5	ns	26.8	33	ns	14.0	7	ns	*6.0	49	ns	48.0	3	ns	*52.6	3	Н
Doddridge Fayette	87.3	28	ns	22.0	50	ns	*13.0	10	ns	*4.9	53	L	24.9	55	L	*31.5	53	ns
Gilmer	88.2 96.7	18 1	ns H	29.4 *29.3	22 23	ns ns	11.4 *22.7	16 1	ns ns	9.3 *17.3	31 3	ns ns	40.4 *38.4	22 30	ns ns	37.4 *49.3	44 9	ns ns
Grant	85.3	48	ns ns	13.9	55 55	L	18.8	2	H	*4.6	54	L	43.3	12	ns	43.9	22	ns
Greenbrier	86.3	40	ns	26.0	38	ns	9.9	29	ns	9.8	26	ns	40.7	21	ns	39.1	38	ns
Hampshire	83.9	51	ns	28.2	29	ns	6.7	45	ns	12.2	13	ns	37.8	35	ns	39.2	37	ns
Hancock	86.6	34	ns	29.8	16	ns	4.4	53	L	10.6	18	ns	37.5	37	ns	37.9	43	ns
Hardy	85.8	44	ns	25.9	39	ns	10.3	24	ns	9.4	30	ns	35.8	45	ns	33.8	50	ns
Harrison	86.6	35	ns	26.5	35	ns	10.3	25	ns	8.3	37	ns	36.6	42	ns	42.1	24	ns
Jackson	87.5	27	ns	27.1	32	ns	9.6	31	ns	6.4	47	L	41.5	17	ns	41.2	28	ns
Jefferson	83.4	52	ns	26.3	36	ns	4.1	55	L	15.1	7	Н	32.1	51	L	36.8	46	ns
Kanawha	87.8	21	ns	26.1	37	ns	6.4	46	L	10.6	17	ns	38.6	28	ns	40.5	30	ns
Lewis	87.5	26	ns	30.2	13	ns	11.6	14	ns	7.1	44	ns	44.9	9	ns	45.8	14	ns
Lincoln	93.4	2	Н	29.5	21	ns	17.7	3	Н	11.6	14	ns	48.0	2	Н	46.2	13	ns
Logan	89.0	13	ns	33.0	7	Н	10.9	20	ns	7.6	41	ns	46.9	5	Н	44.4	19	ns
Marion Marshall	85.9	42	ns	24.7	42	ns	10.8	23	ns	10.3	24	ns	34.1	50	ns	36.0	48	ns
Mason	85.4	47	ns	23.6	44	ns	8.0	37	ns	14.6	8	ns	34.7	47	ns	44.9	18	ns
McDowell	91.9 87.3	6 29	H	30.8 30.7	11 12	ns	7.1 8.0	44 36	ns	7.9 9.8	39 27	ns	43.2 46.1	13 6	ns H	39.7 49.2	34 10	ns H
Mercer	89.9	9	ns ns	29.7	18	ns ns	7.9	39	ns ns	8.4	36	ns ns	40.3	23	ns	49.2	26	ns ns
Mineral	86.0	41	ns	26.8	34	ns	8.0	38	ns	14.1	10	ns	37.3	40	ns	38.2	41	ns
Mingo	91.3	7	Н	32.4	8	ns	9.6	32	ns	5.3	51	L	47.3	4	Н	49.4	8	Н
Monongalia	86.3	39	ns	19.9	53	L	5.8	49	L	24.7	1	Н	26.7	54	L	30.8	55	L
Monroe	85.7	45	ns	24.8	41	ns	11.7	13	ns	8.1	38	ns	40.2	24	ns	51.3	4	Н
Morgan	86.9	33	ns	21.1	51	ns	6.2	47	ns	*4.1	55	L	37.4	38	ns	43.9	21	ns
Nicholas	88.7	15	ns	31.3	9	ns	14.9	6	Н	10.3	23	ns	42.7	14	ns	39.3	36	ns
Ohio	88.4	16	ns	28.9	26	ns	*4.2	54	L	17.0	4	Н	31.6	52	L	39.0	39	ns
Pendleton	85.0	49	ns	*22.5	48	ns	*9.8	30	ns	*6.4	46	ns	*35.6	46	ns	*50.3	6	ns
Pleasants	89.6	10	ns	24.8	40	ns	15.5	4	ns	*10.6	19	ns	*34.2	49	ns	*31.6	52	ns
Pocahontas	82.3	54	ns	14.8	54	L	*10.1	26	ns	*7.4	43	ns	34.4	48	ns	37.1	45	ns
Preston	88.1	19	ns	29.6	20	ns	10.8	22	ns	12.9	11	ns	37.3	39	ns	38.5	40	ns
Putnam Paleigh	86.5	36	ns	22.3	49	L	7.7	41	ns	10.6	20	ns	41.1	19	ns	44.1	20	ns
Raleigh Randolph	87.8	22	ns	27.2	31	ns	10.0	27	ns	7.7	40	ns	39.6	26	ns	43.0	23	ns
Ritchie	85.8 89.4	43 11	ns ns	28.3	28 24	ns ns	10.0 *12.4	28 12	ns ns	8.9 *10.5	33 21	ns ns	37.8 *45.2	34 8	ns ns	39.9 *39.6	33 35	ns ns
Roane	88.3	17	ns	33.6	5	ns	11.3	17	ns	11.4	15	ns	39.2	27	ns	45.7	15	ns
Summers	86.4	37	ns	20.7	52	ns	*5.7	50	ns	8.9	32	ns	39.7	25	ns	51.3	5	Н
Taylor	86.9	32	ns	27.8	30	ns	7.7	42	ns	9.4	29	ns	38.3	32	ns	*32.8	51	L
Tucker	*74.5	55	ns	23.6	43	ns	*8.8	34	ns	*5.2	52	L	*42.2	16	ns	31.4	54	ns
Tyler	87.9	20	ns	*31.1	10	ns	*10.9	21	ns	15.9	5	ns	38.5	29	ns	*47.7	12	ns
Upshur	84.2	50	ns	22.8	46	ns	11.1	19	ns	10.4	22	ns	38.3	31	ns	45.0	17	ns
Wayne	88.9	14	ns	28.9	25	ns	8.6	35	ns	7.0	45	ns	44.1	10	Н	39.9	32	ns
Webster	92.8	3	ns	*41.9	1	Н	*15.1	5	ns	*9.8	28	ns	48.2	1	ns	*58.3	1	Н
Wetzel	89.3	12	ns	29.9	15	ns	12.4	11	ns	8.6	35	ns	45.9	7	ns	45.3	16	ns
Wirt	92.2	4	ns	*22.7	47	ns	*7.8	40	ns	*15.8	6	ns	*41.0	20	ns	*54.2	2	ns
Wood	87.0	31	ns	30.1	14	ns	5.6	51	L	9.9	25	ns	37.5	36	ns	41.3	27	ns
Wyoming West Virginia	87.8	23	ns	33.7	4	ns	13.4	9	ns	5.3	50	L	42.3	15	ns	48.4	11 40.7	ns
West Virginia	<u> </u>	87.4 16.7 8.7									10.3			38.3			40./	

Source: West Virginia Behavioral Risk Factor Surveillance System (WVBRFSS), West Virginia Health Statistics Center, 2015.

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.

P ** This question was asked 2007-2015 (odd years).

Appendix B, Continued 2011-2015 WV Behavioral Risk Factors and Health Conditions by County

County	Cardiovascular Disease			[Diabetes		Cancer			Current Asthma			COPD			Arthritis			Depression		
·	%	Rank	Sig	%	Rank	Sig.	%	Rank	Sig.	%	Rank	Sig.	%	Rank	Sig.	%	Rank	Sig.	%	Rank	Sig.
Barbour	15.6	16	ns	16.3	6	ns	15.4	6	ns	13.1	8	ns	12.8	20	ns	37.2	38	ns	22.4	24	ns
Berkeley	11.1	45	L	9.9	50	L	9.0	53	L	10.2	28	ns	8.3	45	L	32.3	51	L	20.7	34	ns
Boone	18.2	5	н	15.7	10	ns	14.5	17	ns	10.5	24	ns	14.5	9	ns	40.5	21	ns	31.1	1	Н
Braxton	15.0	21	ns	13.3	28	ns	13.3	29	ns	13.4	5	ns	12.2	24	ns	38.0	33	ns	20.6	35	ns
Brooke	14.5	25	ns	14.4	22	ns	13.0	35	ns	11.5	17	ns	9.9	37	ns	37.3	37	ns	19.0	42	ns
Cabell	12.4	35	ns	13.1	33	ns	12.2	41	ns	12.0	12	ns	9.9	36	ns	31.0	53	L	22.7	22	ns
Calhoun	*9.5	52	ns	12.1	37	ns	15.5	5	ns	*13.9	4	ns	9.5	38	ns	37.3	36	ns	22.1	28	ns
Clay	17.1	9	ns	15.5	14	ns	7.4	54	L	11.1	19	ns	11.8	28	ns	41.6	18	ns	25.8	8	ns
Doddridge	10.0	50	ns	11.5	42	ns	14.7	14	ns	*7.5	48	ns	14.0	11	ns	*40.0	23	ns	13.8	54	L
Fayette	14.6	23	ns	13.4	27	ns	15.1	8	ns	9.9	30	ns	16.3	5	н	42.4	10	н	26.5	6	Н
Gilmer	*16.8	11	ns	*16.3	7	ns	*7.1	55	L	*18.0	2	ns	*5.3	55	L	*33.9	46	ns	*10.5	55	L
Grant	18.2	6	ns	22.1	1	Н	14.4	18	ns	*18.3	1	ns	7.5	47	ns	42.4	11	ns	16.0	49	ns
Greenbrier	13.0	30	ns	13.1	32	ns	14.2	19	ns	8.9	35	ns	13.1	16	ns	41.2	20	ns	22.7	21	ns
Hampshire	12.5	33	ns	12.9	34	ns	12.9	37	ns	8.8	38	ns	10.6	32	ns	37.2	39	ns	21.6	31	ns
Hancock	10.5	48	ns	14.6	20	ns	11.1	48	ns	7.4	49	ns	8.9	43	ns	34.5	44	ns	19.5	40	ns
Hardy	12.7	32	ns	11.3	43	ns	11.0	49	ns	7.0	51	ns	7.8	46	ns	31.8	52	ns	15.6	50	L
Harrison	12.0	38	ns	13.2	31	ns	13.9	24	ns	11.7	14	ns	13.0	17	ns	39.2	28	ns	21.7	30	ns
Jackson	12.4	36	ns	11.7	40	ns	13.8	25	ns	8.8	37	ns	13.0	19	ns	37.9	35	ns	20.1	38	ns
Jefferson	8.4	54	L	9.0	53	L	9.6	51	L	8.3	43	ns	5.7	53	L	22.1	54	L	17.7	46	ns
Kanawha	14.5	24	ns	14.4	21	ns	13.3	30	ns	8.5	40	L	9.5	40	L	35.0	41	ns	22.6	23	ns
Lewis	15.5	17	ns	15.9	9	ns	14.6	16	ns	10.6	22	ns	10.9	30	ns	41.9	14	ns	17.4	48	ns
Lincoln	17.5	7	ns	16.3	8	ns	15.6	4	ns	12.1	11	ns	13.3	15	ns	44.8	6	н	25.4	10	ns
Logan	18.4	4	н	18.4	4	Н	13.4	28	ns	13.3	6	ns	17.2	4	н	44.6	7	Н	26.7	5	ns
Marion	11.9	40	ns	10.2	49	L	12.9	36	ns	12.1	10	ns	9.3	41	ns	32.8	49	L	20.3	36	ns
Marshall	12.1	37	ns	11.7	41	ns	15.7	3	ns	10.9	21	ns	12.2	25	ns	39.2	26	ns	24.1	16	ns
Mason	12.4	34	ns	10.8	48	ns	13.8	26	ns	8.2	44	ns	13.0	18	ns	42.3	12	ns	15.5	51	L
McDowell	20.1	2	н	20.5	2	Н	12.4	40	ns	16.2	3	н	18.2	3	н	48.4	2	н	25.2	11	ns
Mercer	14.4	27	ns	13.8	25	ns	12.9	38	ns	9.7	32	ns	15.3	7	н	39.7	24	ns	25.9	7	Н
Mineral	11.1	43	ns	11.2	44	ns	13.2	32	ns	7.7	47	ns	9.1	42	ns	33.4	48	ns	17.5	47	ns
Mingo	19.2	3	н	15.0	16	ns	11.5	45	ns	12.6	9	ns	20.2	1	н	41.7	16	ns	25.4	9	ns
Monongalia	7.9	55	L	8.8	54	L	9.4	52	L	8.4	41	ns	6.8	51	L	21.4	55	L	18.3	44	L
Monroe	10.8	47	ns	15.2	15	ns	13.2	33	ns	6.7	52	ns	9.5	39	ns	38.2	32	ns	22.1	27	ns
Morgan	16.4	12	ns	13.3	30	ns	14.8	13	ns	8.5	39	ns	12.4	23	ns	35.0	42	ns	24.1	17	ns
Nicholas	15.2	19	ns	12.0	38	ns	14.1	22	ns	9.7	33	ns	14.5	8	ns	45.7	4	Н	24.6	13	ns
Ohio	10.8	46	ns	12.3	36	ns	11.3	47	ns	10.4	25	ns	7.4	48	L	34.9	43	ns	18.8	43	ns
Pendleton	11.9	39	ns	14.8	18	ns	12.0	42	ns	*10.3	26	ns	*6.3	52	ns	*41.4	19	ns	*24.3	14	ns
Pleasants	9.9	51	ns	15.7	12	ns	14.0	23	ns	*6.7	53	ns	*5.5	54	L	38.4	31	ns	14.7	52	ns
Pocahontas	14.7	22	ns	13.3	29	ns	11.5	46	ns	10.1	29	ns	10.1	33	ns	41.7	17	ns	21.4	33	ns
Preston	9.2	53	L	9.8	51	L	9.8	50	L	9.9	31	ns	7.0	49	L	33.7	47	ns	19.6	39	ns
Putnam	11.7	41	ns	11.1	47	ns	12.8	39	ns	8.1	45	ns	8.5	44	L	35.5	40	ns	22.1	26	ns
Raleigh	15.2	18	ns	12.7	35	ns	14.2	20	ns	11.5	18	ns	12.6	21	ns	40.3	22	ns	23.4	19	ns
Randolph	13.4	28	ns	13.7	26	ns	14.9	11	ns	13.2	7	ns	10.6	31	ns	38.9	29	ns	20.1	37	ns
Ritchie	14.4	26	ns	15.6	13	ns	13.2	31	ns	*10.5	23	ns	11.7	29	ns	41.8	15	ns	19.2	41	ns
Roane	17.1	10	ns	15.7	11	ns	14.1	21	ns	6.5	54	ns	14.3	10	ns	37.9	34	ns	23.5	18	ns
Summers	15.0	20	ns	14.7	19	ns	16.3	2	ns	8.1	46	ns	13.8	12	ns	39.6	25	ns	21.5	32	ns
Taylor	11.1	44	ns	11.2	45	ns	13.5	27	ns	8.9	36	ns	12.1	26	ns	38.7	30	ns	22.3	25	ns
Tucker 	10.0	49	ns	9.5	52	ns	14.8	12	ns	11.6	16	ns	10.1	34	ns	32.7	50	ns	13.8	53	L
Tyler	11.2	42	ns	11.2	46	ns	15.3	7	ns	*7.1	50	ns	12.6	22	ns	45.3	5	ns	25.1	12	ns
Upshur 	12.7	31	ns	8.8	55	L	15.1	9	ns	10.9	20	ns	6.9	50	L	34.1	45	ns	17.9	45	ns
Wayne	16.1	14	ns	17.1	5	Н	17.4	1	Н	11.9	13	ns	13.8	13	ns	42.2	13	ns	28.1	3	Н
Webster	15.8	15	ns	20.1	3	ns	11.7	43	ns	*8.4	42	ns	19.1	2	н	*48.9	1	н	28.5	2	ns
Wetzel	17.1	8	ns	11.9	39	ns	13.0	34	ns	10.2	27	ns	10.0	35	ns	43.7	9	ns	24.1	15	ns
Wirt	16.2	13	ns	13.9	24	ns	11.6	44	ns	*4.9	55	L	13.5	14	ns	*46.7	3	ns	22.0	29	ns
Wood	13.3	29	ns	14.4	23	ns	14.7	15	ns	8.9	34	ns	12.0	27	ns	39.2	27	ns	23.0	20	ns
Wyoming	20.3	1	Н	14.9	17	ns	15.1	10	ns	11.7	15	ns	15.4	6	ns	44.0	8	Н	27.8	4	ns
West Virginia		13.8			13.3			13.4			10.1			11.3			37.3			21.9	

Source: West Virginia Behavioral Risk Factor Surveillance System (WVBRFSS), West Virginia Health Statistics Center, 2015.
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.